

The following chapter serves as an orientation for analyzing a company's current internal and external situation. This chapter and its implementation are not compulsory for the assessment of the supply chain or the subsequent differentiation process, but it is meant as a practical support for understanding both the company and its environment (Fig. 2.1).

2.1 Internal Analysis: Company Strategy

2.1.1 Elaboration of Vision, Mission and General Principle

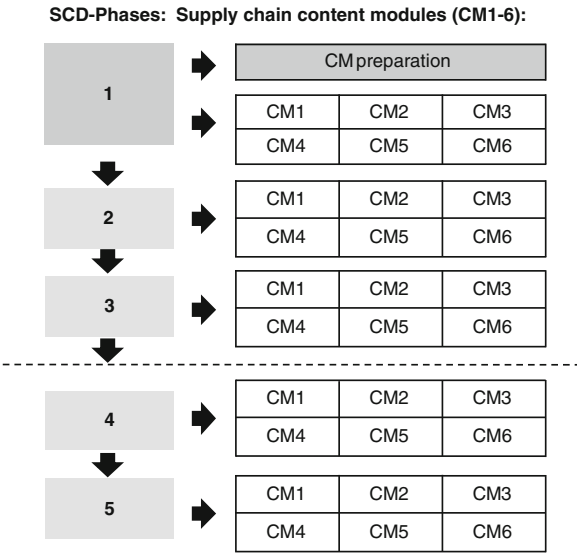
Defining the **vision, mission and general principle** of a company is helpful before starting to assess the company's situation. Questions which need to be asked involve the key principles and core values of the company. The identity of a company derives from its mission statement and its core principles. Furthermore it is important to define the fields of activity as well as the strategic objectives of your company. Besides defining its identity, this will help to assess the future direction of the company within supply chain management.

2.1.2 Portfolio Analysis of Products and Product Groups in the Supply Chain

The portfolio analysis is a well-known strategic management concept developed by the Boston Consulting Group. Herewith the company can assess which product segments exist and how to balance the product portfolio and subsequently the distribution of financial resources.

The product portfolio analysis has two different indicators: market share and market growth. Products are placed within this matrix according to these indicators. The optimal strategies can be depicted from the matrix, in which case the

Fig. 2.1 Position of Chap. 2 in the SCD guide



company invests in the “star” customers and disinvests from the “poor dog” customers. “Cash cows” stay in the same position and, depending on the resources left, the company can decide whether to invest them in the “question mark” customers (cf. also Fig. 3.4). The portfolio analysis helps to improve the balance in cash flow within the supply chain.

2.1.3 Product Life Cycle Position

Products have a life cycle which includes different phases: the **introduction**, **growth**, **maturity** and **decline** phase (Fig. 2.2).

The cycle starts with the product idea, the product test and finally the **introduction** into the market. In the beginning major costs accumulate due to the development of the product. When customers see the benefits of the product, the purchasing begins and the **growth** phase starts. Revenue starts to increase and profit increases to a positive level. The market reaches saturation in the **maturity** phase, which leads in the following to an intensified competition between products. The curve reaches the point of inflection and an overall decrease in profit and revenue starts to set in. In the **decline** phase profit decreases further and loss sets in; here it becomes necessary to either take the product from the market or start relaunching the product through different performance features. Another possibility is the introduction of a new product onto the market.

In the analysis each individual product of the product portfolio in the supply chain can be placed within a given stage of the product life cycle. The company

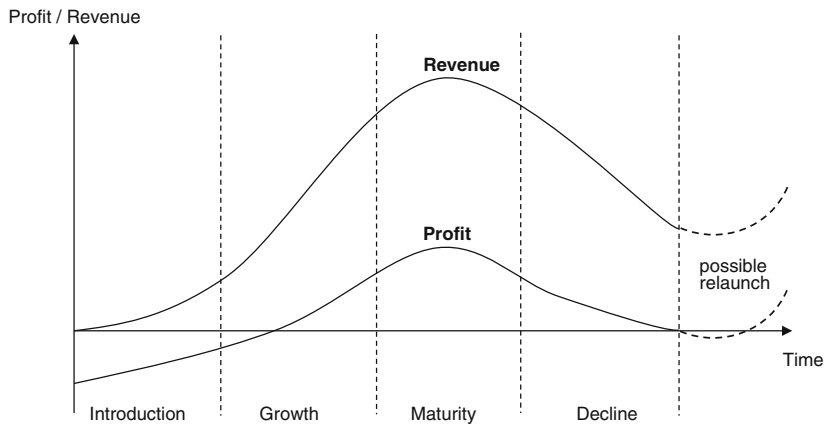


Fig. 2.2 The product life cycle and implications on profits, according Müller-Stewens and Lechner (2005)

can therefore develop individual strategies for individual products. Assessing the product life cycle can help to prevent future risks and find ideas and solutions to upcoming problems at an early stage. This will help secure the future positions of a company and help to identify the position of the company within its competing products and align the performance to the needs of the customers.

2.1.4 Description of Generic Strategy in the Supply Chain

The following generic strategy model by Porter shows that a company either focuses on product differentiation or product cost leadership as a core element. Focus strategies address a niche market and have to distinguish the company from other competitors in the market segment; the strategy either makes it a cost leader or differentiates it substantially from competitors in the niche market.

Differentiation is especially advised when a special need has not been satisfied by the market and can be realized by the company. These kinds of products are usually cost inelastic. It is furthermore possible that a company has a cost advantage within the given segment compared to the industry competitors. In the following figure, Fig. 2.3, the generic strategy matrix is outlined. With this model the company can determine its product strategy within supply chain management and whether it is more of a cost-related strategy or a differentiation strategy. The company can determine the strategy for each individual product in its product line with the help of the generic strategy model and the product's location within the matrix.

Fig. 2.3 Generic strategy matrix to identify supply chain strategy in accordance with Porter (1980)

		Type of product	
		Cost advantage	USP
Scope of competition	Industry	Cost leadership	Differentiation
	Segment	Focus strategy (Low cost)	Focus strategy (Differentiation)

2.2 External Analysis: Company and Environment

2.2.1 Evaluation of the Environmental Factors

The business environment can be divided into different segments varying along **political and legal, economic, sociocultural and technological (PEST)** lines. Through this environmental analysis, the factors influencing the business itself can be determined and possible challenges detected. The earlier the main influencing factors can be determined, the earlier the company can react to their implications.

A company can analyze its business environment by applying the PEST analysis and determine the influencing factors as seen in Fig. 2.4. This method is helpful in order to get a better understanding of the company’s environment within supply chain management.

2.2.2 Industry Structure Analysis

Following Porter’s five forces model, Fig. 2.5 shows the five main forces which are influencing a company’s ability to react. Here we have **industry rivalry, potential entrants, substitute products, buyers and suppliers**. The model clearly shows that the company is constantly exposed to different forces. The company strategy needs to be aligned according to these forces.

- **Growing bargaining power of suppliers.**
In this section, the relationship with the suppliers is considered and a general examination of the supply chain up until now is undertaken. A possible

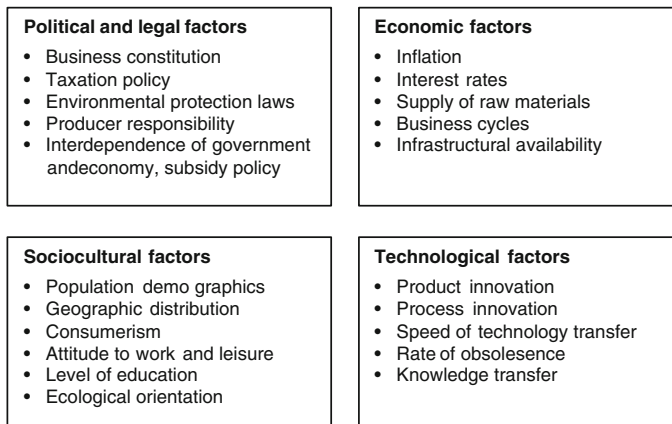
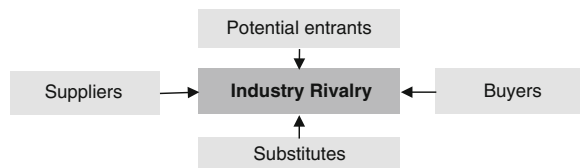


Fig. 2.4 PEST analysis to evaluate the company environment (Müller-Stewens and Lechner 2005)

Fig. 2.5 Porter's five forces model to identify the company's environment within the supply chain



consolidation of suppliers in the industry as well as the tendency to forward integration needs to be examined. Furthermore there may be declines in the flow of information from suppliers and the number of possible substitutes as well as a possible lack of coordination with producers.

- **Growing bargaining power of buyers**

In this section, the relationship with the buyers is considered and a general examination of the supply chain up until now is undertaken. A possible consolidation of customers in the industry as well as a tendency toward backward integration needs to be examined. Furthermore the information flow from suppliers and possible new distribution channels are taken into consideration.

- **Threat of substitute products**

In this section the threat of substitute products is assessed. The question that arises concerns the prediction of new products entering the market. The price and performance proportion of the substitutes and the user-friendliness of substitutes may improve. The entrance barriers for substitutes need to be taken into consideration.

- **Threat of new entrants**

In this section the threat of new competitors entering the market is assessed. Questions which can be asked concern the decline of economies of scale or customer homogeneity, the sunk costs (irreversible fixed costs for the entrance into the industry) and conversion costs (costs for the conversion to new technologies, which are necessary to compete in the relevant industry).

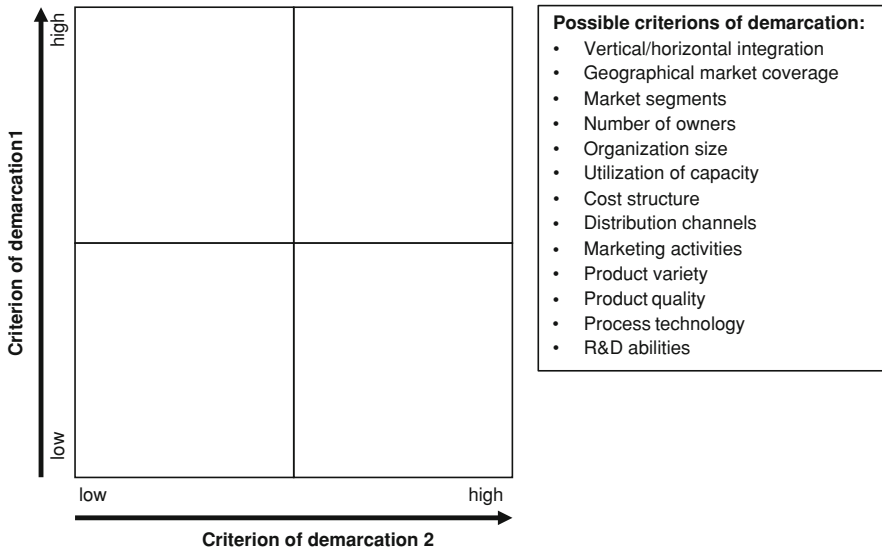


Fig. 2.6 Demarcation matrix to identify relevant criteria and levels of demarcation

• **Competitive rivalry within an industry**

In this section the rivalry within an industry is closely examined. Questions which concern the company are market growth, relative proportion to fixed costs and the appearance of any dominant designs or products. Furthermore the consolidation in the industry as well as fragmentation in the market is part of this assessment.

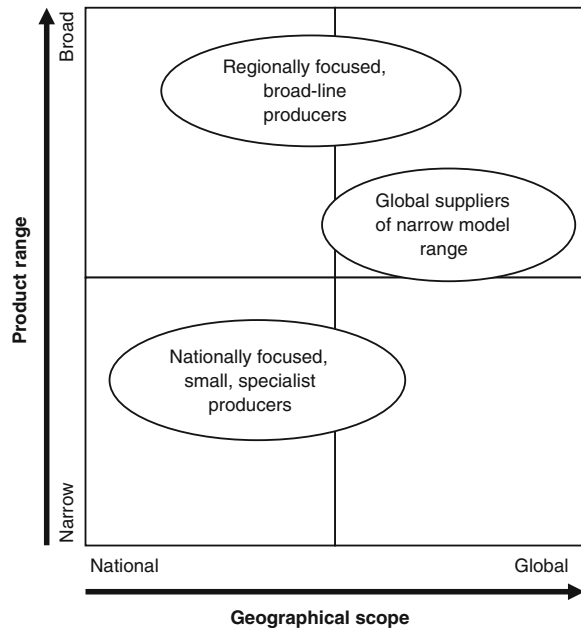
2.2.3 Analysis of Strategic Groups in the Market

In the analysis of strategic groups in the market, the position of the company compared to its competitors is classified. The adequate criteria of demarcation for the establishment of strategic groups in the relevant market are determined via the matrix shown in Fig. 2.6. The most adequate criteria can be chosen and placed within the matrix. The same can be done for the competitors. The matrix shows the relationship of two criteria in order to place them within the product groups. It is therefore possible to evaluate one's own strategy compared to the strategy of competitors.

Figure 2.7 shows an exemplary analysis of strategic groups within the automotive industry. Here the two different demarcation variables which best distinguish the business strategy and competitive position of the company, product range and geographical scope, are used for the analysis.

By using this analysis, it is usually possible to identify two or more groups of companies that have adopted similar strategies. Three different strategic groups have

Fig. 2.7 Exemplary segmentation of strategic groups in the automotive industry



been identified by the analysis. First the regionally focused, broad-line producers, the global suppliers of a narrow model range and the nationally focused small, specialist producers. The strategic group analysis helps to identify the similarities between different companies and competitors. This contributes to the understanding of industry structure, firm strategy and industry evolution (Grant 2002).

2.2.4 Examination of the Strongest Competitors

An examination of the strongest competitor can help to directly compare one's own strategy with the strategy of the competitor. In order to make a thorough analysis of the competitors, the competitor has to be analyzed according to its **objectives, assumptions, strategy, abilities and prognoses**. The analysis of the competitor should include future strategies and objectives, estimating the reactions of the competitor to one's actions and how the behavior of the competitor can be influenced through strategy.

2.2.5 Core Competency Assessment

In the supply chain assessment the company can evaluate how strong its competencies are compared to the strongest and second strongest competitor in different areas of the supply chain. Examples can be given which indicate the core

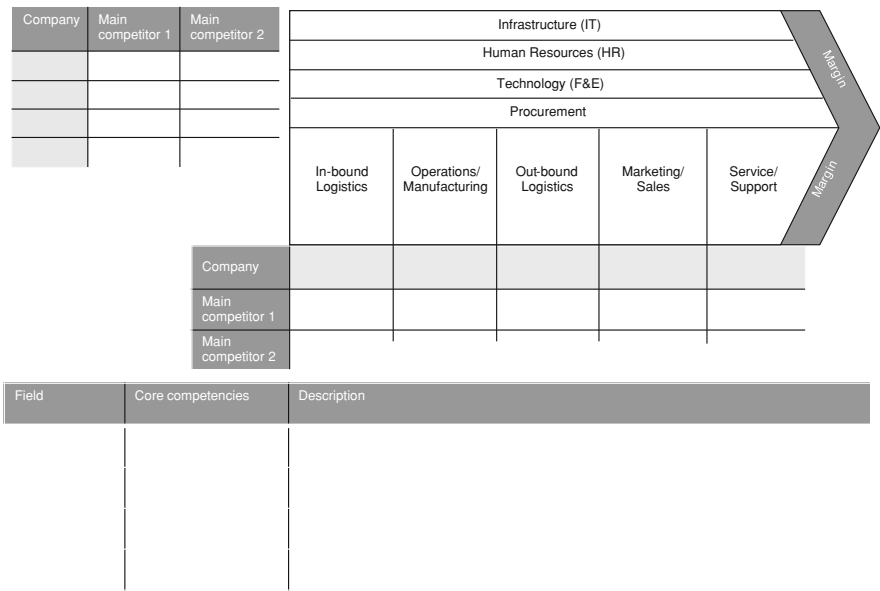


Fig. 2.8 Assessing the company’s competencies by means of Porter’s value chain analysis

competencies of the company in different areas. By the comparing of supply chains, this assessment will help to analyze where the competitive advantage of the company lies compared to its competitors.

In this assessment the companies can analyze their competencies in the supply chain according to their competitors. They can determine the company’s competencies according to the indicators weak, rather weak, average, rather strong and strong and compare them with the competencies of their competitors. Hereby one possible way of determining one’s own main competitors is to compare them relative to the industry average. Figure 2.8 shows examples of core competencies. In the following a brief description of the competencies can be given. Carrying out this method will help to position the company within the industry.

2.3 Summary of Strategic Internal and External Analysis

The SWOT analysis shows the output of previous analyses which were done in order to assess the company’s internal and external situation within its industry. The process of analyzing the company and its environment can help to further assess the implementation factors of the supply chain differentiation process. This will give an overview of the company’s strengths and weaknesses as well as its environment.

In the following the company can place the outcome of the analyses within one chart (Fig. 2.9). This shows a compact overview of the main **strengths** and

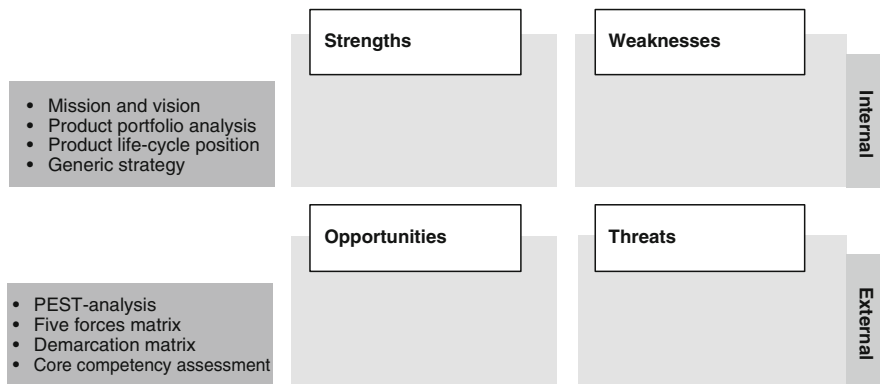


Fig. 2.9 Analyzing internal and external factors according to the outcome of analyses

weaknesses on the internal side of the company as well as the **opportunities and threats** on the external side when looking at the company's environment.

The concepts and methods outlined within CM preparation are **intra-organizational**, meaning that they were solely applied to the company's situation and its environment. A further **inter-organizational** assessment can be conducted by applying the concepts to supply chain components within different companies. The given methods can be applied analogically. By doing so, the core competencies within the supply chain of the company and the competencies of the competitor's supply chain can be assessed.

2.4 Application Example and Possible Output of Company Strategy Analysis

The following case study shows how a fictive example of a firm named "PC Manufacturing Inc." can implement the supply chain differentiation process.

PC Manufacturing Company is a multinational corporation in the IT systems industry that intends to apply the supply chain differentiation process. Due to changes in customer channel preferences, emerging markets, declines in component costs, a capable supply base and globalization, the company has to analyze its supply chain process in order to stay competitive on the market. Customer demands have become increasingly complex, which shows in the market demands predictability, customization, services and precision delivery. Processes are much more complex and different customer requirements create a need for multiple supply chains. The supply chain strategy and the core competencies of the company consist of configure-to-order (CTO) manufacturing, just-in-time inventory and a high cash-to-cash conversion cycle. Due to higher demand and competition, the company wants to apply an integrative differentiated supply chain process.

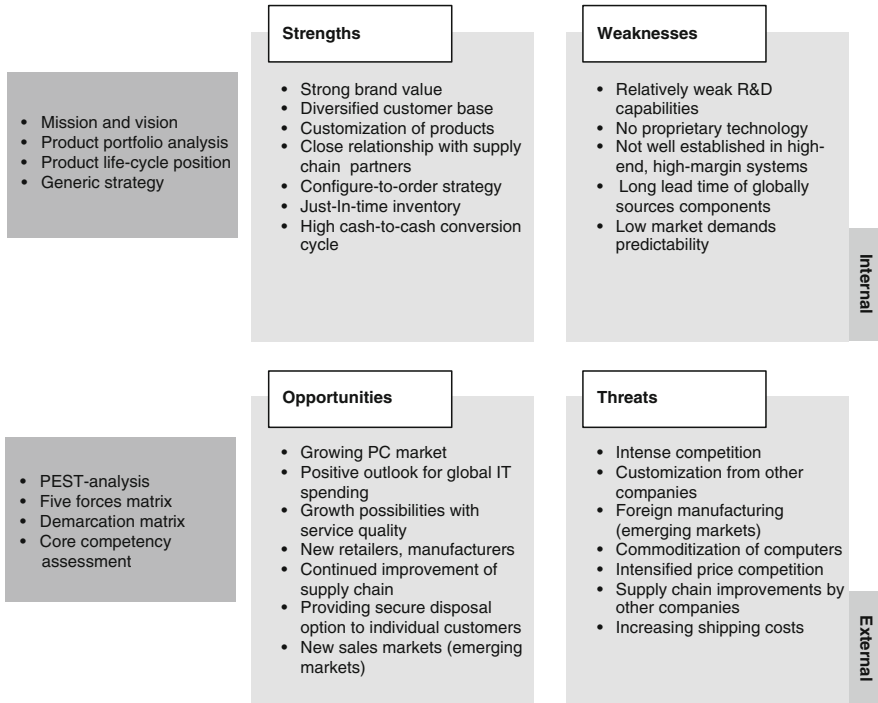


Fig. 2.10 Example—Internal and external factors influencing the success of PC Manufacturing Inc

The differentiation process provides multiple offerings focused on cost efficiency, choice of features and personalization and/or services. Since the customers are looking for multiple channel options, there is a strong need to transform the former supply chain strategy within the corporation.

- In CM preparation it is necessary to scrutinize the company and its environment. In order to provide an example of the analysis in CM preparation, one can apply Porter's **generic strategy** in order to distinguish the different product segments and strategies. This case study will mainly focus on the computer segment as the main product group of the large variety of products within the product portfolio of the company, disregarding the other product groups and mentioning them solely where necessary. In the generic strategy developed by Porter, one can distinguish the strategies of all products and product groups. Porter's generic model analyzes the company's strategy and shows that companies are either focused on product differentiation or on cost leadership. The characteristics of a differentiation strategy are a large variety of products or niche products, low price sensitivity and a strong brand management. The company can either compete in mass markets or target a few markets while focusing on innovation. Due to the large variety of products in information

technology, business related services, infrastructure technology, consulting and applications and business process services and a strong brand image, the company is clearly focusing its strategy on differentiation rather than cost leadership.

- The **SWOT analysis** of the supply chain of PC Manufacturing Inc. in Fig. 2.10 shows the strengths and weaknesses as internal factors of the company and the opportunities and threats as external factors influencing the company and involving its environment. The output of the analysis of the different measures outlined in CM preparation can be seen within the SWOT analysis. The computer manufacturer has recognized the need for a differentiated supply chain model because of its diversified customer base and its customization of products.

Especially in an industry with continuous product innovation, PC Manufacturing Company has to consider its long-term strategies and continually refine its product portfolio. Therefore the outlook for the next three years is crucial. The customer needs and supporting global customer groups are classified. Due to high complexities of products and processes, there is a need for complexity reduction while maintaining a responsive mindset. In regard to changing business strategies, product commoditization, intense competition, foreign manufacturing, supply chain improvements by other companies and multichannel sales, the company needs to design its supply chain around the new environmental circumstances by applying the supply chain differentiation process.

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