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Design of a Guideline for a Strategy Process of medium-sized Companies

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Abstract

Companies with a clear, documented strategy perform better than their competitors without a strategy. Nevertheless, the strategy process confronts medium-sized companies (250-3,000 employees) with major challenges while many of them do not have a clear strategy process. Reasons for that can be the focus on operations and thus lack of time and resources, missing methods knowledge, or the underestimation of the value of a strategy. In times of a structural change in an industry, as we see it currently for example with the electrification of the automotive industry, a strategy becomes even more important. The automotive supplier industry alone employs around 150,000 people just in medium-sized companies in Germany. This paper aims to design a guideline that supports medium-sized companies to define their long-term goals and in the implementation of their derived strategy. Based on a literature review and 16 expert interviews a guideline was developed that contains templates to document the strategy process and a process model including checklists to fill the templates. The guideline was initially evaluated against the defined success factors in a medium-sized company.

1. Introduction

The structural change in the automotive industry driven by electrification threatens the business model of many companies, especially in the supplier industry [1]. Medium-sized companies (250-3000 employees [2]), which stand for a total of 150,000 of the 300,000 [3] jobs in the supplier industry in Germany, are particularly affected. These technical-driven companies are often dependent on one product. If this is used in the combustion engine, the risk increases due to electrification.

These medium-sized, mostly family-run companies frequently often do not have a documented strategy because they underestimate its value and lack time, resources, and familiarity with the process [4–6]. In addition, hiring a consulting firm is not an option for most medium-sized companies because they are not willing to spend such sums and still bear the risk of implementation failure. The situation of a structural change, which also exists in other industries (e.g.

energy production, heating), combined with study results that companies with a strategy perform better than companies without one [4, 7], results in a need for a usable guideline for medium-sized companies.

This guideline is intended to support medium-sized companies in the strategy process in order to avoid a similar fate of companies such as Nokia or Kodak [8], which strategically underestimated a structural change. For example, templates and checklists, are provided to enable an easy application.

2. Current Understanding

This paper aims to design a guideline to support medium-sized companies to define a strategy. For this purpose, the concepts and literature on strategy, challenges for medium-sized companies in the strategy process, and problem solving methods are examined. At the end of the chapter, the understanding of important terms is summarized.

2.1. Strategy, Strategy Process and Methods

The business understanding of the term strategy was shaped by Chandler [9], Ansoff [10] and Andrews [11]. Grant stated that most of the definitions unify that strategy is used to achieve specific, long-term goals by allocating resources [12]. In literature, the corporate strategy is often separated from the business unit strategy and the functional strategy, which depend on the defined corporate strategy [13, 14].

The strategy process is used to define and implement the strategy. Focus of this paper is the ideal-typical planning process, in which strategies are planned rationally [13]. The origin of phase models lies in the Harvard Concept from 1971, which separates a strategy formulation and an implementation phase [11, 13]. Stammnitz et al. identified 10 key sources for the strategy process based on extensive literature research and generated an overview and comparison of the described phase models [15]. The strategic methods that are described in these 10 key sources are considered for the guideline. In addition, a study by Schneemann, who surveyed 50 management consultants to identify the Top 10 used methods, such as the SWOT analysis or BCG matrix was considered [16]. An interesting approach was made by Stadler et. al [17] with their concept of "Open Strategy". They are convinced that involving all employees in the strategy process leads to greater success.

2.2. Problem Solving Methods

During the research, it became obvious that the considered strategy processes have high similarities to classical problem solving methods. The focus of this study is on manufacturing, medium-sized companies, which are predominantly technically oriented. Therefore, the guideline uses a problem solving method as a basis, as many of these companies are familiar with such processes. Nine selected problem solving methods, including e.g. the TOTE-scheme, the 8D-method and the SPALTEN method were analyzed by Albers et al. in 2016 [18].

2.3. Challenges for medium-sized companies

The medium-sized companies considered in this paper employ 250-3,000 people, according to a definition by the Institute for the German Economy [2]. They differ from large companies in specifics such as manageability, resource limitation, low degree of formalization, regional roots and flat hierarchies [19]. These characteristics are similar to small and medium enterprises (SMEs), where ownership, management and liability are also often in one hand [20]. Lombriser [21] names reasons, why many medium-sized companies struggle with the strategy process: concretely he names lack of time, lack of skills and methodological competencies, lack of common understanding of strategy, lack of role understanding, lack of openness, the costs and resources required for the strategy process, and the underestimation of its importance.

Stammnitz et al. derived 27 success factors for the strategy process of medium-sized companies [15]. These success factors can be clustered into four groups. The groups culture, information policy and resources and capabilities will not enter directly in the guideline, but only by explaining them and their

relevance in the preamble. The 12 success factors of the cluster process design, such as the strategy team or checklists & templates are essential for the guideline.

2.4. Understanding of important terms for the Guideline

The following terms will be explained briefly to guarantee a consistent understanding during the usage of the guideline:

Strategy: The company strategy is a plan to reach long-term goals. The goals should consider quantitative goals (sales, EBIT margin, …) and qualitative statements. The strategy can consist of several Strategy Initiatives that allocate resources.

Strategy Process: The strategy process is the process to develop the long-term company goals and the strategy itself. It can be explained using three key questions: Where are we today? Where do we see ourselves in the future? How do we reach these goals? The process for medium-sized companies should not be hierarchical. The key is to focus on the future and the development of relevant markets.

Business Area (BA) / Business Unit (BU): BAs are part of the market. They can be seen as a product-market combination [22]. Companies compete in BAs for market share. BUs are part of the company organization. Overall, it can be said that corresponding BUs of different companies compete in the same BA.

Structural Change: Significant change in the BA that the company is competing in. The change can be caused by inventions [23] or by a regulatory intervention for instance. An example is the current change in the Automotive Industry (electrification) or in the Energy Supply Industry (renewable energies).

These terms should not be seen as general applicable definitions, but as the base understanding for the guideline.

3. Materials and Methods

The need for research, consisting of the missing applicable guideline for medium-sized companies and the relevance that currently many companies do not have a documented strategy but are facing challenges due to a structural change, leads to the following research goal:

The aim of this research is to design a guideline that supports medium-sized companies during a structural change to develop their strategy considering company-internal assets and document the process.

To reach this goal, the research was structured according to the Design Research Methodology [24] (see Fig. 1).
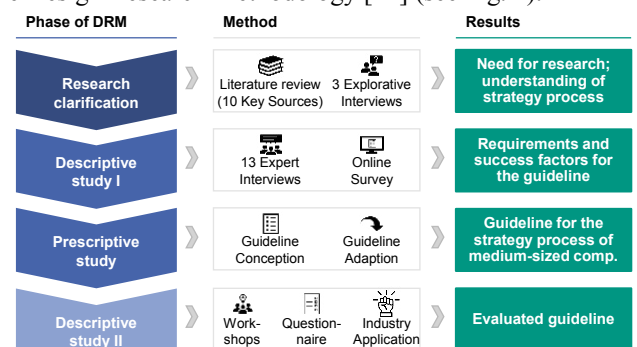

Fig. 1. Research Design for the design of a guideline for a strategy process following the structure of the Design Research Methodology

First, during the Research Clarification (RC) extensive literature research took place and three explorative interviews were conducted to sharpen the presumed need for research. Afterwards, 27 success factors were derived based on the RC and 13 additional expert interviews. The success factors were clustered into four groups and then evaluated with a survey. The results of the Research Clarification and Descriptive Study I were presented as first research results [15]. After that, several workshops took place during the Prescriptive Study to translate the relevant success factors into requirements for the guideline. Based on this, the guideline was designed by merging the insights from the interviews and the knowledge from the literature research. The initial guideline was presented during workshops to researchers and to employees of medium-sized companies and adapted based on the feedback. The adapted guideline was then evaluated in a medium-sized company. The requirements for the guideline, the adapted guideline and the evaluation will be the subject of this paper.

4. Results

This chapter serves to describe the derived requirements in the first subchapter, the guideline itself in the second subchapter and to present the evaluation in the third subchapter.

4.1. Requirements for the Guideline

Based on the success factors mentioned by Stammnitz et al. [15] the requirements for the guideline were derived (Table 1):

Table 1. Requirements for the guideline for the strategy process for medium-sized companies

Factor	Requirement for guideline
Project Management	The guideline needs to consider a concrete plan with milestones and responsibilities for the strategy development and implementation including possible meeting structures.
Process Owner	The guideline needs to describe roles of the strategy team. The process owner should have a concrete description of his / her tasks and a plan that he/she can follow.
Strategy Team	The guideline should recommend a structure for a strategy team and define its tasks. For different activities, it may be beneficial to include different team members.
Role of leadership	The guideline needs to point out the importance of the involvement of corporate management in the process. Without their support, a success of the process is unlikely.
Goals	The guideline is intended to help ensure that the goals set as part of the strategy process are SMART and FAST.
Focus	The guideline needs to require a clear focus. Knowing the scope of the process is elemental for its success.
Checklists & Templates	The guideline should contain checklists and templates, which consider the required outcomes per activity to make the strategic work easier for the user.
Resource Planning	The guideline should require long-term resource planning. Estimating this under uncertainty is challenging but neglecting it could risk the implementation.
Degree of Agility	The guideline should ensure a structured flow but allow agility. Premises need to be reviewed regularly. The guideline should consider these checks as well.

Change Management	The guideline should promote the communication of the strategy and support its user with recommendations, on how to address fear and increase acceptance.
Participation	The guideline should encourage the user to let employees participate during the strategy process. This helps to generate ideas and to increase the acceptance of the elaborated strategy and thus motivates employees.
Learning Curve	The guideline needs to point out that repetitions of the process lead to better results as employees become more and more familiar with its activities and methods.
Problem Solving Method	The process model of the guideline should be familiar to its user. According to chapter 2.2, a problem solving method should be used.

4.2. Guideline for a Strategy Process of medium-sized Companies

The guideline to support medium-sized companies is divided into two sections. First, a template, which itself consists of several templates and second a process model that supports the user to fill the template. The guideline itself is a more extensive document, which is described as precisely as possible at this point. The process model should be a problem solving method. The reviewed problem solving methods were evaluated based on Albers et al. [18] using criteria that meet the requirements for the guideline (see Fig. 2).

	Degree of agility adjustable	Lessons learned documented	Universally applicable	Detail level	Plausibility Check during Process	Possible to document ideas flexibly	Team-Creat. and its flex. adaption
TOTE-Scheme	○	◕	●	○	●	◑	○
PS Method by Kepner/Tregoe	◑	◑	●	◑	◕	◑	○
General Solving Process by Pahl/Beitz	●	◕	●	●	●	◑	○
Procedure Cycle by Ehrlenspiel	◑	○	●	●	○	◑	○
8D-Method	○	◑	◑	○	◕	◑	◕
Systems Engineering	◕	○	◑	◕	◕	◑	◑
PS Process (VDI 2221)	●	◑	◑	◑	◑	◑	○
REFA-Method	◑	○	○	◑	◕	◑	○
SPALTEN PS Method	●	●	●	●	●	●	●

Fig. 2. Evaluation of problem solving (PS) methods in terms of their usability for the guideline (evaluation factors derived from DS-I results)

To sum it up, the SPALTEN method meets all the relevant criteria. For example, the method already takes into account team formation and especially team adjustment between the steps, it allows the degree of agility to be adjusted flexibly, and it is universally applicable.

At the beginning of the guideline, the user is familiarized with the topic with the help of the terms from chapter 2.4 and with a preamble considering the following points:

Role of Consultants: Consultants are helpful for different tasks within the strategy process, but the overall process should be managed by the company and not by consultants. In each activity, it should be checked whether the company has enough resources to cover the needed tasks or if support is required.

Indirect Success Factors (see Fig. 3):

Culture
- Show courage and make decisions
- Promote a culture of open discussion
- Demonstrate an open-minded way of thinking
- Tolerance for mistakes (strategy involves uncertainty)

Information Policy
- Regular communication about the strategy process and decisions
- Transparent procedure for employees
- Clarify relevance of strategic initiatives
- Spreading strategy in an inspiring way

Resources / Capabilities
- Promote and train methodological competence
- Allocate sufficient time for strategy work
- Redistribute resources according to the strategy
- Take employees' feelings and fears seriously to avoid excessive demands

Fig. 3. Prerequisites for a successful strategy process derived from the DS-I and clustered into three groups

Of course, these premises are overlapping with points mentioned in the guideline. For example, there are several examples in the guideline, where the company is being pushed to communicate. However, these points were so important, that they should have been pointed out clearly in the beginning.

Methods: There is a big variety of methods for the strategy process. More important than the usage of many different methods is the correct understanding of a method and to use it for a clear target. The guideline offers a set of methods (toolbox-character) that are connected to concrete goals.

Cognitive Bias: Many medium-sized companies are owned and led by a family and key employees have a long history in the company. This has many advantages, but can also lead to the fact that these companies stick to their strategy, although the market change would require an adaption. Concretely, the confirmation- (interpret findings as confirmation of one´s belief), the conformity- (individual thinking conforms group´s thinking) and the status quo-bias (preference for the status quo and tendency to keep it) can cause irrational decisions. [25]

Strategy Interactions: In literature, a hierarchical approach is often used for strategies. In medium-sized companies, the interactions between corporate, BU and functional strategies are too important to view them separately. One overall strategy process that includes relevant interactions is more useful for medium-sized companies than several parallel processes.

After reading the preamble and the definition of relevant terms, the guideline is presented to the user (see Fig. 4 on p.5): the guideline is structured around three templates and a process model. The main template is the Strategy Template. The first section contains the members of the strategy team (adaptable for each activity) and the focus and goal of the strategy process. It is important to have a clear focus to prevent the team from being overburdened. After that, three sections serve to answer the three key questions of a strategy process: Where are we today? Where do we see ourselves in the future? How do we reach these goals? Two additional templates are provided for the analysis section and the objectives section, where each BU is considered individually. The analysis template is divided into the sections internal quantitative, internal qualitative and external (market view, focus on the future). The results of these three sections are condensed in a SWOT (acc. to Schneemann the most used strategy method [16]) for each BU. The analysis and objective templates have a structuring purpose but can be customized by users according to their individual needs.

Coming back to the Strategy Template, the analysis templates for each BU are placed in the section analysis. In addition, sales and EBIT-% should be displayed for the entire company and each BU and a condensed SWOT (the key points of each BU) should be filled. The asset-based BU development is a new method, developed by the researcher to identify new possible BUs. This method is not the focus of this paper. The objective templates are then filled for each BU and placed into the Strategy Template. The objective templates promote the usage of the SMART and FAST concepts. The strategic initiatives are developed by reviewing the initiatives in the BU templates and by analyzing their interactions. The Early Warning System (EWS) is a special feature in the guideline, which results from the criticism that a rigid strategy limits a company's flexibility. In this EWS, tipping points are set for predefined indicators, which trigger a new start of the strategy process and the development of a new strategy generation.

The templates are filled by using the process model displayed below. The model is based on the SPALTEN problem solving method and contains seven activities. For each activity, guiding questions, activity-specific goals and methods are given. This is to prevent methods from being used as a substitute for a strategy process rather than for a specific task in the overall context. Well-known examples are the strategy workshops in medium-sized companies, in which a SWOT or BCG method is used to elaborate a completely new strategy. Between the activities, provided checklists are used to verify that the team composition is still correct, that all team members have the necessary information, and that all relevant items from the previous activity have been completed or at least considered. The process allows and promotes agile iterations.

The sections of the Strategy Template can be approx. assigned to activities. However, due to the agile structure, this cannot be considered too rigid. For example, in the Situation Analysis (S) the general information is filled and in the Problem Containment (P) the Analysis Templates are filled with the help of quantitative company data and qualitative interviews (participation). An example where the assignment does not work properly is in strategic initiatives. They are first outlined in the Alternative Solutions (A) activity, then further elaborated in the Selection of Solution activity (L) and finally operationalized with an action plan in the Make Decision & Realization (E) activity.

To relate the process model to the original Harvard phase model, it can be noted that the strategy is developed (activities A, L and Consequence Analysis (T)) and implemented (activity E) based on a detailed analysis (activities S and P). The implementation is then a continuous process of tracking the progress of the initiatives and using the EWS to check if a new strategy generation needs to be developed. An exemplary project plan is provided in the guideline. The Recapitulate and Learn activity (N) considers suggestions for improvement throughout the whole process. These can be documented in the lessons learned catalogue. In a workshop towards the end of the process, the templates and the process are to be adapted based on these findings.

The fractal character of the SPALTEN method is essential for the process model. Each activity can be subdivided again into a SPALTEN process in order to be able to answer questions. For example, the question of how the team should be put together can be decided with SPALTEN. Another decision that the company needs to make is whether it would rather work with creativity workshops in the management circle or with a large participation workshop in activity A. The participation workshop (researchers' favorite) follows the open strategy idea and can increase creativity and diversification. Also, it helps to increase the identification of the employees with the strategy. Possible agendas for these workshops are provided in the guideline. The process model also offers a Continuous Idea Pool. The Idea Pool is extremely helpful in a strategy process as ideas cannot only occur when they are needed (in the Alternative Solutions activity) but also before or after and thus can be documented and considered.
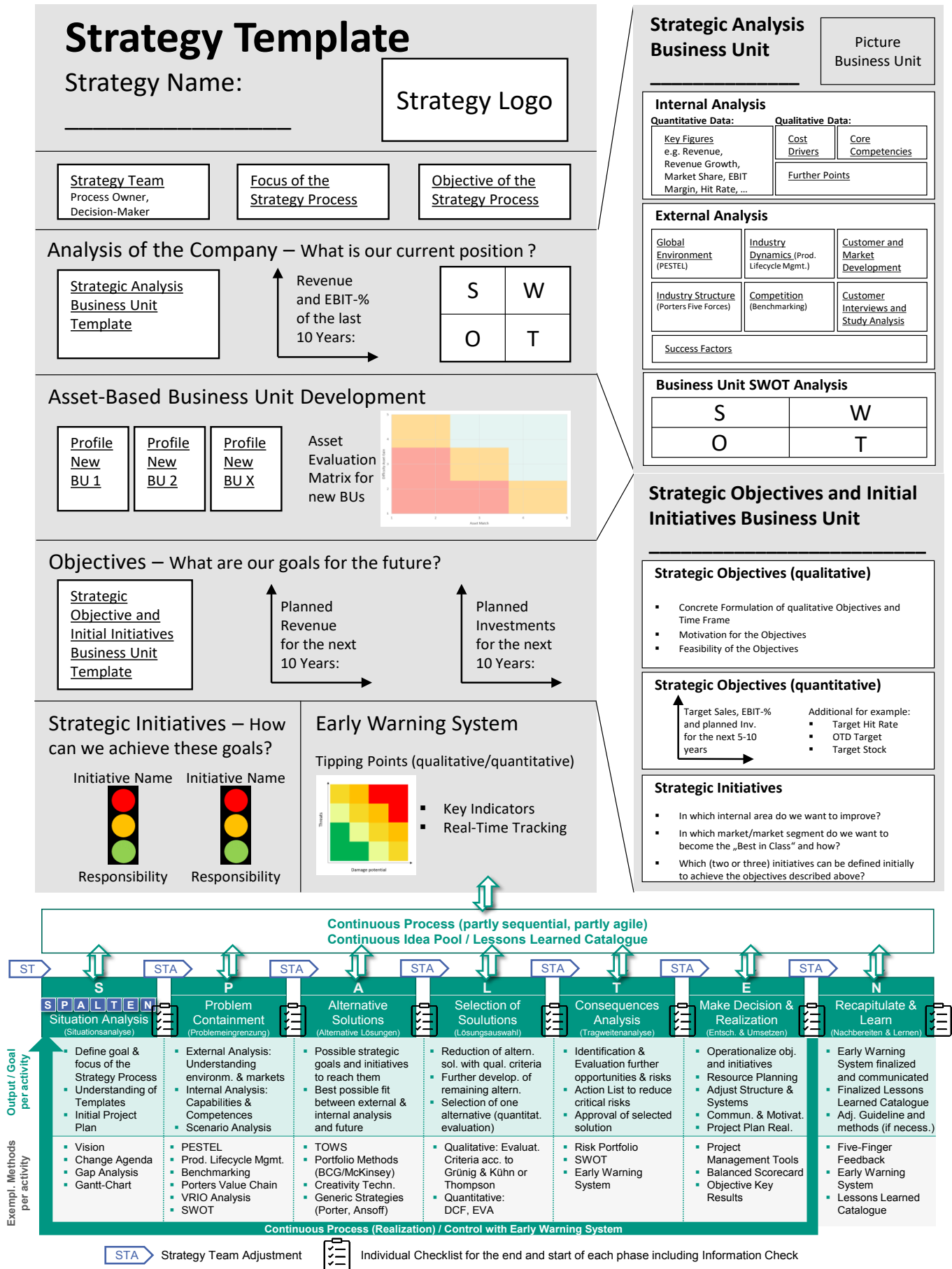
Strategy Template

Strategy Name:
_____

Strategy Logo

Strategy Team	Focus of the Strategy Process	Objective of the Strategy Process
Process Owner, Decision-Maker		

Analysis of the Company – What is our current position ?

Strategic Analysis Business Unit Template

Revenue and EBIT-% of the last 10 Years:

S	W
O	T

Asset-Based Business Unit Development

Profile New BU 1	Profile New BU 2	Profile New BU X

Asset Evaluation Matrix for new BUs

Objectives – What are our goals for the future?

Strategic Objective and Initial Initiatives Business Unit Template

Planned Revenue for the next 10 Years:

Planned Investments for the next 10 Years:

Strategic Initiatives – How can we achieve these goals?

Initiative Name	Initiative Name
Responsibility	Responsibility

Early Warning System

Tipping Points (qualitative/quantitative)

- Key Indicators
- Real-Time Tracking

Strategic Analysis Business Unit
_____

Picture Business Unit

Internal Analysis
Quantitative Data:
Key Figures
e.g. Revenue,
Revenue Growth,
Market Share, EBIT
Margin, Hit Rate, …

Qualitative Data:
Cost Drivers	Core Competencies
Further Points	

External Analysis

Global Environment (PESTEL)	Industry Dynamics (Prod. Lifecycle Mgmt.)	Customer and Market Development
Industry Structure (Porters Five Forces)	Competition (Benchmarking)	Customer Interviews and Study Analysis
Success Factors		

Business Unit SWOT Analysis

S	W
O	T

Strategic Objectives and Initial Initiatives Business Unit
_____

Strategic Objectives (qualitative)

- Concrete Formulation of qualitative Objectives and Time Frame
- Motivation for the Objectives
- Feasibility of the Objectives

Strategic Objectives (quantitative)

Target Sales, EBIT-% and planned Inv. for the next 5-10 years

Additional for example:
- Target Hit Rate
- OTD Target
- Target Stock

Strategic Initiatives

- In which internal area do we want to improve?
- In which market/market segment do we want to become the „Best in Class" and how?
- Which (two or three) initiatives can be defined initially to achieve the objectives described above?

Continuous Process (partly sequential, partly agile)
Continuous Idea Pool / Lessons Learned Catalogue

ST → S → STA → P → STA → A → STA → L → STA → T → STA → E → STA → N

S P A L T E N

	Situation Analysis (Situationsanalyse)	Problem Containment (Problemeingrenzung)	Alternative Solutions (Alternative Lösungen)	Selection of Soulutions (Lösungsauswahl)	Consequences Analysis (Tragweitenanalyse)	Make Decision & Realization (Entsch. & Umsetzen)	Recapitulate & Learn (Nachbereiten & Lernen)
Output / Goal per activity	▪ Define goal & focus of the Strategy Process ▪ Understanding of Templates ▪ Initial Project Plan	▪ External Analysis: Understanding environm. & markets ▪ Internal Analysis: Capabilities & Competences ▪ Scenario Analysis	▪ Possible strategic goals and initiatives to reach them ▪ Best possible fit between external & internal analysis and future	▪ Reduction of altern. sol. with qual. criteria ▪ Further develop. of remaining altern. ▪ Selection of one alternative (quantitat. evaluation)	▪ Identification & Evaluation further opportunities & risks ▪ Action List to reduce critical risks ▪ Approval of selected solution	▪ Operationalize obj. and initiatives ▪ Resource Planning ▪ Adjust Structure & Systems ▪ Commun. & Motivat. ▪ Project Plan Real.	▪ Early Warning System finalized and communicated ▪ Finalized Lessons Learned Catalogue ▪ Adj. Guideline and methods (if necess.)
Exempl. Methods per activity	▪ Vision ▪ Change Agenda ▪ Gap Analysis ▪ Gantt-Chart	▪ PESTEL ▪ Prod. Lifecycle Mgmt. ▪ Benchmarking ▪ Porters Value Chain ▪ VRIO Analysis ▪ SWOT	▪ TOWS ▪ Portfolio Methods (BCG/McKinsey) ▪ Creativity Techn. ▪ Generic Strategies (Porter, Ansoff)	▪ Qualitative: Evaluat. Criteria acc. to Grünig & Kühn or Thompson ▪ Quantitative: DCF, EVA	▪ Risk Portfolio ▪ SWOT ▪ Early Warning System	▪ Project Management Tools ▪ Balanced Scorecard ▪ Objective Key Results	▪ Five-Finger Feedback ▪ Early Warning System ▪ Lessons Learned Catalogue

Continuous Process (Realization) / Control with Early Warning System

STA → Strategy Team Adjustment   Individual Checklist for the end and start of each phase including Information Check

Fig. 4. Templates and process model of the guideline for a strategy process in medium-sized companies

4.3. Initial Evaluation of the Guideline

The guideline is currently used at a medium-sized company (an automotive supplier with 1,500 employees in Germany). It was presented at the beginning to the management team. The members evaluated afterwards with a questionnaire based on a Likert scale from 0 to 5 (5-completely considered) for each success factor if it was considered in the guideline. The average results for each success factor can be found in Fig. 5.
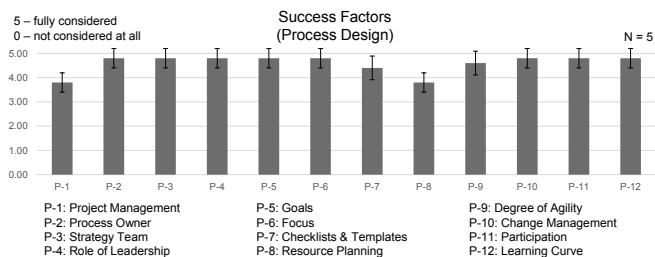

Fig. 5. Results of the evaluation survey at a medium-sized company that used the guideline (y-axis: average rating of success factor)

All success factors were evaluated as considered (average above 3.5). The factors project management and resource planning were considered lowest with a result of 3.8 each.

5. Conclusion and Outlook

A guideline for the strategy process of medium-sized companies was created by providing templates and a process model, which is based on the problem solving method SPALTEN. The guideline takes all success factors that were derived from an extensive literature research and 16 expert interviews into account. It allocated known methods to specific activities and supports the user with an understandable and structured design. The guideline should be easier to use than existing metamodels that were rather designed for large corporations. Classic mistakes in the strategy process such as the insufficient preparation of a SWOT or BCG matrix can be avoided by working with the guideline. The goal orientation of the individual activities of the guideline increases the efficiency of the overall process. By using the Strategy Template, a detailed documentation of the strategy process is guaranteed. The EWS supports the company to maintain a needed flexibility. A major advantage is that the seemingly huge task of a strategy process is broken down into small, manageable problems and guiding questions. This, combined with the activity-specific team make-up and recommendations for the structure of the team for each activity, leads to increased efficiency of the process.

One major challenge was to combine templates and concrete specifications while allowing sufficient.

room for the individuality and complexity of a strategy process. The initial evaluation suggests that project management and resource planning should be described in more detail, which correlates to the Trade-Off between concrete specifications and leaving the sufficient room as mentioned before. Due to the complexity of the topic, the guideline is not as compact as the researcher wanted it to be so that this paper for example does not leave enough space to describe it in detail.

For future research, the following points are planned:

- Evaluate the guideline based on the success factors again after the use at the medium-sized company.
- Evaluate if the guideline let to a professional and applicable strategy process and at the end to a documented strategy.
- Develop a second concept to evaluate the guideline after application as a strategy itself is difficult to evaluate due to the long-time horizon.

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