University of Surrey
School of Management

Submitted for the degree of
Doctor of Business Administration

Development of a Strategic Planning Model
for Automotive Supplier

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Abstract

The current pace of economic evolution in the world is driving companies in every industry to become more competitive every day. Old strategies that led to success stories in the past are no longer valid and need to be reconsidered, adapted, rebuilt or disposed of. This is especially true in the automotive industry and all its branches. Companies in the automotive supplier industry are being forced to think and rethink their strategies while facing increasingly hard times. This sector is being subjected to high pressure from increasingly demanding customers, who use their power to push prices down, and suppliers increasing prices for raw materials. The uncertain future demand from customers makes planning even harder, and fierce global competition calls for efficient operations, worldwide supply capabilities and most importantly, constant innovation. Many suppliers are planning acquisitions and mergers in order to meet the new market requirements in response to a study by Roland Berger (2006). The challenges for suppliers are vast, and the dilemma about how to solve them is a severe one. On the one hand, suppliers are exposed to price and quality pressures from their customers (Dudenhöffer 2002), while on the other, they have to introduce innovation to the market in order to maintain or increase their market position.

Solving this dilemma maybe made easier with a business process that helps to formulate and implement strategies for reaching each supplier’s goals - a strategy which helps suppliers to face their challenges, and positions them in this difficult market. A possible way of dealing with this is strategic planning developed for the automotive supplier industry.
Declaration of Originality

I declare that my thesis entitled – Development of a Strategic Planning Model for the Automotive Supplier Industry – for the degree of Doctor of Business Administration (DBA) of University of Surrey, embodies the result of an original research programme undertaken by me.

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Mauro Ambrosi

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ABBREVIATIONS

CAGR  Compound Annual Growth Rate
CAPEX  Capital Expenditure
CBV  Capability Based View
CEO  Chief Executive Officer
CSF  Critical Success Factors
BCG  Boston Consulting Group
BSC  Balanced Scorecard
EBIT  Earnings before Interest and Taxes
EVA  Economic Value Added
HMI  Human Machine Interface
KPI  Key Performance Indicators
KSF  Key Success Factors
NAFTA  North American Free Trade Agreement
NOPAT  Net Operating Profit after Tax
OEM  Original Equipment Manufacturer
PBV  Position Based View
PEST  Political - Economical - Social – Technological
PIMS  Profit Impact of Market Strategy
PROM  Profit Optimization Model
RBV  Resource Based View
R&D  Research and Development
ROCE  Return on Capital Employed
ROE  Return on Equity
ROI  Return on Investment
ROS  Return on Sales
SBA  Strategy Business Areas
SORT  Satisfactory – Opportunity- Fault – Threat
SWOT  Strengths, Weaknesses, Opportunities and Threats Analysis
VCA  Value Chain Analysis
VDA  Verband der Automobilindustrie
WACC  Weighted Average Cost of Capital
1. INTRODUCTION

1.1 Reference to the topic and the problem statement

Strategic planning is a business discipline that has been discussed by various authors over the last decades. For instance, Michael E. Porter (1998b, p.xxi) stated that 'every firm competing in an industry has a competitive strategy, whether explicit or implicit'. Following Porter (1998b, p.xxi), strategic planning has become essential in order to find a position in the industry, which helps to defend the own company against the competition. Porter (1998b, p.xxi) says that there are three generic strategies for coping with five competitive forces, which help to outperform other companies in the industry: overall cost leadership, differentiation and focus. Porter (1998b, p.xxi) supports the theory that it is rarely possible to successfully pursue more than one approach as the core strategy, but overall commitment from organization and top managers has to take place. In agreement with Porter (1998b, p.xxi), the availability of strategy depends on the industry structure. Therefore, an environmental analysis should be made in order to formulate a strategy.

In contrast to Porter's (1998b, p.xxi) theory, Igor Ansoff (1998) identifies the procedure of a strategic planning process based on four steps: objectives establishment; estimation of the gap between the current position of the firm and its objectives; proposition of the strategy courses; and testing for the ability to reduce gaps.

Another generic strategic planning approach has been developed by George Stalk and Rob Lachenauer (2004). According to their theory, the focus on competitive advantages is the leitmotif of the strategic planning process. Therefore, in order to win in business, companies have to play 'hardball'. This means they have to perform in order to win and they must seek decisive victory through applying every available strategy and using every legitimate resource. Contrasting or supplementing Porter's (1998b, p.xxi) body of thought, there exist other approaches, such as the ones from Kenichi Ohmae (1982), and Igor Filatotchev (1981) to mention only a few.
These authors developed so-called prescriptive models, which either see planning as a conceptual, formal or analytical process. Ansoff's (1998) previously described model, for example, has a formal view on the process with a conceptual approach on corporate strategy. Porter (1998b, p.xxi), Stalk and Lachenauer (2004) focus on the analytical view in order to develop a more generic corporate strategic approach. The conceptual view is represented by Andrews (1980) and Steiner (1969). According to this view, strategic planning is an informal process of conception, typically in a leader's conscious mind and usually based on the Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis matrix.

An alternative view was developed by Mintzberg (Mintzberg 1994). He categorised five different schools of thought, where the 'learning school' is the most popular. With its emergent point of view, strategy is seen as a must-have in the process of collective learning. Bryan (2002), Courtney, Kirkland and Viguere (1999), Govindarajan and Trimble (2005), Kim and Mauborgne (2005), Hamel and Prahalad (1994) are the most popular authors of the descriptive school.

The objective of this research is to discover the extent to which the existing approaches can be applied to the automotive supplier industry. The question is whether the market specifics allow for the application of the existing strategic planning models and to what extent such an application is possible. While an initial literature overview demonstrates that there is a lack of availability of strategic planning models for the automotive industry, the research will deeply analyse whether such concepts are available. The results will be used to develop a company-specific strategic planning model which could become the industry's first representative study. From this starting point, the following chapters will describe the intentions and methodology of the academic research.

### 1.2 Research questions and objectives

Regarding the automotive supplier industry, it is possible to assume that there is a gap in knowledge in relation to strategic planning models specifically designed for this industry. This paper will attempt to fill this gap by answering the following
questions through the development of the subsequent chapters. The main question for the thesis is:

- What form does the strategic planning model for automotive suppliers take in order to meet the market's requirements?

Derived from it are the following questions:

- Which concepts of strategic planning have been developed up until now?
- What are the main findings and hypotheses of these specific concepts?
- What can be learnt from responses of industry experts?
- Can a specific model be derived for the automotive supplier industry?
- Does the model withstand a first verification?
- With the help of a case study, what can be learned from the verification process?

Taking into account the research questions, the following objectives have been set:

- Identification and analysis of outstanding strategy and strategic planning concepts
- Development of strategic planning model for the automotive supplier industry

These objectives will be achieved throughout the development of the forthcoming chapters.

1.3 Research design

In order to scrutinise how this research handles the development of knowledge, it is essential to outline the underlying research method and design.

Firstly, the research is based on theoretical research and aims to review existing strategic planning concepts in order to explore the important findings and relevant hypotheses.
While the previously mentioned step is purely theoretical, an primary research of the automotive supplier industry analyzes the opinions of experts about the strategic approach taken in their companies.

Following the primary and secondary research, a strategic model will be developed. Afterwards, the model is tested through a case study within an automotive supplier market segment. Finally, it is foreseen to discuss the findings and illustrate the possible limitations. Furthermore the procedure of this research is measured by the results achieved and to their applicability for other automotive suppliers.

![Research Design](source: Own development)

Figure 1.1 Research Design
Source: Own development

1.4 **Data collection and research ethics**

While the first section the literature review mostly makes use of books, market analysis, consults reports, newspapers, journals, articles and research papers which deal with the automotive supplier industry. The focus clearly lies on qualitative data gained from existing literature.
In direct correlation with data collection methods, ethical issues need to be discussed. Ethical concerns generally emerge when a research is planned and when access to organisations and individuals is granted. According to Saunders et al (2003) 'ethics refers to the appropriateness of your behavior in relation to the rights of those who become the subject of your work, or are affected by it'. This research is guided by the code of ethics developed from The Social Research (December 2003). A link to the PDF file can be found in the appendix. In brief, the basic principles of this code of ethics will be illustrated and the extent to which they are valid will be discussed further on in this paper.

Obligations to society

➢ Social research should be a legal benefit to society
➢ The work must be conducted responsibly in order to maintain standards in the collection of data, in the impartial assessment and in the dissemination of findings

➢ Obligations to founder and employer
➢ Clear and balanced relationship with employer and founder
➢ The relationship should not compromise a commitment to morality and to the law

➢ Obligations to colleagues
➢ Methods, procedures and findings should be open to collegial review

➢ Obligations to subjects
➢ The subjects' participation should be voluntary
➢ No groups should be disadvantaged by being excluded from consideration

For this research not all of the above mentioned principles are equally relevant. During the collection of data for the literature review and the case study, the so-called impartial assessment is relevant. This means that all information should be treated equally without neglecting the findings that may not lead to the desired outcome. The
obligations towards society require that research benefits society by providing results that are authentic and reliable. Secondary data from external sources - especially conducted surveys and studies - will be used but this should be critically reviewed according to the widely-used ethical standards. The outcome is not pre-defined, since the literature review and the analysis of data will be conducted neutrally. The chosen research method renders this procedure possible.

The principle, which describes the obligations to colleagues, will be followed. The ethical guidelines from "The Social Research" explicitly state that within the limits of confidentiality, the researcher should provide adequate information to colleagues in order to permit procedures. This point refers to the data used for the case studies and the publication of the whole research. The research will only be made available to other sources with the specific permission of the employer in order to avoid the publication of confidential data. To ensure that other researchers can comprehend the conducted research, an anonymous version of the research may be made available if requested.

1.5 Research structure

The thesis will be subdivided into seven main chapters followed by references and an appendix:

1. Introduction – research question, objectives, first idea of design and method
2. Literature review – definition, theoretical concepts, trade-offs
3. Research design, methods and philosophy
4. Primary research through interview by questionnaire
5. Development of a strategic planning model
6. First verification of the practicability of the model through the use of a case study
7. Conclusion and evaluation of research

The Introduction contains a problem definition, an initial overview and an exploration the topic. The academic requirements are met through the depiction of the ethical statement in correlation with an in-depth explanation of the research philosophy.
Chapter 2 begins with an explanation of the significance of the strategic planning process, which leads to a detailed analysis of the available strategic planning models. The chief aim of this chapter is the identification of the main findings and (in the development) of a relevant hypotheses.

After the literature review the empirical section follows, which includes chapters 3 and 4. Chapter 3 contains the whole research procedure: objectives, design and methodologies. It serves as a starting point for the research goal.

Chapter 5 presents the results of the theoretical research in chapter 2 and the primary research in chapter 4, combining them in order to develop a strategic planning model suited to the needs of the industry. In chapter 6 the developed strategic planning concept will be tested through the use of a case study.

The last chapter of the research contains the findings that were achieved with the aid of the case study and provides a list of recommendations for the company. Furthermore, the used methodology and the developed strategic planning concepts will be evaluated in terms of their applicability/relevance to/for other suppliers within the automotive industry. New and unanswered questions will be identified and the strengths and weaknesses of the chosen procedure will be outlined. If necessary further steps will be carried out.
2. LITERATURE REVIEW

2.1 Significance of strategic planning

The following chapter encompasses the definitions of strategy and strategic planning and incorporates their historical perspectives. This is followed by the link to strategic planning concepts.

2.1.1. Term definitions: strategic planning

Before addressing strategic planning, it is necessary to determine the roots and origin of strategy and to clarify strategy itself.

The word ‘strategy’ comes from the Greek words ‘stratos’ (army) and ‘agein’ (leading), which translates to ‘army-leading’. Indeed originally, the word was only used in relation to military purposes. Among the well-known ancestors of the ‘art of strategy’ was the Chinese general Sun Tsu who wrote The Art of War (in approximately 500 BC), the first book on strategic warfare. Sun Tsu settled on the concept of ‘victory without battle’ as his top priority. This refers to that which can be achieved through co-operation, meticulous preparation, analysis of detailed information about the opponent (including espionage) and the ability to assess one’s own strengths.

The German military philosopher Carl von Clausewitz (1780-1831) developed a new concept. According to him, “uncertainty is an inevitable part of all strategies – not just a random disturbance of one’s plans” (Neuhaeuser 2005, p.3). He suggested that flexibility was the key to success (and that one should make scenarios of all eventualities). In addition to this idea, Clausewitz (1780-1831) believed that battle was the only means of achieving one’s strategic ends.

However, the premise of strategy might be seen not only in terms of military activity. Some of its principles were inherited from the Roman era. Seneca (4 BC- 65 AD), a Roman Stoic philosopher - and who is sometimes viewed as founder of the time management concept. From a business viewpoint, this can be interpreted as “define your goals – then check your abilities – finally develop a roadmap to reach your goals” (Neuhaeuser 2005, p.4).
Florence governor Niccolo Machiavelli (1469-1527) introduced another view in strategic thinking. His famous utterance: "Goals one thinks to be right must be pursued, even unpopular actions are allowed", opened up a new field of strategy application - politics.

Miyamoto Musashi, the 17th century Japanese Samurai swordsman, developed the military application of the word strategy further by introducing new thoughts on strategic perception. In *The Book of Five Rings*, Musashi wrote that the key factor of success rests with the concept of a bird’s eye view: to succeed, one must see from a bird’s eye view in order to avoid getting lost in details. Musashi believed that one can win the battle when the action will be totally unexpected for adversary and maximum utilization of own strengths will be made.

Seneca (4 BC- 65 AD), Sun Tsu (approx. 500 BC), Clausewitz (1780-1831), Machiavelli (1469-1527), Musashi (17th century) – all belong to the roots of modern strategic thought, because current concepts of strategy have been borrowed from the military and adapted for use in business life.

Nowadays, from corporate perspective, strategy is perceived as "the pattern of decisions in a company that determines and reveals its objectives, purposes, or goals, produces the principal policies and plans for achieving those goals, and defines the range of business the company is to pursue, the kind of economic and human organisation it is or intends to be, and the nature of the economic and non-economic contribution it intends to make to its shareholders, employees, customers, and communities" (Andrews 1980, pp.18-19).

As it can be seen from the definition, business strategy differs from military strategy in one aspect. Business strategy takes into account ethics and values, and this is something that is usually omitted in warfare strategy.

Strategic planning is the business process of the formulation and implementation of a set of strategies in order for a company to reach its goals. Strategic development, also known as strategic formulation or strategic planning, is the process of creating a strategic plan (usually called strategy) which "establishes the specific results an organisation intends to achieve, and includes a set of inter-related core strategies
and a clear course of action in order to realise the intended results" (Anderson 2006). However, the effective strategic planning process might not always be strictly formulated. According to Mintzberg (1994), it can be a judgmental designing, intuitive visioning, and emergent learning process; and it has to include analysing before and programming after as well as negotiating during the process. After all, the results of strategy formulations are the development of a strategic plan that provides the input for the strategy implementation phase, where it should be executed.

Further, the emphasis will be made on business strategy, which refers to the particular business unit (figure 2.1).

![Diagram of the levels of strategic planning](image)

**Figure 2.1 The levels of strategic planning**  
*Source: Thompson, Strickland 1989*

In context we the above description, following terminology can be given: **Strategy** is perceived as "the pattern of decisions in a company that determines and reveals its objectives, purposes, or goals, produces the principal policies and plans for achieving those goals, and defines the range of business the company is to pursue, the kind of economic and human organisation it is or intends to be, and the nature of the economic and non-economic contribution it intends to make to its shareholders, employees, customers, and communities" (Andrews 1980, pp.18-19).

Whereas:
Strategic planning is the business process of the formulation and implementation of a set of strategies in order for a company to reach its goals. Strategic development, also known as strategic formulation or strategic planning, is the process of creating a strategic plan (usually called strategy) which "establishes the specific results an organisation intends to achieve, and includes a set of inter-related core strategies and a clear course of action in order to realise the intended results" (Anderson 2006).

However, the effective strategic planning process might not always be strictly formulated. According to Mintzberg, it can be a judgmental designing, intuitive visioning, and emergent learning process; and it has to include analysing before and programming after as well as negotiating during the process. After all, the results of strategy formulation is the development of a strategic plan that provides the input for the strategy implementation phase, where it should be executed.

2.1.2. Necessity of strategic planning

"Every firm competing in an industry has a competitive strategy, whether explicit or implicit" (Michael Porter 1998b, p.xxi). According to Porter (Porter 1998b, p.xxi), either strategy is developed explicitly through the planning process, or it might emerge from various activities. Evidently, that the sum of departmental methodologies, which are separately driven by local area professionals and which are oriented towards local incentives, rarely equal the best practice. "The emphasis being placed on strategic planning today in firms reflects the proposition that there are significant benefits to gain through an explicit process of formulating strategy, to ensure that at least the policies (if not actions) of functional departments are co-ordinated and directed at some common set of goals" (Porter 1998b, p.xxi).

The necessity of strategy, according to Porter (Porter 1998b, p.xxi), is in finding "a position in the industry where the company can best defend itself against competitive forces or can influence them in its favour" (Porter 1998b, p.4).

According to George Stalk (Stalk 1999), every available resource and strategy – that is what business winners need in order to "play to win" creating unassailable advantage, and not "play to play".
Kenichi Ohmae (Ohmae 1982) pointed out that strategy is all about competitive advantage. "Without competitors there would be no need for strategy, for the sole purpose of strategic planning is to enable the company to gain, as efficiently as possible, a sustainable edge over its competitors" (Ohmae 1982, p.36).

In their research, W. Chan Kim and Renée Mauborgne (Kim, Mauborgne 2005) show that smart strategic moves are the essential elements which allows a company to distinguish itself from the competition and go on to create strong profitable growth.

For George Yip (Yip 1992), strategy is the basis for defining the types of customers served and the types of products and services offered.

Vijay Govindarajan and Chris Trimble (Govindarajan, Trimble 2005, p.xvii) concur. They argue that strategy should answer at least three fundamental questions: "Who is your customer? What is the value you offer to the customer? How do you deliver the value?"

Igor Ansoff (Ansoff 1988, p.75) argues that the necessity of strategy arises from two facts: "The fact that firms need direction and focus in their search for and creation of new opportunities and the fact that it is to the firm's advantage to seek entries with strong synergistic potential".

Strategic planning is the method used by businesses to ensure their long-term survival and profitability; to allow for their adjustment to continuous change; and to strengthen their ability towards self organisation. Being a bridge between long-term goals and concrete actions, strategy aims at mutual consent to corporate goals, creates the ability to self govern and ensures that a firm has the capacity to act within complex structures.

2.1.3. The practice and process perspective about strategic planning

It is of importance to describe the two different perspectives about strategic panning – the practice and process view. According to Whittington, strategy praxis is about the activities of strategy, for instance planning, issue selling and decision-making, done formally or through ad hoc meetings and offline attempts at influence. This praxis is the work of strategy-making (Whittington, 2007).
Moreover, according to Paula Jarzabkowski and Richard Whittington (2008) strategy-as-practice is a recent field of research that has grown in response to the curious absence of actors and their activities in most academic articles on strategy (Hambrick, 2004). Strategy research is populated by multivariate analyses of firm- or industry-level effects on firm performance; in practice, strategy is something that people do. Strategy-as-practice, therefore, is concerned to study strategy through the lenses of strategy praxis, practitioners and practices (Jarzabkowski, Balogun, & Seidl, 2007; Whittington, 2006). Praxis refers to the work that comprises strategy: the flow of activities such as meeting, talking, calculating, form filling, and presenting in which strategy is constituted.

According to Paula Jarzabkowski and Richard Whittington, 2008, Strategy practices are the social, symbolic, and material tools through which strategy work is done. These practices include those theoretically and practically derived tools that have become part of the everyday lexicon and activity of strategy, such as Porter's five forces, decision modeling and budget systems, and material artifacts and technologies, such as PowerPoint, flipcharts, and spreadsheets (Paula Jarzabkowski, Richard Whittington, 2008).

Differently to this practice orientation, the process researchers are tracing processes and activities over time, and linking them to organizational outcomes, whether economic returns, strategic change or fast decision-making (Whittington, 2007). In examining praxis, Strategy-as-Practice researchers have mainly followed, their key contribution being a greater commitment to ethnography or similarly intimate methodologies (Balogun et al. 2003), rather than the interview-based, organization-level case studies typical of the process tradition (e.g. Pettigrew and Whipp 1991).

Following above mentioned thoughts this research mainly follows the process oriented view to examine strategic planning, however the examination of the outcome which will be tested through a case study with its aim of practicability and includes a practice oriented intention.
2.1.4. Strategic planning based on market and competitor analysis

"Industry structure has a strong influence in determining the strategies potentially available to the firm" (Porter 1998b, p.3). Very true. This statement makes clear that strategy formulation is an analysis-driven task and not the process whereby managers can depend only on creativity. Moreover, there is hardly any methodology for business strategic planning that ignores market analysis because the flaws of the over-the-wall approach are clear to every specialist and manager. Therefore, analysis is the critical starting point of strategic thinking, which provides a guarantee that a given strategy will suit the situation.

As a component of strategic analysis (figure 2.2), market analysis serves as the foundation for almost every strategic planning model, providing the planners with the first basic steps and actions to be taken in order to have the data and ability to apply the model. Under different strategic planning concepts, market analysis basically serves two main purposes: to state the “as-is” situation and to find the “to-be” position.

![Figure 2.2 Strategic cycle](Source: Own graph)
The position in the market or the "as-is" status in the view of strategic planning is made either for understanding how the business works in order to forecast future market behavior, or for setting the starting point in order to provide control, or both. The elements of the "as-is" analysis can be found in the ideas of Porter (1998), Andrews (1980), Bryan (2002), Ohmae (1982), Yip (1992), Govindarajan and Trimble (2005), Mintzberg, Steiner (1969), Stalk and Lachenauer (2004), Henderson (1973), Kim and Mauborgne (2005), Treacy and Wiersema (1995), Ries and Trout, Ansoff (1998), Drucker (1993) and others.


In contrast with market analysis, there is no generally accepted opinion about competitor analysis. For example, Porter (1998), Andrews (1980), Ohmae (1982), Yip (1992), Humphrey, Mintzberg (1994), Steiner (1969), Stalk and Lachenauer (2004), Treacy and Wiersema (1995), Hamel and Prahalad (1994), Ansoff (1998) and others emphasize the importance of competitor analysis. Whereas Kim and Mauborgne (2005) argue that a company should monitor competitors but should focus on competition-free areas. Theodor Levitt, however, believes that competitor analysis is not only useless, but harmful.

In spite of the existence of a variety of opinions, nearly all business leaders agree that competitor analysis makes sense even if it is done with the only intention of getting familiar with new ideas, which allows the company to better deliver value to the customer.
Therefore, market and competitor analysis is the first logical step in strategy formulation in that it provides the basis for further strategic models application and management decisions.

2.1.5. Different views about strategic concepts

Over time, many thinkers have addressed the issues related to business strategy and strategic planning from different angles.

Mintzberg (Mintzberg 1994) emphasizes the broad diversity of perspectives in current strategic thinking and has identified nine main distinct schools in strategy theory. In addition, Mintzberg (Mintzberg 1994) addressed the question of whether learning provided the ability to incorporate emerged issues into planning activity. Later, Mintzberg’s (Mintzberg 1994) views was used to provide the basis for Whittington’s (Whittington 2001) classification of approaches to strategy.

Strategy formation and realisation in practice consists both of deliberate and emergent elements. However, most of the studies that are conducted on the corporate strategy system focus on the more formal and intended aspects of strategy, i.e. processes followed to deliver the intended plan. Ansoff (Ansoff, 1988) is considered to be the pioneer of strict formal strategic planning methodology.

From the perspective of the context debate (inside-out versus outside-in), Porter’s study (Porter 1998b) represents the beginning of the externally oriented view establishing positioning approach. The works of Treacy and Wiersema (Treacy, Wiersema 1995), Ohmae (Ohmae 1982), and Stalk and Lachenauer (Stalk, Lachenauer 2004) enlarged the school with new thoughts. In addition, Treacy and Wiersema’s model provided the basis for Kaplan and Norton’s strategy maps (Kaplan, Norton 2002).

In contrast to the outside-in view, the capability-based inside-out approach of Hamel and Prahalad (Hamel, Prahalad, 1994) is based on the uniqueness of the set of capabilities of the enterprise. Similar methodology was offered in the concept of Collis and Montgomery (Collis, Montgomery 1998).
Kim and Mauborgne's work (Kim, Mauborgne 2005) has been extremely influential in generating a new course of strategic planning aimed at achieving revolutionary changes. The support of this new course might be found in the works of Bryan (Bryan 2002), Courtney, Kirkland and Viguerie (Courtney 2001, Courtney et al. 1999) and others.

Humphrey's Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis as well as Henderson's Matrix (Henderson 1973) opened up new ways of thinking about strategic planning concepts. Elements of the SWOT analysis might be found in the concepts of Steiner (Steiner 1969) and others, while Henderson's methodology was amplified by the portfolio theories of GE/McKinsey, Hinterhuber (Hinterhuber 1992) and others.

In light of the stated research questions, it should be noted that the majority of strategic concepts are not solely related to strategic planning, but to strategy in general. However, the shaping borders of the strategic planning process can be also extracted from this overview of thought streams. Therefore, an analysis of them will also be useful.

Furthermore, following the stated research questions, it can be derived that there is no strategic planning concepts that were created or adapted for application inside the automotive supplier industry. Consequently, the above-stated research questions remain uncovered and unsolved, because all the concepts that are available until now are general. Therefore, in literature, there is no common opinion and understanding concerning strategic planning concepts that might be applied to automotive supplier industry.

Nonetheless, taking into account universal strategy and strategic planning methodologies, a concept of strategic planning for an automotive supplier could be developed which takes into account the specifics of the automotive supplier industry. Through analysing the general concepts on their applicability inside the automotive supplier industry, the methodologies could be transferred into ideas that could create a strategic planning concept, covering all aspects of an automotive supplier business’ activities. From the perspective of the automotive supplier industry, an analysis of
general strategy and strategic planning concepts can contribute towards the development of a strategic planning concept for an automotive supplier.

2.2 **Existing strategy concepts**

This chapter provides an overview and an analysis of the most outstanding strategy and strategic planning concepts developed up until now. These concepts were grouped into different perspectives according to their underlying philosophies, which will be discussed further in the general findings sub-chapter.

2.2.1. *Strategies based on prescriptive and descriptive concepts*

2.2.1.1. **Concept according to Igor Ansoff**

According to Igor Ansoff (1998), the strategic planning process procedure is based on four steps:

- Objectives establishment
- Estimation of the gap between the current position of the firm and its objectives
- Proposition of the strategy courses
- Test for ability to reduce gaps (figure 2.3).

![Figure 2.3 Decision schematic in strategy formulation](image-url)
As emphasised by Ansoff (1998), objectives must contain three main elements:

- The particular attribute that has been chosen as a measure of the fulfilment of the criteria
- The yardstick, or scale, by which the attribute is measured;
- The goal – the particular value on the scale which the firm seeks to attain" (Ansoff 1988, p.33)

The process of objectives formulation is depicted in figure 2.4, and the overall hierarchy of objectives is depicted in figure 2.5. According to Ansoff (1998), yardsticks are an indicator by which the present and future performance of any given company can be measured. Yardsticks have two dimensions: objectives and the desired quantity goals.

Ansoff pointed out that both strategy and objectives appear similar. Firstly, both of them are used to filter projects. “Objectives represent the ends which a company seeks to attain, while the strategy is the means to these ends” (Ansoff 1988, p.78). Secondly, strategy and objectivities are interchangeable at different points in time.
and at different levels of organisation. "Elements of strategy at a higher managerial level become objectives at a lower one" (Ansoff 1988, p.79).
Ansoff divided strategy into two components: the business strategy that develops from the company's relationship with its external environment and the administrative strategy which establishes the internal relationships and processes.

According to Ansoff (1998), there are two basic business strategies: the portfolio and the competitive strategies.

The strategic portfolio strategy is the concept based on the identification of strategic business areas (SBAs) in which the firm intends to do business in the future. The portfolio strategy has four components that must be optimised:

- Geographical growth vector (figure 2.6)
- Competitive advantage
- Synergies
- Strategic flexibility

Ansoff pointed out that these four ingredients have close to zero correlations among them.

<table>
<thead>
<tr>
<th>Product</th>
<th>Present</th>
<th>New</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market</td>
<td></td>
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</tr>
<tr>
<td>Present</td>
<td>Market</td>
<td>Product</td>
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<td></td>
<td>Penetration</td>
<td>development</td>
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<tr>
<td>New</td>
<td>Market</td>
<td>Diversification</td>
</tr>
<tr>
<td></td>
<td>development</td>
<td></td>
</tr>
</tbody>
</table>

*Figure 2.6 Growth vector components
Source: Ansoff 1988*

The growth vector as well as the SBA can be measured in three dimensions:

- The dimension of market need
- The dimension of product-service technology
The dimension of the market geography

In addition, the SBA incorporates a fourth dimension - customer need.

Strategic flexibility can be attained in two ways. The first way is externally by the company and is aimed at balancing business risk through diversifying geographic scope, needs served and technologies (figure 2.7). The second way is “to base the firm’s portfolio on resources and capabilities which are easily transferable among SBAs” (Ansoff 1988, p.85).

Figure 2.7 Diversification and internationalisation alternatives
Source: Ansoff 1988

Another major component of a firm’s product market strategy is synergy which is usually described as ‘2+2=5’. Ansoff argues that synergy can be classified in term of the components of the return on investment (ROI) formula:

- Sales synergy
- Operating synergy
- Investment synergy
Management synergy

The framework for the evaluation of synergy is presented in figure 2.8.

![Figure 2.8 Measurement of synergy of a new product-market entry](source: Ansoff 1988)

As emphasised by Ansoff (1998), a strength-weakness analysis must be undertaken. This is because a firm can optimise the synergy effect by searching for new opportunities that match the strength, synergy and SWOT analysis. In order to accumulate these two tools within the same analytic framework, Ansoff (1998) suggests using the method of profile comparison. The first step in profile comparison analysis is the development of the framework for a capability profile to rate a particular pattern of skills and facilities relative to some reference level. In order to do this, Ansoff (1998) provides a grid of competence, which matches the functional areas in the company against the competencies and skills relevant to the functional area (see Figure 2.9).

<table>
<thead>
<tr>
<th>Functional area</th>
<th>Symmetry effects</th>
<th>Effects due to pooling of competences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General management and finance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contribution to parent</td>
<td></td>
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<tr>
<td></td>
<td>Contribution to new entry</td>
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<td></td>
<td>Joint opportunities</td>
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<td></td>
<td>Research and development</td>
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<td></td>
<td>Contribution to parent</td>
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<td></td>
<td>Contribution to new entry</td>
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<td></td>
<td>Joint opportunities</td>
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<td>Marketing</td>
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<td></td>
<td>Contribution to parent</td>
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<td></td>
<td>Contribution to new entry</td>
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<td></td>
<td>Joint opportunities</td>
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<td></td>
<td>Operations</td>
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<td></td>
<td>Contribution to parent</td>
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<td></td>
<td>Contribution to new entry</td>
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<td></td>
<td>Joint opportunities</td>
<td></td>
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</tbody>
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<table>
<thead>
<tr>
<th>Startup economies</th>
<th>Operating economies</th>
<th>Expansion of present sales</th>
<th>New product and market areas</th>
<th>Overall synergy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment</td>
<td>Operating</td>
<td>Timing</td>
<td>Investment</td>
<td>Operating</td>
</tr>
</tbody>
</table>

24
### Category of resources & skill

<table>
<thead>
<tr>
<th>Functional areas</th>
<th>Facilities and equipment</th>
<th>Personnel skills</th>
<th>Organizational capabilities</th>
<th>Management capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General management &amp; finance</strong></td>
<td>Data processing equipment</td>
<td>Depth of general management</td>
<td>Multi-divisional structure, consumer financing, industrial financing, planning and control, automated business data processing</td>
<td>Investment management, centralized control, large systems management, decentralized control, R &amp; D intensive business, capital-equipment intensive business, merchandising intensive business, cyclical business, many customers, few customers</td>
</tr>
<tr>
<td><strong>Research and development</strong></td>
<td>Special lab equipment, general lab equipment, test facilities</td>
<td>Area of specialization, advanced research, applied research, product design: industrial consumer military specifications, systems design, industrial design: consumer industrial</td>
<td>Systems development, product development, military consumer process, military specifications compliance</td>
<td>Utilization of advanced state of the art, application of current state of the art, cost-performance optimization</td>
</tr>
<tr>
<td><strong>Operations</strong></td>
<td>General machine shop, precision machinery, process equipment, automated production, large high-bay facilities, controlled environment</td>
<td>Machine operation, tool making, assembly, precision machinery, close tolerance work, process operation, product planning</td>
<td>Mass production, continuous flow process, batch process, job shop, large complex product assembly, subsystems integration, complex product control, quality control, purchasing</td>
<td>Operation under cyclic demand, military specifications quality, tight cost control, tight scheduling</td>
</tr>
<tr>
<td><strong>Marketing</strong></td>
<td>Warehousing, retail outlets, sales offices, service offices, transportation equipment</td>
<td>Door-to-door selling, retail selling, wholesale selling, direct industry selling, department of defense selling, cross-industry selling, applications engineering, advertising, sales promotion, servicing, contract administration, sales analysis</td>
<td>Direct sales, distributor chain, retail chain, consumer service organization, industrial service organization, department of defense product support, inventory distribution and control</td>
<td>Industrial marketing, consumer merchandising, department of defense marketing, state and municipality marketing</td>
</tr>
</tbody>
</table>

**Figure 2.9 Check-list for competitive and competence profiles**

Source: Adapted from Ansoff 1988

"While portfolio strategy answers the question: in which business shall we be?; competitive strategy answers the question: how shall we succeed in each?" (Ansoff 1988, p.95). Ansoff pointed out the following four ingredients of competitive strategy:
Market-share maximization strategy
- Growth strategy
- Market differentiation strategy
- Product/service differentiation strategy

The logical algorithm of the whole strategic analysis is presented in Figure 2.10. The outline for the portfolio potential analysis is presented in Table 2.1.

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product-market structure</td>
<td>Products and their characteristics</td>
</tr>
<tr>
<td></td>
<td>Product missions</td>
</tr>
<tr>
<td></td>
<td>Customers</td>
</tr>
<tr>
<td>Growth and profitability</td>
<td>History</td>
</tr>
<tr>
<td></td>
<td>Forecasts</td>
</tr>
<tr>
<td></td>
<td>Relation to life cycle</td>
</tr>
<tr>
<td></td>
<td>Basic determinants of demand</td>
</tr>
<tr>
<td></td>
<td>Average and norms typical of the industry</td>
</tr>
<tr>
<td>Technology</td>
<td>Basic technology</td>
</tr>
<tr>
<td></td>
<td>History of innovation</td>
</tr>
<tr>
<td></td>
<td>Technological trends – threats and opportunities</td>
</tr>
<tr>
<td></td>
<td>Role of technology in success</td>
</tr>
<tr>
<td>Investment</td>
<td>Cost of entry and exit-critical mass</td>
</tr>
<tr>
<td></td>
<td>Typical asset patterns in firms</td>
</tr>
<tr>
<td></td>
<td>Rate and type of obsolescence of assets</td>
</tr>
<tr>
<td></td>
<td>Role of capital investment in success</td>
</tr>
<tr>
<td>Marketing</td>
<td>Means and methods of selling</td>
</tr>
<tr>
<td></td>
<td>Role of service and field support</td>
</tr>
<tr>
<td></td>
<td>Role and means of advertisement and sales</td>
</tr>
<tr>
<td></td>
<td>What makes a product competitive</td>
</tr>
<tr>
<td></td>
<td>Role of marketing in success</td>
</tr>
<tr>
<td>Competition</td>
<td>Market shares, concentration, dominance</td>
</tr>
<tr>
<td></td>
<td>Characteristics of outstanding firms, of poor firms</td>
</tr>
<tr>
<td></td>
<td>Trends in competitive patterns</td>
</tr>
<tr>
<td>Strategic perspective</td>
<td>Trends in demand</td>
</tr>
<tr>
<td></td>
<td>Trends in product-market structure</td>
</tr>
<tr>
<td></td>
<td>Trends in technology</td>
</tr>
<tr>
<td></td>
<td>Key ingredients in success</td>
</tr>
</tbody>
</table>

Table 2.1 Outline for future SBA potential analysis
Source: Ansoff 1988
Figure 2.10 Decision flow in competitive and portfolio analysis
Source: Adapted from Ansoff 1988

2.2.1.2. **Concept according to Alfred Chandler**

Alfred Chandler’s (Chandler 2000, p.15) study represents the significance of both strategy and structure to the strategic planning process. According to Chandler (Chandler 2000, p.15), while the process of determining the basic long-term goals and objectives of an enterprise is critical to obtaining buy-in, the ability to most effectively administer these enlarged activities and resources is necessary to carry out stated goals. Chandler’s (Chandler 2000, p.15) concept, that "structure does follow strategy" is based on idea that changes in strategy require “a new or, at least, a re-fashioned structure if the enlarged enterprise is operate efficiently”. Chandler (Chandler 2000, p.15) argues that since growth without structural adjustment can lead only to economic inefficiency, strategy and structure must be viewed together from the angle of the application of the company’s resources to market demand.

Chandler (Chandler 2000, p.15) states that: “Changes in strategy appear to have been in response to the opportunities and needs created by changing population and changing national income and by technological innovation”.

2.2.1.3. **Concept according to Michael Godet**

According to Michael Godet (Godet, Roubelat 1996), there are four attitudes towards the future:

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive</td>
<td>Ostrich</td>
</tr>
<tr>
<td>Reactive</td>
<td>Fireman</td>
</tr>
<tr>
<td>Preactive</td>
<td>Insurer</td>
</tr>
<tr>
<td>Proactive</td>
<td>Prospective manager</td>
</tr>
</tbody>
</table>

**Table 2.2 Towards the future: four attitudes**

Source: Godet, Roubelat 1996

Godet (Godet 1998) argues that companies should be proactive through provoking change and should therefore link anticipation with action (figure 2.11). This perspective, he argues, provides the content and direction for collective mobilisation.
"To transform anticipation into action through appropriation, scenarios should follow four conditions: relevance, consistence, likelihood and transparency" (Godet, Roubelat 1996, p.164).

In order to avoid entertainment and to explore all possible scenarios (see Figure 2.12) a company – according to Godet’s (Godet 2000a) theory - might use formal
tools like structural analysis, an actor's strategic analysis, morphological or probability analysis. The complete process of scenario planning is depicted in Figure 2.13.

Figure 2.13 Strategic planning based on scenarios
Source: Godet 2000b
2.2.1.4. **Concept according to Henry Mintzberg**

According to Henry Mintzberg (1994), there are ten schools of thought on strategic planning that provide different perspectives on strategy formation (table 2.3).

<table>
<thead>
<tr>
<th>Type of school</th>
<th>School</th>
<th>View on Process</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescriptive</td>
<td>Design</td>
<td>Conceptual</td>
<td>Strategic planning is an informal process of conception, typically in a leader’s conscious mind. Usually based on SWOT.</td>
</tr>
<tr>
<td></td>
<td>Planning</td>
<td>Formal</td>
<td>Formal process, planning made by the group of planners</td>
</tr>
<tr>
<td></td>
<td>Positioning</td>
<td>Analytical</td>
<td>Focus on content of strategies more than on the process. Usually based on BCG matrix, Porter’s model, PIMS, etc.</td>
</tr>
<tr>
<td></td>
<td>Cognitive</td>
<td>Mental</td>
<td>Considering human way of thinking</td>
</tr>
<tr>
<td></td>
<td>Entrepreneurial</td>
<td>Visionary</td>
<td>Visionary process of a strong leader</td>
</tr>
<tr>
<td></td>
<td>Learning</td>
<td>Emergent</td>
<td>Strategy is needed to emerge in a process of collective learning</td>
</tr>
<tr>
<td></td>
<td>Political</td>
<td>Power</td>
<td>Focus on conflict and the exploitation of power in the process</td>
</tr>
<tr>
<td></td>
<td>Cultural</td>
<td>Ideological</td>
<td>Considering collective, cooperative dimension</td>
</tr>
<tr>
<td></td>
<td>Environmental</td>
<td>Passive</td>
<td>Strategy is a passive response to external forces</td>
</tr>
<tr>
<td></td>
<td>Configurational</td>
<td>Episodic</td>
<td>Putting all schools into the contexts of specific episodes in the process</td>
</tr>
</tbody>
</table>

Table 2.3 Schools of thought on strategy formation  
Source: Adapted from Mintzberg 1994

Mintzberg pointed out that if any, intended strategies are fully realised and few strategies are without an expressly intended pattern. Therefore, organisations often pursue so called umbrella strategies: “The broad outlines are deliberate while the details are allowed to emerge within them” (Mintzberg 1994, p.25). Such strategies allow for a combination of the two controversial issues of planning: controlling and learning (see Figure 2.14). As shown in Figure 2.14, the originally planned intentions split into two groups. The part are realised can be called deliberate strategies, and
the rest – unrealized. However, realised patterns of not expressly intended actions might also take place. Taken one by one, these unplanned actions, or manifestations of emergent strategies, converge over time into some sort of consistency or pattern. As stated by Mintzberg, this strategic mix of deliberate and emergent strategies can provide the firm with the required flexibility, reflecting all conditions at hand.

![Figure 2.14 Forms of strategy](image)

Source: Mintzberg 1994

Guided by Mintzberg’s (1994) theory, Richard Whittington (Whittington 2006, p.2) developed four generic approaches to strategy. As emphasised by Whittington (Whittington 2006, p.2), these four methodologies differ fundamentally along two dimensions: the outcome of the strategy and the process by which it is made. This can be presented by the intersection of the axis in Figure 2.15. “The vertical axis measures the degree to which strategy either produces profit-maximisation outcomes or deviates to allow other possibilities to intrude, whereas the horizontal axis considers process, reflecting how far strategies are the product of deliberate calculation or whether they are emerge by accident, muddle or inertia” (Whittington 2006, p.2).
According to Whittington (2006), for classicalists profitability is the supreme goal of any business, and rational planning is the means towards achieving it. Evolutionary approaches are less confident about the top management’s ability to plan and act rationally; they expect the markets to secure profit maximisation. “[Emphasizing or Stressing] the competitive process of natural selection, evolutionary theorists do not necessarily prescribe to rational planning methods; rather, they argue that whatever methods managers adopt, it will only be the best performers that survive” (Whittington 2006, p.16). The basics of the evolutionary approach lie in cost-benefit analysis. Whittington (2006) showed that processual methodologies generally share the same evolutionary skepticism associated with rational strategy-making, but they are less confident about the markets’ ability to ensure profit-maximising outcomes, accepting and working with the sticky and messy business environment as it is. “Against the sometimes nihilistic propositions of evolutionary and processual theorists, systemic theorists do retain faith in the capacity of organisations to plan forward and act effectively within their environments” (Whittington 2006, p.26).
The summary of Whittington’s (2006) four perspectives on strategies is presented in Table 2.4.

<table>
<thead>
<tr>
<th>Issues and debates</th>
<th>Classical</th>
<th>Evolutionary</th>
<th>Processual</th>
<th>Systemic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy</td>
<td>Formal</td>
<td>Crafted</td>
<td>Efficient</td>
<td>Embedded</td>
</tr>
<tr>
<td>Rationale</td>
<td>Profit maximization</td>
<td>Value</td>
<td>Survival</td>
<td>Local</td>
</tr>
<tr>
<td>Focus</td>
<td>Internal (plants)</td>
<td>Internal (politics / cognitions)</td>
<td>External (markets)</td>
<td>External (societies)</td>
</tr>
<tr>
<td>Processes</td>
<td>Analytical</td>
<td>Bargaining learning / Darwinian</td>
<td>Social</td>
<td></td>
</tr>
<tr>
<td>Key influences</td>
<td>Economics / military</td>
<td>Psychology</td>
<td>Economics / biology</td>
<td>Sociology</td>
</tr>
<tr>
<td>Emergence</td>
<td>1960s</td>
<td>1970s</td>
<td>1980s</td>
<td>1990s</td>
</tr>
<tr>
<td>Major emphasis</td>
<td>Leadership Decisions Planning Innovation Internationalisation Organisation</td>
<td>Diversification Internationalisation Organisation Strategic change</td>
<td>Innovation Strategic change</td>
<td>Leadership Decisions Organisation</td>
</tr>
<tr>
<td>Secondary emphasis</td>
<td>Diversification</td>
<td>Decisions Planning Organization</td>
<td>Planning Innovation Internationalisation Organisation Strategic change</td>
<td></td>
</tr>
</tbody>
</table>

Table 2.4 Whittington: Generic perspectives on strategy
Source: Adapted from Whittington 2006

2.2.1.5. Summary

Ansoff (1998) and Mintzberg (1994) provide opposite approaches to the strategic planning process. According to Ansoff, both the process and outcomes should be strictly formalised and determined, thereby creating the so-called read-plan. In contrast to Ansoff (1998), Mintzberg (1994) points out the failure of creating an only-intended strategy. He argues that strategic implementation requires some adaptation en route and suggests using umbrella strategies, in which “the broad outlines are deliberate while the details are allowed to emerge within them” (Mintzberg 1994, p.25).
Thus Mintzberg’s (1994) emergent strategies are not necessarily bad and Ansoff’s deliberate ones good. The ability to predict as well as the need to react to unexpected events is that what makes strategic planning effective.

Based on Mintzberg’s (1994) theory, Whittington (2006) provides a new classification for the strategic planning process, which falls into four categories and could be read off from its position on the two axes. These stand for the outcomes of the strategy and the process by which is it made.

According to Mintzberg’s (1994) classification into prescriptive and descriptive school could be seen. Differentiation into planning and further formal process and emerged and learning process worked out and the following table shows the result, reviewing the important different approaches. In other words, it could be seen a scenario planning, organization structure and corporate strategy under the approach of a formal process. In contrast, Henry Mintzberg proclaimed an adaption during the strategy process and therefore a learning and descriptive process.

<table>
<thead>
<tr>
<th>Scenario planning</th>
<th>Organization structure</th>
<th>Corporate Strategy</th>
<th>Deliberate broad outline, details flexible to adopt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael Godel</td>
<td>Alfred Chandler</td>
<td>Igor Ansoff</td>
<td>Strategy formulation and implementation require adaptation during strategy process</td>
</tr>
<tr>
<td>proactive strategy approach through scenario planning</td>
<td>structure to be adopt to strategy in order to be efficient</td>
<td>- Process and outcome are to be formalized - Intended strategy - Set objectives and describe strategy</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 2.16 Prescriptive school versus the descriptive school**

Source: on development
2.2.2. Strategies based on analytical positioning

2.2.2.1. Concept according to Michael Porter

According to Michael Porter (1998), there are three generic strategies which cope with five competitive forces in order to outperform industry competitors:

- Overall cost leadership
- Differentiation
- Focus

Porter (1998) argues in favour of the theory that it is rarely possible to successfully pursue more than one approach as the core strategy, but overall commitment from organization and top managers has to take place. Strategic availability – according to Porter - depends on the industry structure. Consequently, environmental analysis should be undertaken in order to formulate the most appropriate strategy.

Figure 2.17 Forces driving industry competition
Source: Porter 1998b
According to Porter (1998), these driving forces should be analysed. They include the intensity of rivalry among existing competitors; the threat of entry into the market by new ones; the pressure from substitute products; and the bargaining power of suppliers.

**Overall cost leadership**

Porter (1998) pointed out that the overall cost leadership position might yield above-average returns in spite of strong competitive forces because a company will be able to achieve a profit margin even “after its competitors have completed away their profits through rivalry” (Porter 1998b, p.36). In addition, the low-cost position “defends the firm against powerful buyers because buyers can exert power only to drive down prices to level of the next most efficient competitor” (Porter 1998b, p.36). According to Porter, more flexibility in dealing with input cost increases will provide a sufficient defence against powerful suppliers and substantial entry barriers will be created.

Porter states that cost leadership can be achieved through the advantage of having economies of scale, experience curve effects and tight cost control.

However, “achieving a low overall cost position often requires a high relative market share or other advantages” (Porter 1998b, p.36). Strategy implementation may require “heavy up-front capital investment in state-of-the-art equipment, aggressive pricing, and start-up losses in order to build market share. But high market share may, in turn, allow for economies in purchasing which lower costs even further” (Porter 1998b, p.36). Porter (1998) suggests that once achieved, companies should re-invest profit in equipment in order to maintain an effective cost leadership position.

**Differentiation**

According to Porter (1998), differentiation provides customer brand loyalty and, as a result, the customer’s sensitivity to price is lowered. This leads to above-average returns, providing a robust defence against the five competitive forces and the creation of an effective entry barrier.
Porter defines being different as "creating something that is perceived industry-wide as being unique" (Porter 1998b, p.37). Therefore, a company can differentiate a product or service offering by adopting a distinctive design or brand image, technology, features, customer service, dealer network or through using other dimensions. "Ideally, the firm differentiates itself along several dimensions" (Porter 1998b, p.37). It goes without saying that a company cannot neglect costs, it is not the primary target in contrast with the overall cost leadership strategy.

Focus

Adopting a focus strategy approach means a company "serves its narrow strategic target more effectively or efficiently than competitors who are competing more broadly" (Porter 1998b, p.38). Porter (1998) described that focus as well as differentiation might take many forms, i.e. particular buyer group, segment of the product line, or geographical region. A company is able to earn above-average returns through "better meeting the needs of the particular target, or lower costs in serving this target, or both" (Porter 1998b, p.38).

The summary of three generic strategies is presented in Figure 2.18.

![Figure 2.18 Three generic strategies](Source: Porter 1998b)

Porter (1998) contends that sustainable competitive advantage, which is the basis of an above-average performance within the industry, can be achieved through the specific activities presented in Figure 2.19. Once the value chain has been defined, a cost analysis should be performed by assigning costs to the value chain activities.
The following ten cost drivers related to value chain activities were identified by Porter as:

- Economies of scale
- Learning
- Capacity utilisation
- Linkages among activities
- Interrelationships among business units
- Degree of vertical integration
- Timing of market entry
- Firm’s cost or differentiation policies
- Geographic location;
- Institutional factors (regulation, unions, taxation, etc.)

Figure 2.19 Value Chain Model
Source: Adapted from Porter 1985

2.2.2.2. Concept according to Peter Drucker

According to Peter Drucker (1993), the “doing the right things” strategy generally might be focused either in the direction of product improvement, or in the direction of innovation, and can be realized through the adoption of three basic strategic alternatives:

- Specialisation
- Diversification
- Integration
Before strategic planning takes place analysis must be done in three main areas:

- Product
- Market
- Distribution (see Figure 2.21).

2.2.2.3. Concept according to Kenichi Ohmae

Under Kenichi Ohmae's (1982) theory there are four basic strategies (see Figure 2.22):
Strategy based on key factors for success (KFS)
Strategy based on relative superiority
Strategy based on aggressive initiatives
Strategy based on strategic degrees of freedom

A business strategy which is based on the KFS consists of the identification of KFS followed by an injection of resources into the area where the most significant opportunity for gaining competitive advantage occurs. The business strategy based on relative superiority involves "using any differences in the composition of assets between the enterprise and its competitors" (Ohmae 1982, p.39) in order to find a position that will be difficult for a competitor to imitate. The backbone of this strategy consists of adopting ideas and innovations that breathe new life into the company's market situation or resource allocation. Aggressive initiatives include challenging the accepted business and industry beliefs by changing the rules of the game. A strategy based on strategic degrees of freedom is "a value-adding strategy, which is created by thinking about how best to provide value to customers rather than by aping the competition" (Ohmae 2001, p.59). This is something which can be achieved through opening up new markets or through the development of new products.

![Figure 2.22 Four basic strategies](source: Ohmae 1982)

The process of strategic planning should be based on the strategic triangle: the corporation itself, the customer, and the competition (see Figure 2.23). Therefore the
task of the strategist is to “achieve superior performance, relative to the competition, in the KFS for the business” and to “be sure that his strategy properly matches the strengths of the corporation’s with the needs of a clearly defined market” (Ohmae 1982, p.91). Moreover, Ohmae (1982) states that the whole planning process should flow under at least three major constraints: reality, ripeness and resources.

Figure 2.23 The strategic three Cs
Source: Ohmae 1982

2.2.2.4. Concept according to George Stalk and Rob Lachenauer

According to George Stalk and Rob Lachenauer (2004), in order to win in business companies have to play hardball, in other words perform not to play but to win, seeking decisive victory through applying every available strategy and using every legitimate resource.

Stalk and Lachenauer (2004) pointed out that hardball players are guided by the following principles:
- Focus on competitive advantage
- Convert competitive advantage into decisive advantage, which cannot be replicated and should be systematically reinforced
- Employ indirect attack
- Exploit employee's will to win
- Draw a bright line in the caution zone, the area in which society will not accept a company’s questionable behaviour.

In keeping with Stalk and Lachenauer (2004), there are six hardball strategies:

The "unleash massive and overwhelming force" strategy is a direct onslaught strategy, aimed at overwhelming competitors by deploying superior resources with sufficient commitment. In general, this strategy tends to be used by upstart companies to beat so-called fat cat leaders.

The "exploit anomalies" strategy is the type of strategy that helps large corporations behaves like start-ups. "Anomaly is an irregularity, a departure from the norm, but it can sometimes reveal what your customers really want from you" (Stalk, Lachenauer 2004, p.39-40). According to Stalk and Lachenauer, anomalies should be identified and potential business opportunities must be checked. However, "before the strategy can be implemented, the anomaly must be thoroughly tested and explored" (Stalk, Lachenauer 2004, p.52). In addition, the reaction of customers and competitors to a new strategy must be considered.

The "threaten a competitor's profit sanctuaries" approach is a strategy designed to change the behaviours and actions of a competitor that are detrimental to the company. "If the competitor doesn't change, it risks an incursion into its profit sanctuaries that will, in turn, put pressure on other areas of its business" (Stalk, Lachenauer 2004, p.56). One way to threaten a competitor's profit sanctuaries is through strategic pricing. Needless to say, a competitor analysis must be undertaken before embarking on this course of action.

The "take it and make it your own" strategy is about "recognising the value of an existing idea, practice, or business model and making it your own" (Stalk,
Companies must follow several rules when applying such kind of strategic actions:

- Copy the idea only when it will enable you to gain leadership. "You must become a leader, particularly vis-à-vis the competitor from whom you took the idea" (Stalk, Lachenauer 2004, p. 82).
- Borrow the idea and use it to facilitate an indirect attack.
- Copy completely, commit fully.
- Make the copy your own. However, the idea must be improved upon, adapted or re-interpreted.

The "entice the competitor into a retreat mode" strategy can be applied to a rival in order to re-direct the competitor away from the area which is important and highly profitable to the company. This can be achieved through luring the competitor into a different business area, which is less important to the company, but which can be perceived by the competitor as highly profitable goldmine when it is, in fact, a rabbit hole. The analysis of the company itself and superior understanding of competitors, especially with regards to their costs and pricing structures, are the essential foundation for successfully executing this strategy. This strategy can be applied only when both the analysis of your cost disaggregation and judgment about competitor's cost structure and pricing behaviour has been made.

The "break compromises" strategy is "the most powerful strategy for companies seeking breakaway growth" (Stalk, Lachenauer 2004, p. 103). According to Stalk and Lachenauer (2004), one of the most powerful forces that drive customers is choice. "A compromise, by contrast, is a limitation on customer choice made by the industry. It is what results when the limitless desires of the customers to be satisfied collide with the constraints encountered by businesses in meeting these customer desires" (Stalk, Lachenauer 2004, p. 104, 115). Therefore, customers either perceive it as the way the industry works and can not complain about it, or can not see it at all. But when one company breaks the compromise which was found, "customers suddenly see the compromise too, and are delighted they now have a choice" (Stalk, Lachenauer 2004, p. 105). When a company adopts a strategy which is based on breaking compromises, the company should follow the following principles:
Shop the way the customer shops
Gather sufficient knowledge about how the product or service is bought and used
Make changes and create new ways of delivering value to the customer
Test the limits of the company's imagination
Rapidly execute the strategy once the compromise is discovered

In terms of strategic planning, Stalk, along with Philip Evans and Lawrence Shulman (1999), pointed out the following principles:

- Strategy should be based on business processes, not products or markets
- A company's key processes should be transformed into strategic capabilities that consistently provide superior value to the customer
- "Companies can create these capabilities by investing in a support infrastructure that links together and transcends traditional strategic business units and functions" (Stalk et al. 1999, p.183);
- The chief executive officer's commitment to this course of action is necessary.

2.2.2.5. Concept according to Michael Treacy and Fred Wiersema

According to Michael Treacy and Fred Wiersema (1995), business winners follow one of the three value disciplines of:

- Operational excellence
- Product leadership
- Customer intimacy

By operating excellence, Treacy and Wiersema (1995) mean providing the customer with a combination of quality, price and hassle-free service that no one in industry can match. In order to achieve this, the strategy should contain the following four distinct features:

- The whole supply chain must be optimised and streamlined to minimise both obstacles and total costs, including the customer's future costs of ownership
Operations have to be standardised, simplified, tightly controlled and centrally planned.

A company should possess "management systems that focus on integrated, reliable, high-speed transactions and compliance to the norm.

A culture that abhors waste and rewards efficiency" (Treacy, Wiersema 1995, p.35) should be a part of the company’s ethos.

As cited by Treacy and Wiersema (1995), product leadership is about providing products and services that continually re-define the current status quo and expand existing performance boundaries. To apply this type of strategy companies must be creative and be not only able to commercialise ideas quickly, but must also leapfrog their latest product and service into the market. Therefore, in order to successfully implement a product leadership strategy, a company has to (Treacy, Wiersema 1995, p.37):

- "Focus on the core processes of invention, product development and market exploitation"
- Possess a flexible business structure
- Have a results-driven management system
- Possess a corporate culture that encourages creativity and new ideas

"A company that delivers value via customer intimacy creates bonds with customers like those between good neighbours" (Treacy, Wiersema 1995, p.38). A company should provide its customers with a total solution, one which satisfies specific customers' needs. Therefore, a company's strategy should include:

- "An obsession with the core process of solution development, results and relationship management"
- Delegation of the decision-making process to the employees who are closest to the customer
- Management systems which are aimed at creating value for carefully selected and nurtured customers
A “company culture that embraces specific solutions and thrives on deep and lasting client relationships” (Treacy, Wiersema 1995, p.41)

Organisations are not able to become the best in all three value disciplines, or even in two. Therefore they should attempt to achieve a leadership position in one of the value disciplines, and maintain an adequate performance level with the other two. At the same time they should strive for continuous improvement in all three dimensions.

In addition, Treacy (2003) states that growth is vitally important to companies. Growth, according to Treacy (2003), is driven by three virtuous cycles: economic, momentum and opportunity.

The economic cycle refers to a company’s ability to raise capital for future projects more cheaply. This is vital because companies that grow create increased market value. Momentum refers to the fact that fast growth attracts a customer’s attention and people want to do business with winners. Opportunity stands for the ability to achieve innovation and improve productivity via new job opportunities within the organisation and, as consequence, high morale.

In order to develop a good strategy, that supports Treacy’s theory, companies should follow six key principles:

- Spread risk by creating a portfolio of diversified initiatives
- Take small bites
- Balance strategies through organic and acquired growth
- Commit to superior value
- Expand their growth capabilities
- Manage for growth

Based on these six principles Treacy (2003) offers five disciplines that should be taken into account:

- Focus on improving a company’s customer-base retention
- Focus on market share gain
- Focus on making sure you show up where growth is going to occur
- Focus on penetrating adjacent markets
Focus on achieving growth by invading new lines of business, where your core operating capabilities are of little advantage" (Treacy 2003, p.16-17).

2.2.2.6. Concept according to Robert S. Kaplan and David P. Norton

Based on the strategy models of Michael Treacy and Fred Wiersema (1995), Robert Kaplan and David Norton (2002) developed the ‘strategic maps’ concept as a method for strategic planning. A strategy map, as presented in Figure 2.24, is a visual framework for connecting a desired strategic outcome with its drivers. It consists of four major perspectives, taken directly from the Balanced Scorecard Concept (BSC): financial; customer; internal process; and learning and growth.

Figure 2.24 The Balanced Scorecard Strategy Map
Source: Kaplan, Norton 2002
As the best way for strategic planning, Kaplan and Norton (2002) suggest adopting a 'top down' approach. According to the two, business leaders must firstly determine their mission and core values. They must then settle on their strategic vision, and only then should their company's overall goals be created. And finally, they need to define the steps they need to take in order to arrive at their destination.

2.2.2.7. Concept according to George Yip

George Yip (1992) believes that companies should expand their operations worldwide unless they can find very good reasons not to do business abroad. A total global strategy, Yip's (1992) theory consists of three separate components, as illustrated in Figure 2.25.

![Diagram of Total Global Strategy](image)

**Figure 2.25 Total global strategy**  
Source: Yip 1992

According to Yip, the development of a core business strategy is the basis of maintaining a sustainable strategic advantage and mainly includes two major parameters: the types of customers served and the types of products and services offered.

Internationalisation of the core business strategy includes the "identification of market attractiveness potential competition and ways in which to adapt to local conditions, and ways in which to manage the business across a larger geographic area" (Yip 1992, p.7). Typically, the end result of this step is a set of strategies that have large
differences among countries, which "weaken the company's worldwide cost position, quality, customer preference, and competitive leverage" (Yip 1992, p.7).

Therefore, the globalisation of the international strategy serves as a method that integrates and manages for worldwide business leverage and competitive advantage. The framework for diagnosing and developing a globalisation strategy is presented in Figure 2.26.

![Globalization Triangle Diagram]

Figure 2.26 The Globalization triangle
Source: Yip 1992

Figure 2.27 depicts the strategic planning process as a series of consecutive steps. In order to determine the industry's globalisation potential, strategists should take into account four main drivers:

- The market
- Costs
- Competition
- Government policy
Finally, according to Yip, based on strategic and comparative advantage, the company may apply one of the four basic strategies presented in Figure 2.28.

![Figure 2.28 Strategic and comparative bases of advantage](Source: Yip 1992)
2.2.2.8. Concept according to Albert S. Humphrey and others

Today, many strategic planning concepts are based on the Strengths-Weaknesses-Opportunities-Threats (SWOT) analysis credited to Albert S. Humphrey. Originally, SWOT was known as SOFT (Satisfactory-Opportunity-Fault-Threat). However, in 1964 Urick and Orr changed the Fault to a Weakness and it became SWOT as it is now known (see Table 2.5).

<table>
<thead>
<tr>
<th>Internal Strengths</th>
<th>Internal Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Opportunities</td>
<td>S-O Strategy</td>
</tr>
<tr>
<td>External Threats</td>
<td>S-T Strategy</td>
</tr>
</tbody>
</table>

Table 2.5 The SWOT Matrix
Source: Own graph

The main idea of strategic planning based on the SWOT analysis is to maintain, build and leverage the strengths of the company, thereby creating opportunities, which should be prioritised and optimised. On the other hand, weaknesses should be remedied and threats should be eliminated. Albert Humphrey advocates that when undertaking a SWOT analysis, six issues should be taken into consideration:

- Product and service
- Process
- Customer
- Distribution
- Finance
- Administration

In practice, a SWOT analysis is combined with a macro-environment Political-Economical-Social-Technology (PEST) analysis. PEST analysis is also referred to as the SLEPT or PESTLE (plus Legal), or to STEEPLED, which takes into account both ethics and demographics.
In addition, a SWOT analysis might also serve as the basis for the approach advocated by Andrews, who suggests using long-term indicators as the direction for a company's future development. Andrews explains that these performance indicators should be linked to the organisation's overall agreed aims.

Two of the strategy variations based on a SWOT analysis is presented in figures 2.29 and 2.30.

![Diagram of Strategic Planning Based on SWOT Analysis](attachment:image.png)

**Figure 2.29 Strategic planning based on SWOT**

Source: Mintzberg 1994
2.2.2.9. Concept according to Bruce D. Henderson

Bruce D. Henderson (1973) introduced the tool that became the foundation for many concepts of strategic planning, the so-called Growth-share or Boston Consulting Group (BCG) Matrix (see Figure 2.31).
Henderson pointed out that there are four types of businesses: stars, question marks, cash cows, and dogs.

Stars are leaders in the highly growing business arena. According to Henderson (1973), if stars could hold their market share, due to industry stagnation, they become cash cows otherwise they become dogs.

Cash cows are the leaders in industries where growth is not high. Therefore, because of high market share, comparative cash generation is high. Cash cows are used "to pay the dividends, pay the interest on debt and cover corporate overheads" (Henderson 1973, p.1).

Henderson (1973) argued that dogs often report a profit, but they are pure net cash users. Therefore, they are worthless and cash traps, so liquidation makes sense.

"Question marks are the real cash traps and the real gambles" (Henderson 1973, p.1). According to Henderson (1973), question marks are sure losers and it is difficult to convert them into stars because of the heavy cash injection required. Therefore, some of them should be selected and the rest divested.

The BCG Matrix was later developed into the nine-cell General Electric/McKinsey Industry Attractiveness–Strengths Matrix (see Figure 2.32). Another variation on the BCG Matrix is illustrated in Figure 2.33.

<table>
<thead>
<tr>
<th>Strategic Business Unit Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
</tr>
<tr>
<td>Medium</td>
</tr>
<tr>
<td>Low</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Market Attractiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
</tr>
<tr>
<td>Medium</td>
</tr>
<tr>
<td>Low</td>
</tr>
</tbody>
</table>

*Figure 2.32 GE/McKinsey Matrix*

*Source: Own graph*
2.2.2.10. **Concept according to Theodor Levitt et al**

There are two main aspects to value-based strategies. The first aspect is about delivering value to the customer by placing marketing strategy at the roots of the business strategy. The second is about delivering value to the shareholders. In this instance, the onus is placed solely on the company's financial objectives and entire business orients itself towards meeting them.

Theodor Levitt with his *Marketing Myopia*, Harvey Golub and Jane Henry (2001) with their price-value model, and John L. Forbis and Nitin T. Mehta (2001) with the concept of economic value to the customer, and others, suggest taking the value that a company delivers to the customer as the most important criteria and measure of a business' activities. Consequently, a company's strategy must be focused on this.

In contrast with customer value-added strategies, shareholder value-based strategic concepts do not consider delivery value to the customer as the number one task. Shareholder value-added strategies were developed during the 1980s when booms in the capital markets had an influence on business strategy. Shareholder value-based strategy advocates a holistic approach towards maximising company and...
Arguing that free cash flow to a firm is the correct measurement of a company's value, most of these concepts are based on the economic value added (EVA) index, which measures the cash flow consequences of any strategic decision and action (see Figure 2.35).

The EVA index was formulated by Joel M. Stern. However, the underlying concept of EVA was developed by Eugen Schmalenbach. The central key of free cash-flow driven strategies is the maximization of the EVA index, which is equal to Net Operating Profit after Tax (NOPAT), less the multiplication of capital and the Weighted Average Cost of Capital (WACC). Stern argues that company shareholders will receive a positive value added when the return from the equity employed in the business is greater than the cost of company's capital.
2.2.2.11. Summary

The generic corporate strategy concepts, as described above, are mainly focused on companies establishing the ways by which their competitive position can be defended or enlarged by either developing new products or moving into other markets, or a combination of both. As it might be derived from the concepts, they are aimed at developing competitive advantages and taking a preferred position in the market. Therefore, from the perspective of inside-out versus outside-in approaches to planning, the concepts from the “positioning” school are externally oriented. The market and competitor analysis under this school of thought serves as the basis for further strategic decisions.

The reviewed perspectives could be categorised into different approaches, which are shown in the following table. Differentiation could be placed under the positioning approach and analytic process into generic strategy approaches and furthermore into capability-based, portfolio planning-based and value-based approaches.
### Prescriptive Concepts

with Positioning and analytical Process
with Focus on Market Requirement and an Outside Perspective

<table>
<thead>
<tr>
<th>Generic Strategies</th>
<th>Capability based concepts</th>
<th>Portfolio Planning concepts</th>
<th>Value based concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Porter and Drucker</td>
<td>Charles</td>
<td>Steck &amp; Lachheberer</td>
<td>Trinity &amp; Megawara</td>
</tr>
<tr>
<td>- Porter:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Cost Leadership</td>
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<td></td>
</tr>
<tr>
<td>- Differentiation</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>- Focus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Drucker:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>- Specialization</td>
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<td></td>
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<tr>
<td>- Diversification</td>
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<td></td>
<td></td>
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<tr>
<td>- and integration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Key factors for success (KFS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Relative superiority</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Aggressive initiative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Strategic degrees of freedom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Focus on competitive advantage</td>
<td></td>
<td></td>
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<tr>
<td>- Convert Competitive advantage into decisive advantage, which cannot be replicated and should be systematically reinforced</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Employ indirect attack</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Exploit employee’s will to win</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Operational excellence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Product leadership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Or customer intimacy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- tour major perspectives taken directly from the Balanced Scorecard (BSC) concept</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Financial, customer, internal process and learning and growth perspective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Total global strategy concept</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Analyse market attractiveness in accordance with strategic business unit strength</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Delivery value to the customer by pricing marketing strategy as the roots of business strategy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Second step: value to the shareholders, which puts financial objectives on the first place and orients the whole business towards them.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

![Figure 2.36 Prescriptive concepts](Source: on development)

In addition, the concepts of Humphrey and Steiner (1969) are based on designing and with a conceptual process. It focuses, as well as other strategies mentioned in this chapter, on market requirements with an outside perspective.

### 2.2.3. Strategies based on capabilities and opportunities

#### 2.2.3.1. Concept according to W. Chan Kim and Renée Mauborgne

Kim and Mauborgne (2005) discovered that companies can accumulate the biggest profit from so-called blue oceans: some kind of unknown market place where the competition is irrelevant because the rules have not been set. Red oceans, in contrast, are the known market places where “companies try to outperform their rivals to grab a greater market share of existing demand” (Kim, Mauborgne 2005, p.4).
According to Kim and Mauborgne (2005), the difference between business winners and losers is in their approach to strategy. The companies caught in red ocean thinking follow competition-based strategic planning rules, where the market conditions are given and so companies set their strategies accordingly. This way of planning is also known as structuralist or environmental determinism. In contrast, the methodology of "blue ocean" strategic planning is based not on benchmarking, but on value innovation. This is the area where a company affects both its cost structure and its value proposition to buyers. "Cost saving are made by eliminating and reducing the factors an industry competes on and buyer value is lifted by raising and creating elements the industry has never offered" (Kim, Mauborgne 2005, p.16). Value innovation is a leap in value for both company and customers and it can be based on product, service and delivery.

The summary of two different strategic logics is presented in Table 2.6.
### The Five Dimensions of Strategy

<table>
<thead>
<tr>
<th></th>
<th>Conventional Logic</th>
<th>Value Innovation Logic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Assumptions</td>
<td>Industry’s conditions are given</td>
<td>Industry’s conditions can be shaped</td>
</tr>
<tr>
<td>Strategic Focus</td>
<td>A company should build competitive advantages. The aim is to beat the competition.</td>
<td>Competition is not the benchmark. A company should pursue a quantum leap in value to dominate the market.</td>
</tr>
<tr>
<td>Customers</td>
<td>A company should retain and expand its customer base through further segmentation and customisation. It should focus on the differences in what customers value.</td>
<td>A value innovator targets the mass of buyers and willingly lets some exiting customers go. It focuses on the key commonalities in what customers value.</td>
</tr>
<tr>
<td>Assets and Capabilities</td>
<td>A company should leverage its exiting assets and capabilities.</td>
<td>A company must not be constrained by what it already has. It must ask ‘What would we do if we were starting anew?’</td>
</tr>
<tr>
<td>Products and Service Offerings</td>
<td>An industry’s traditional boundaries determine the products and services a company offers. The goal is to maximise the value of those offerings.</td>
<td>A value innovator thinks in terms of the total solution customers seek, even if that takes the company beyond the industry’s traditional offerings.</td>
</tr>
</tbody>
</table>

Table 2.6 Two Strategic Logics  
Source: Kim, Mauborgne 1998

According to Kim and Mauborgne (2005) the analytical tools and framework for creating and capturing blue oceans mainly consist of two basic elements: strategy canvas and the four actions framework.

The strategy canvas is a graph that “captures the current state of play in the known market” and helps to understand “where the competition is currently investing, the factors the industry currently competes on in products, service and delivery, and what customers receive from the existing competitive offerings on the market” (Kim, Mauborgne 2005, p.25). The value curve in the strategy canvas must be shifted from competitors to alternatives and from customers to noncustomers of the industry (see...
Figure 2.37. According to Kim and Mauborgne (2005), the value curve must be focused on the really key factors, it has to diverge from competitors to alternatives, and the tagline should contain a clear strategic profile.

Figure 2.37 An example of the strategy canvas
Source: Own graph

Figure 2.38 The four actions framework
Source: Kim, Mauborgne 2005
Kim and Mauborgne (2005) provided six principles of blue ocean strategy to overcome - six risks companies face during the strategic planning and strategy implementation process. These can be broken down into four principles for the strategy development stage and two for the execution (see Figure 2.39) stage.

### Formulation principles
- Reconstruct market boundaries
- Focus on big picture, not the numbers
- Reach beyond existing demand
- Get the strategic sequence right

### Execution principles
- Overcome key organizational hurdles
- Build execution into strategy

<table>
<thead>
<tr>
<th>Formulation principles</th>
<th>Execution principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reconstruct market boundaries</td>
<td>Overcome key organizational hurdles</td>
</tr>
<tr>
<td>Focus on big picture, not the numbers</td>
<td>Build execution into strategy</td>
</tr>
<tr>
<td>Reach beyond existing demand</td>
<td></td>
</tr>
<tr>
<td>Get the strategic sequence right</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk factor each principle attenuates</th>
<th>Risk factor each principle attenuates</th>
</tr>
</thead>
<tbody>
<tr>
<td>↓ Search risk</td>
<td>↓ Organizational risk</td>
</tr>
<tr>
<td>↓ Planning risk</td>
<td>↓ Management risk</td>
</tr>
<tr>
<td>↓ Scale risk</td>
<td></td>
</tr>
<tr>
<td>↓ Business model risk</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 2.39 The six principles and risk factors of blue ocean strategy**

Source: Kim, Mauborgne 2005

The first principle is about systematically creating “uncontested market space across diverse industry domains” (Kim, Mauborgne 2005, p.20) through identifying commercially compelling blue ocean opportunities. Kim and Mauborgne (2005) suggested using “six paths framework”, which is illustrated in Table 2.7.

### Table 2.7 The six-path framework of blue ocean strategy

<table>
<thead>
<tr>
<th>Head-to-Head Competition</th>
<th>Blue Ocean Creation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Industry</strong></td>
<td>Focuses on rivals within its industry</td>
</tr>
<tr>
<td><strong>Strategic Group</strong></td>
<td>Focuses on competitive position</td>
</tr>
<tr>
<td><strong>Buyer Group</strong></td>
<td>Focuses on better serving the buyer group</td>
</tr>
<tr>
<td><strong>Scope of product or service offering</strong></td>
<td>Focuses on maximizing the value of product and service offerings within the bounds of its industry</td>
</tr>
<tr>
<td><strong>Functional-emotional orientation</strong></td>
<td>Focuses on improving price performance within the functional-emotional orientation of its industry</td>
</tr>
<tr>
<td><strong>Time</strong></td>
<td>Focuses on adapting to external trends as they occur</td>
</tr>
</tbody>
</table>

Source: Kim, Mauborgne 2005
In order to overcome planning risk, and in addition to their strategy canvas, Kim and Mauborgne (2005) also offer a four-step guide to illustrate the strategy (Table 2.8) and pioneer-migrator-settler map to test the growth potential (figure 2.40).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Compare your business with your competitors' by drawing your “as is” strategy canvas.</td>
<td>• Go into the field to explore the six paths to creating blue oceans.</td>
<td>• Draw your “to be” strategy canvas based on insights from field observations.</td>
<td>• Distribute your before-and-after strategic profiles on one page for easy comparison.</td>
</tr>
<tr>
<td>• See where your strategy needs to change.</td>
<td>• Observe the distinctive advantages of alternative products and services.</td>
<td>• Get feedback on alternative strategy canvases from customers, competitors’ customers, and noncustomers.</td>
<td>• Support only those projects and operational moves that allow your company to close the gaps to actualize the new strategy.</td>
</tr>
<tr>
<td></td>
<td>• See which factors you should eliminate, create, or change.</td>
<td>• Use feedback to build the best “to be” future strategy.</td>
<td></td>
</tr>
</tbody>
</table>

Table 2.8 The four steps of visualizing strategy
Source: Kim, Mauborgne 2005

Figure 2.40 The pioneer-migrator-settler map
Source: Kim, Mauborgne 1988

Kim and Mauborgne (2005) argue that the scale risk could be managed by looking across not only to existing customers, but to noncustomers in order to find...
overlapping commonality areas across them. Noncustomers should be divided into three groups:

- First tier: soon-to-be noncustomers who are on the edge of your market, waiting to jump ship
- Second tier: refusing noncustomers who consciously do not choose your market
- Third tier: unexplored noncustomers who are in markets distant to you" (Kim, Mauborgne 2005, p.104)

In order to mitigate the business model risk and to ensure the profit in any blue ocean strategy, a company must get the strategic sequence right (see Figure 2.41) and address buyer utility from the right perspective. The buyer utility map, as presented in Figure 2.41, serves as the basis for strategic pricing.

![Figure 2.41 The sequence of blue ocean strategy](Source: Kim, Mauborgne 2005)
The Six Stages of the Buyer Experience Cycle


- Customer productivity
- Simplicity
- Convenience
- Risk
- Fun and Image
- Environmental friendliness

Figure 2.42 The buyer utility map
Source: Kim, Mauborgne 2005

Kim and Mauborgne (2005) argue that four hurdles depicted in Figure 2.43 can hamper blue ocean strategy execution.

- Cognitive Hurdle
  An organization wedded to the status quo

- Resource Hurdle
  Limited resources

- Political Hurdle
  Opposition from powerful vested interests

- Motivational Hurdle
  Unmotivated staff

Figure 2.43 The four organizational hurdles to strategy execution
Source: Kim, Mauborgne 2005

The last blue ocean principle is about people and management attitude. According to Kim and Mauborgne, in order to successfully implement the strategy and to make the process stable, business leaders should follow the “three E principles of fair process”:
Engage by involving individuals in the strategic decision-making process and asking for their input;

- Explain the reasons for the decisions to everybody involved
- Expect clarity. After strategy has been established, set out a list of new rules

### 2.2.3.2. Concept according to Gary Hamel and C. K. Prahalad

Gary Hamel and C.K. Prahalad (1994) developed the core competency theory, an inside-out corporate strategy model that starts off the strategy process by considering the core strengths of an organisation and competing for the future (see Figure 2.44).

![THE NEW STRATEGY PARADIGM](image)

**Not Only**
- Reengineering processes
- Organizational transformation
- Competing for market share

**But Also**
- Regenerating strategies
- Industry transformation
- Competing for opportunity share

**Finding the Future**
- Strategy as learning
- Strategy as positioning
- Strategic plans

**Mobilizing for the Future**
- Strategy as fit
- Strategy as resource allocation

**Getting to the Future First**
- Competing within an existing industry structure
- Competing for product leadership
- Competing as a single entity
- Maximizing the ratio of new product "hits"
- Minimizing time-to-market

- Competing to shape future industry structure
- Competing for core competence leadership
- Competing as a coalition
- Maximizing the rate of new market learning
- Minimizing time to global preemption

**Figure 2.44 The “competing for the future” model**

Source: Hamel, Prahalad 1994

Competing for the future, according to Hamel and Prahalad (1994), is the "competition to create and dominate emerging opportunities – to stake out new competitive space". Consequently, the following is required:

- An understanding of how competition for the future is different from the present
- A process for finding and gaining insight into tomorrow’s opportunities
An ability to energise the company from the top to bottom for what may be a long and arduous journey towards the future.

The capacity to outrun competitors and get to the future first, without taking undue risks" (Hamel, Prahalad 1994, p.24-25).

Under this methodology, a company must unlearn much of its past behaviours and develop industry and tomorrow's market foresight. In addition, the strategic planning process should be changed to incorporate strategic architecture, which must include stretch goals and resource leverage powered by strategic intent. Furthermore, a company has to compete to shape the structure of the future industries through competing for core competence leadership as the coalition of the companies. Therefore, competition for the future consists of three stages: competition for industry foresight and intellectual leadership, competition to foreshorten migration paths and competition for market position and market share (see Figure 2.45).

<table>
<thead>
<tr>
<th>Intellectual Leadership</th>
<th>Management of Migration Paths</th>
<th>Competition for Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaining industry foresight by probing deeply into industry drivers.</td>
<td>Preemptively building core competencies, exploring alternate product concepts, and reconfiguring the customer interface.</td>
<td>Building a worldwide supplier network.</td>
</tr>
<tr>
<td>Developing a creative point of view about the potential evolution of: • Functionality • Core competencies • Customer interface</td>
<td>Assembling and managing the necessary coalition of industry participants.</td>
<td>Crafting an appropriate market positioning strategy.</td>
</tr>
<tr>
<td>Summarizing this point of view in a &quot;strategic architecture. &quot;</td>
<td>Forcing competitors onto longer and more expensive migration paths.</td>
<td>Preempting competitors in critical markets.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maximizing efficiency and productivity.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Managing competitive interaction.</td>
</tr>
</tbody>
</table>

Figure 2.45 Three phases of competition for the future
Source: Hamel, Prahalad 1994

Hamel and Prahalad (1994) pointed put that the goal of competition for industry foresight is to build the best assumption base about the future and thereby develop the prescience needed to proactively shape evolution through establishing the company as the intellectual leader in term of its influence over the direction and...
shape of the industry's transformation. It is a "competition to conceive of an alternate industry structure or a new opportunity area" (Hamel, Prahalad 1994, p.200). Industry foresight informs corporate direction by determining future types of customer benefits, future competences required to offer those benefits and the way of future customer interface re-configuration.

In order to build an imagined future Hamel and Prahalad (Hamel, Prahalad 1994, p.118) suggest summarising the ideas in the so-called process of "crafting strategic architecture". "Strategic architecture is a high-level blueprint for the deployment of new functionalities, the acquisition of new competencies or the migration of existing competencies, and the re-configuring of the interface with customers" (Hamel, Prahalad 1994, p.118).

The goal of strategic architecture is to identify the major capabilities to be built and to show the relative position of the major load-bearing structure providing a degree of inexactitude to the company and the ability to learn. However, strategic architecture should include two vital components: strategic intent and resource leverage.

Hamel and Prahalad (1994) define strategic intent as an ambitious and compelling dream that energises and provides the emotional and intellectual energy for the journey to the future. Strategic intent has three main attributes:

- **Sense of direction** (a particular view about the long-term market and the competitive position)
- **Sense of discovery** (a competitively unique point of view about the future)
- **And sense of destiny** (an emotional edge to it)

"The goal of strategic intent is to ensure that there is some "cumulativeness" to month-by-month and year-by-year decisions" (Hamel, Prahalad 1994, p.175).

The essence of resource leverage is basically to do more with less, what can be achieved in five fundamental ways. Table 2.9 summarises the aspects of resource leverage.
Figure 2.46 encompass the range of potential leverage opportunities. "By sufficiently concentrating, efficiently accumulating, creatively complementing, carefully conserving and speedily recovering resources, firms close the gap between where they are and where they want to be" (Hamel, Prahalad 1994, p.192).
The goal of the second phase of the competition for the future, management of migration paths is to minimise both the time and investment required to turn foresight into genuine market opportunity, in other words "to actively shape the emergence of that future industry structure into one's own advantage" (Hamel, Prahalad 1994, p.200). In order to do so, Hamel and Prahalad (1994) stressed the role of company's share of influence over the trajectory of industry development and share of future profits. A summary of key issues in managing migration paths is presented in figure 2.47.

![Diagram](image)

Figure 2.47 Managing migration paths
Source: Hamel, Prahalad 1994

Serving as gateways to future opportunities, Hamel and Prahalad (1994) argue that core competencies are the capabilities that underline leadership in a range of products or services. "A core competence is a bundle of skills and technologies that enables a company to provide a particular benefit to customers...", therefore, "...the commitment a firm makes to building a new core competence is a commitment to creating or further perfecting a class of customer benefits, not commitment to a
specific product-market opportunity” (Hamel, Prahalad 1994, p.219). To be considered a core competence, a skill must have the following three characteristics:

- It should enable a firm to deliver a fundamental customer value
- Capability must be competitively unique, therefore providing competitor differentiation
- It should be commercialised (extendable to an array of new products or services issuing from the competence).

The process of competition for competence is depicted in Figure 2.48.

![Diagram of competition processes](image)

**Figure 2.48 Competing for future**  
*Source: Hamel, Prahalad 1994*

According to Hamel and Prahalad (1994), good corporate strategy is more than an amalgamation of individual unit strategies. Core competencies must be the central subject of corporate strategy. And because they are the highest level, long-lasting units for strategy making, they must be managed by the senior management team.

In addition, the whole company must be viewed as a portfolio of competencies (see Figure 2.49). “The core competencies that support product leadership are the foundation of the corporation, its banner brand(s) the roof. In between are the various
businesses, each resting on a shared foundation and each supporting a common roof" (Hamel, Prahalad 1994, p.279).

![Conception of the diversified firm](source)

In order for the core competency perspective to take root in a company, the following tasks must be executed:

- Identification of core competence
- Establishment of a core competence acquisition agenda
- Building core competence
- Core competence deployment
- Protection and defence of core competence leadership

As discussed by Hamel and Prahalad (1994), the competence-product matrix presented in Figure 2.50 can be useful in setting specific competence acquisition and deployment goals.
Hamel and Prahalad (1994) pointed out that the ability to think differently plays a vital role, especially in thinking about the following three things:

- The meaning of competitiveness
- The meaning of strategy
- The meaning of organisations

Table 2.10 summarises the differences between the traditional approach to the strategic planning and core competency model.
The framework for crafting strategic architecture must include three elements:

- Strategy must be long-term in terms of industry evolution and the ways of shaping it.
- It must be ambitious in terms of “sketching aspiration that is de-risked through the tools of resource leverage” (Hamel, Prahalad 1994, p.315).
- It should provoke extraordinary levels of commitment, both intellectually and emotionally, which will ensure consistency and constancy.

### 2.2.3.3. Concept according to Govindarajan and Trimble

Vijay Govindarajan and Chris Trimble (2005) argue that strategic innovation and strategic experiments are essential factors in determining a company’s survivability in unknown and untested markets, for instance, in emerging industries. Govindarajan

<table>
<thead>
<tr>
<th>Planning goal</th>
<th>Strategic planning</th>
<th>Crafting strategic architecture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incremental improvement in market share and position</td>
<td>Re-writing industry rules and creating new competitive space</td>
<td></td>
</tr>
<tr>
<td>Formulaic and ritualistic</td>
<td>Exploratory and open-ended</td>
<td></td>
</tr>
<tr>
<td>Existing industry and market structure as the base line</td>
<td>An understanding of discontinuities and competencies as the base line</td>
<td></td>
</tr>
<tr>
<td>Industry structure analysis (segmentation analysis, value chain analysis, cost structure analysis, competitor benchmarking, etc.)</td>
<td>A search for new functionalities or new ways of delivering traditional functionalities</td>
<td></td>
</tr>
<tr>
<td>Test for fit between resources and plans</td>
<td>Enlarging opportunity horizons</td>
<td></td>
</tr>
<tr>
<td>Capital budgeting and allocation of resources among competing projects</td>
<td>Tests for significance and timeliness of new opportunities</td>
<td></td>
</tr>
<tr>
<td>Individual businesses as the unit of analysis</td>
<td>Development of plans for competence acquisition and migration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Development of opportunity approach plans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The corporation unit analysis</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Planning resources</th>
<th>Strategic planning</th>
<th>Crafting strategic architecture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business unit executives</td>
<td>Many managers</td>
<td></td>
</tr>
<tr>
<td>Few experts</td>
<td>The collective wisdom of the company</td>
<td></td>
</tr>
<tr>
<td>Staff driven</td>
<td>Line and staff driven</td>
<td></td>
</tr>
</tbody>
</table>

Table 2.10 Distinction between two models
Source: Hamel, Prahalad 1994
and Trimble (2005) showed that the ability to turn breakthrough ideas into breakthrough growth depends on three central prerequisites of strategic experiments:

- The ability to forget
- The ability to borrow
- The ability to learn

According to Govindarajan and Trimble’s (2005) theory, a new legal entity (NewCo) that operates in an untested market has to forget what made the parent company (CoreCo) successful. The NewCo must borrow some of the parent company’s assets and it has to be ready to learn how to succeed in unknown markets by itself. In this instance, learning is top-priority.

According to Govindarajan and Trimble (2005), a crucial part of strategic experiments is planning, which also provides a foundation for the learning process. Planning should be “simple enough reassessing theories and prediction and it must focus on trends” (Govindarajan, Trimble 1992, p.149). The concept of theory-focused planning is presented in Figure 2.51.

![Figure 2.51 Theory-focused planning](image_url)
Source: Govindarajan, Trimble 1992
Govindarajan and Trimble (2005) state that in order to remain profitable and achieve growth, a NewCo has to follow 10 rules:

1. All great strategic innovations require only forgetting, borrowing and learning
2. The NewCo must overcome the sources of organisational memory and operate on its own
3. In order to beat large start-ups, established companies must “succeed in leveraging their enormous assets and capabilities” (Govindarajan, Trimble 1992, p.187).
4. “Strategic experiments face critical unknowns”, which cannot be “resolved before the business is launched. Therefore, success depends more on an ability to experiment and learn than on the initial strategy” (Govindarajan, Trimble 1992, p.188).
5. The NewCo must be built from scratch, with new choices in staffing, structure, systems and culture” (Govindarajan, Trimble 1992, p.191).
6. Keeping relationships and managing tensions between NewCo and CoreCo is the job of business leaders
7. The NewCo must plan by itself
8. “Interest, influence, internal competition and politics disrupt learning” (Govindarajan, Trimble 1992, p.194). The stable and disciplined process of planning and interpreting differences between predictions and outcomes must be settled.
10. Growth can be achieved only through strategic innovation, which is based on forgetting, borrowing and learning.

2.2.3.4. Concept according to Collis and Montgomery

David Collis and Cynthia Montgomery (1998) argue that there are seven perspectives on corporate strategy (see Table 2.11)
<table>
<thead>
<tr>
<th>Perspective</th>
<th>Concern</th>
<th>Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept of corporate strategy</td>
<td>General management role</td>
<td>Early statement of corporate and competitive strategy</td>
</tr>
<tr>
<td>Organisation structure</td>
<td>Organisation structure</td>
<td>Structure follows strategy, &quot;fit&quot;, decentralisation</td>
</tr>
<tr>
<td>Diversification</td>
<td>Extent and mode of diversification</td>
<td>Set of businesses as strategic variable, &quot;synergy&quot;</td>
</tr>
<tr>
<td>Portfolio planning</td>
<td>Resource allocation</td>
<td>Portfolio management</td>
</tr>
<tr>
<td>Value-based strategy</td>
<td>Corporate contribution to SBU performance</td>
<td>Limited evidence of corporate value; market for corporate control</td>
</tr>
<tr>
<td>Generic corporate strategy</td>
<td>Source of corporate advantage</td>
<td>Typology of corporate advantage</td>
</tr>
<tr>
<td>Resource-based view</td>
<td>Firm idiosyncrasy and growth</td>
<td>Tangible and intangible assets and capabilities</td>
</tr>
</tbody>
</table>

Table 2.11 Perspectives on Corporate Strategy
Source: Collis, Montgomery 1998

Collis and Montgomery (1998) pointed out that strategy is a carefully constructed system of three interdependent units, which are aligned with one another by the nature of the firm's resources: its special assets, skills and capabilities (Figure 2.52).

![Figure 2.52 The triangle of corporate strategy](image-url)
According to Collis and Montgomery (1998), corporate strategy should be aimed not only at building high-quality resources, strong market position and an efficient administrative organisation, but also at creating tight junctions at each angle. When the company's resources are critical to the success of its business, the firm will benefit from its competitive advantage. Once the organisation's structure is configured to leverage resources into the business, synergy effect and coordination will be achieved. “Finally, fit between a company's measurement and reward systems and its business produces strategic control” (Collis, Montgomery 1999, p.4). The relationship between company's resources and strategy is presented in Figure 2.53.

2.2.3.5. Concept according to Kathleen Eisenhardt and Donald Sull

Eisenhardt and Sull (2002) developed another dimension to strategic planning theory called “simple rules”. Eisenhardt and Sull (2002) believe that the simple rules strategy is the source of competitive advantage in high-velocity markets in order to achieve growth. The key idea of this approach is to pursue opportunities, those which can be achieved through focusing on key processes and simple rules. A simple rules strategy is a set of consequential steps that consist of questions and rules grouped into five types (see Table 2.12).
<table>
<thead>
<tr>
<th>Type</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>How-to rules</td>
<td>Spell out key features of how a process is executed – &quot;What makes our process unique?&quot;</td>
</tr>
<tr>
<td>Boundary rules</td>
<td>Focus managers on which opportunities can be pursued and which are outside the pale</td>
</tr>
<tr>
<td>Priority rules</td>
<td>Help managers rank the accepted opportunities</td>
</tr>
<tr>
<td>Timing rules</td>
<td>Synchronise managers with the pace of emerging opportunities and other parts of the company</td>
</tr>
<tr>
<td>Exit rules</td>
<td>Help managers decide when to pull out of yesterday's opportunities</td>
</tr>
</tbody>
</table>

Table 2.12 Simple Rules
Source: Eisenhardt, Sull 2002

How-to rules provide an organisation with its main direction, principles and focus in order to seize opportunities. Boundary rules “help managers sort through many opportunities quickly” (Eisenhardt, Sull 2002, p.105), i.e. customer, geographic region or technology. Sorted opportunities are prioritised in order to allocate resources among competing alternatives. Priority rules serve not only to set the rhythm of the key strategic processes, but also to “co-ordinate the company’s various parts in order to capture emerging opportunities” (Eisenhardt, Sull 2002, p.107).

Eisenhardt and Sull (2002) pointed out that it is imperative to have the optimal number of right rules which should be reviewed periodically. According to Eisenhardt and Sull (2002), rules generally develop from experience, especially from mistakes; or from an executive’s experience gained at other companies; or they already exist implicitly in the organisation.

2.2.3.6. Concept according to Lowell L. Bryan

Lowell Bryan (2002) offered another concept for strategic planning, which also deals with opportunities. According to Bryan (2002), the chief executive officer must think about corporate strategy as a ‘portfolio of initiatives’ focused on an organisation’s goal, because “a company that builds a portfolio of initiatives in areas in which it enjoys advantages of familiarity can prosper even amid uncertainty” (Bryan 2002,
p.20). The whole process consists of four main steps: initiatives search, execution based on 9-cell grid (as presented in Figure 2.54), progress monitoring and portfolio reassessment.

The 9-cell grid "displays timing, economics at stake, risks inherent in each initiative and provides a framework to highlight the changing effects of:

- Timing
- Altered levels of familiarity or uncertainty
- The launch of new initiatives or the termination of unsuccessful ones" (Bryan 2002, p.25).

As argued by Bryan (2002), competitive advantage will be enjoyed by the early adopters who scale-up their activities once the way forward is made clear.
2.2.3.7. Concept according to H. Courtney, J. Kirkland, and P. Viguerie

Hugh G. Courtney, Jane Kirkland and S. Patrick Viguerie (1999), from McKinsey & Company, developed a four-level framework that helps to cope with residual uncertainty during the strategic planning process. Residual uncertainty is defined as "the uncertainty that remains after the best possible analysis has been undertaken" (Courtney et al. 1999, p.82).

According to the three, "residual uncertainty facing most strategic-decision makers falls into one of four broad levels" (Courtney et al. 1999, p.82):

- Level one: a clear enough future
- Level two: alternative futures
- Level three: a range of futures
- Level four: true ambiguity

Residual uncertainty at Level 1 is irrelevant to the strategic planning process and therefore can be overcome by a single forecast. At this level companies are known as adapters and "strategy involves making positioning choices about where and how
to compete. Such strategies, by definition, consist of a series of no-regrets moves” (Courtney et al. 1999, p.85).

“In classic Level 2 situations, the possible outcomes are discrete and clear but hard to predict” (Courtney et al. 1999, p.83). Starting from Level 2 to 4, strategies are developed which are aimed at reducing uncertainty and creating order out of chaos. Such strategies are also known as shaping strategies. Therefore at Level 2, the strategist should make a set of discrete scenarios along with the likelihood of each outcome, and the whole process should be oriented towards increasing the probability that a favoured industry scenario will unfold. The ability to change the course quickly, if necessary, plays a vital role in a company’s success at Levels 2 through to 4.

Level 3 is characterised by a range defined by a limited number of key variables in which the actual outcome may lie. Obviously, discrete scenarios are impossible here. “As in Level 2, some, and possibly all, elements of the strategy would change if the outcome was predictable” (Courtney et al. 1999, p.83). Therefore, “if at Level 2, shapers are trying to promote a discrete outcome, at Level 3 they are simply trying to move the market in a general direction because they can identify only a range of possible outcomes” (Courtney et al. 1999, p.88). “Reserving the right to play is a common posture for companies that face Level 3 uncertainty” (Courtney et al. 1999, p.89).

At Level 4 it is not possible to identify not only a range of potential outcomes, but even all relevant variables that will define the future. However, returns might be higher and risk lower than at Levels 2 and 3. “Since no player necessarily knows the best strategy in these environments, the shaper’s role is to provide a vision of an industry structure and a set of standards that will co-ordinate the strategies of other players and drive the market towards a more stable and favourable outcome” (Courtney et al. 1999, p.89). Courtney, Kirkland, and Vigueirie (1999) pointed out that despite reserving the right to play is common, it is dangerous at Level 4 as well. A few general rules apply. “First, look for a high degree of leverage. Second, don’t get locked into one position through neglect”, because “Level 4 situations are transitional and most will quickly move towards Levels 3 and 2” (Courtney et al. 1999, p.90).
The resource-based concepts, as described above, can be classified into two groups. The first group provides the way to deal with future opportunities without mentioning capabilities in details. The opportunity-based methodologies of Bryan, Courtney, Kirkland and Viguerie (1999), and the simple rules of Eisenhardt and Sull (2002) represent such schools of thought. In contrast, the other group of concepts stand for clear inside-out approaches, placing an emphasis on the company's resources and capabilities (Core competence of Hamel and Prahalad (1994), resource-based approach by Collis and Montgomery (1998)).

Hamel and Prahalad's (1994) "crafting strategic architecture" concept offers a similar approach to Mintzberg's (1994) emergent strategic planning theory. As well as providing an umbrella strategy, the adoption of a crafting strategic architecture allows a firm to adjust the implementation of the strategy in accordance with unexpected occurred events.

<table>
<thead>
<tr>
<th>Descriptive Concepts with Learning and Emergent Process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Henry Mintzberg</strong></td>
</tr>
<tr>
<td>with Capability and Competencies focused process</td>
</tr>
<tr>
<td>with inside-out perspective</td>
</tr>
<tr>
<td>with Opportunity oriented process</td>
</tr>
<tr>
<td>with out-side in perspective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gallis and Montgomery</th>
<th>Hamel &amp; Prahalad</th>
<th>Gavindaarajan &amp; Trimble</th>
<th>Kim &amp; Mauborgne</th>
<th>Ryan</th>
<th>Courtney, Kirkland, Viguerie</th>
</tr>
</thead>
<tbody>
<tr>
<td>strategy is a carefully constructed system of three interdependent parts, which are aligned with one another by the nature of the firm's resources: its special assets, skills, and capabilities</td>
<td>inside-out corporate strategy model that starts the strategy process by thinking about the core strengths of an organization and competing for the future</td>
<td>strategic innovation and strategic experiments are essential factors in determination of company's survivability and success</td>
<td>companies gain the highest profit from so called “Blue oceans”, some kind of unknown market place, where competition is irrelevant because the rules have not been set</td>
<td>advantage will be received by first movers who scale up activities once the way forwarded has become clear</td>
<td>four-level framework that helps to cope with residual uncertainty during strategic planning process. Residual uncertainty is “the uncertainty that remains after the best possible analysis has been undertaken”</td>
</tr>
</tbody>
</table>
2.2.4. General findings

During the last half of the century a colossal change occurred in attitude towards strategic planning. From the long-term planning based on the gap analysis of the 1960s, strategic planning has made its way into portfolio strategies, competitive positioning strategies, capabilities-based strategies and finally into the strategic management and thinking of today. A retrospective of strategic planning theory is illustrated in Figure 2.57.

![Figure 2.57 The historical development of strategic planning](image)

Source: Kuehn, Gruenig 2000

To a large extent, these historical shifts and the difference in perspective of all described above concepts might be understood from the wide range of base disciplines on which the strategy arguments are based, like for example, the
economy, philosophy, political science, anthropology and others. These base
disciplines create an ideology and a way of thinking about the development of
strategy, which, at the end, leads to the strategy formation approaches. The
formulating approach, in its part, serves as the starting point for the process of
strategic planning providing and might be, for instance, corporate structure, company
resources, business opportunities or values. Furthermore, the influence on the
difference of strategy formulation concepts is made by the target, to which the
strategy is aimed at, i.e. growth, profitability (return), profit or other deviates to allow
other possibilities to intrude. Finally, the whole structure has the dimensions of the
degree of process formalisation and the degree of freedom. The degree of freedom
represents the trade-off between the controlling and learning process, reflecting the
ability to change or to adjust the taken course of actions. Whereas the degree of
formalisation stands for the attitude towards the process of strategy formulation,
reflecting the attitude of the management towards the process of strategic planning.
In general, the degree of process formalisation stands for the "position" on the
horizontal axis between free discussion (the free-flowing process) and the strict
proceeding, when the process is formalised. The layers and dimensions of strategic
planning are depicted in Figure 2.58.
Figure 2.58 Strategic planning framework  
Source: Own development

The main strategy concerns flow from the perspective of the strategic formulation approach. Strategy classification by Mintzberg (1994) fits inside the model by providing schools of strategy formation that represent the underlying philosophy. The thoughts of Collis and Montgomery (1998) can also be linked within the framework through the approach classification provided in Table 2.13. The shift in the mid 1980s from strategic planning to strategic thinking from the retrospective of Kuehn and Gruenig (see Figure 2.55) corroborates the change in the underlying philosophy of strategy concepts, from economics and military strategy to education, psychology and learning theory.

Obviously, as with any classification, there is a certain danger in trying to put rich individual ideas and concepts into a limited number of cases because of the risk of oversimplification. However, the classification does contribute to a deeper understanding of how business strategy concepts might be perceived from the perspective of different thinking and underlying mainstream thought.

The relationships between the strategic planning framework and the theories of Mintzberg (1994), Collis and Montgomery (1998), and a number of examples, are presented in Table 2.13.
<table>
<thead>
<tr>
<th>school</th>
<th>School</th>
<th>View on Process</th>
<th>Underlying philosophy</th>
<th>Approach</th>
<th>Key Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>Conceptual</td>
<td>Architecture as a metaphor</td>
<td>corporate strategy</td>
<td>Andrews</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Capability-based view</td>
<td>Humphrey, Steiner</td>
<td></td>
</tr>
<tr>
<td>Planning</td>
<td>Formal</td>
<td>System theory, Cybernetics, Urban planning, Mathematics</td>
<td>Concept of corporate strategy</td>
<td>Ansoff</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Organisation structure</td>
<td>Chandler</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td>Scenario planning</td>
<td>Godet</td>
<td></td>
</tr>
<tr>
<td>Positioning</td>
<td>Analytical</td>
<td>Economics, military strategy</td>
<td>Generic Corporate Strategy</td>
<td>Porter, Ohmae, Stalk and Lachenauer, Treacy and Wiersema Drucker, Yip</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Capability-based view</td>
<td>Hinterhuber</td>
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<td></td>
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<td>Portfolio planning</td>
<td>Henderson, McKinsey</td>
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<td></td>
<td>Value-based concepts</td>
<td>Stern, Levitt, Copeland</td>
<td></td>
</tr>
<tr>
<td>Cognitive</td>
<td>Mental</td>
<td>Psychology</td>
<td>Entrepreneurial</td>
<td>Visionary</td>
<td>Economics</td>
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<td></td>
<td></td>
<td>Learning</td>
<td>Emergent</td>
<td>Psychology, Education, Learning theory</td>
</tr>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>Mintzberg</td>
</tr>
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<td></td>
<td></td>
<td>Capability-based view</td>
<td>Govindarajan and Trimble, Collins and Montgomery, Hamel and Prahalad</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Opportunity based view</td>
<td>Kim and Mauborgne, Bryan, Courtney, Kirkland and Vigerie</td>
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</tr>
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<td></td>
<td>Configurational</td>
<td>Episodic</td>
<td>Context</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2.13 The perspectives on corporate strategy, Source: Own development
2.3 Trade-offs in strategic planning concepts

As discussed in the previous chapter, studies about strategic formulation have two conflicting points. The first is the discussion held over deliberate versus emergent processes; and the second is the focus of the analysis, whether outside on the environment or inside within the company. Another aspect to take into consideration is the moderating role of the environment which is, by itself, another topic which has been discussed extensively by strategic philosophers.

2.3.1. Deliberate versus emergent strategies

Mintzberg (1994, 1999) classified the different lines of strategic thought into ten schools. Table 2.14 details a summary of that classification, separated in three groups: prescriptive, descriptive and combined.

<table>
<thead>
<tr>
<th>Prescriptive</th>
<th>Advocates</th>
<th>Descriptive</th>
<th>Advocates</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>Strategy as</td>
<td></td>
<td>School</td>
</tr>
<tr>
<td>Design</td>
<td>A process of conception</td>
<td>Slevin, Newman, Andrews</td>
<td>Cognitive</td>
</tr>
<tr>
<td>Planning</td>
<td>A formal process</td>
<td>Ansoff</td>
<td>Learning</td>
</tr>
<tr>
<td>Positioning</td>
<td>An Analytical process</td>
<td>Shendel, Hatten, Porter</td>
<td>Power</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cultural</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Environmental</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Combined schools:</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
</tr>
<tr>
<td>Entrepreneurial</td>
</tr>
<tr>
<td>Configuration</td>
</tr>
</tbody>
</table>

Table 2.14 The ten schools of strategy formation
A quick glance at any number of journals specialising in strategy frequently contain discussions and debates about the two opposing thoughts - the dichotomy represented by the prescriptive and descriptive lines of thought. These have the following characteristics:

<table>
<thead>
<tr>
<th>PRESCRIPTIVE SCHOOLS</th>
<th>DESCRIPTIVE SCHOOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify direction of action based on assessment of own current situation and the environment</td>
<td>understand the historical reasons why a given company is where it is at a particular point in time</td>
</tr>
<tr>
<td>Deliberate, rational, linear process. Ends specified first, followed by means.</td>
<td>Non-deliberate, adaptive, incremental, learning process. Ends and means either specified simultaneously or mutually involved.</td>
</tr>
<tr>
<td>Managed growth</td>
<td>Natural growth</td>
</tr>
<tr>
<td>Aims to control the strategy process through analysis. The way it should be done.</td>
<td>Aims to observe how strategies arise. The way it is done</td>
</tr>
<tr>
<td>Intended, analytical, rational, from top to bottom.</td>
<td>Emergent, intuitive, non-rational, from bottom to top.</td>
</tr>
</tbody>
</table>

In his classification, Mintzberg (1994, 1999) grouped the schools into two categories prescriptive and descriptive. Mintzberg (1994, 1999) believed that the prescriptive tag adequately represented the "planning school" of thought, while the descriptive label succinctly illustrated the "learning school" of thought. The debate between planning and learning has been discussed in several research papers, articles and journals. On the "planning" side the most important advocates are Porter (1998), Andrews (1980) and Igor Ansoff (1998). On the "learning" side, Mintzberg (1994, 1999) fiercely defends his thoughts along with Lampel who, in turn, gathers the support of authors like Prahalad, Hamel (1994), Chandler (2000), Hannan and Freeman. Nevertheless, Mintzberg (1994, 1999) does not identify himself directly as a "learning" advocate. In his article, Reflecting on Strategy Process (Mintzberg 1999),

Source: Mintzberg 1999
Mintzberg places himself within the "configuration school" and attempts to gather all schools in a single process, as shown in the graph below.

Figure 2.60 Ten schools of strategy formation  
Source: Mintzberg

The ten schools would work together in one process as follows:

The cognitive school inside the mind of the strategist is placed at the centre of the process. The positioning school looks behind at the established data that is analyzed. The planning school looks slightly ahead to program the strategies, while the design school looks far ahead driving the perspective. Finally, the entrepreneurial school looks beyond to a unique vision of the future. The learning and power schools of thought deal with the details; the cultural school concerns itself with beliefs; and the environmental school, a little above the cultural school, places the process in context with its surroundings. The configuration school is all around, opposite to the cognitive school, which looks from the inside. The configuration school looks in from the outside.

Although Mintzberg (1991) is not a pure "learning" strategist, he claims that the conception of a novel strategy is a creative process that can not be formalised. He said: "Strategy always precedes structure, and always follows it too. And so it is with planning and learning" (Mintzberg 1991). He does not condemn a rational deliberate process, but believes that learning is an important part of the process and that
deliberate, intended strategies join with emergent strategies to result in the realised strategy (Mintzberg 1985).


In an attempt to resolve the debate between these two perspectives in strategy formation, planning versus learning, Brews and Hunt (1999) carried out an analysis of 656 firms. The objective of the research was to determine the relationship between the specificity of ends (what an organisation wants to achieve); the performance among firms operating in stable environments; and the relationship between the specificity of means (how to achieve the ends) and performance. One of their main findings was that the external performance of a firm is associated with formal, specific planning, regardless of the environment. They also discovered that multiple deliberate strategies (means) are preferable to unspecified ends and waiting for strategies to emerge as the organisation interacts with the environment.

In their study clear evidence of the co-existence of formal, specific and flexible planning was found in very unstable environments. A firm that pursues incrementalism alone, without previous specific planning, can spend more time in the experimentation (trial and error) stage which will ultimately affect its performance. This goes against the Mintzberg concept, which proposes that since the company's strategists don't know their future environment, they can not establish realistic strategies, thus they should 'learn' by trial and error.

Brews and Hunt (1999) conclude that the remedy for bad planning is good planning, and that forming and reforming specific plans and making incremental adjustment as implementation proceeds are two capabilities required for successful strategy-making.
2.3.2. **Inside focus versus outside focus**

While studying strategy, researchers try to discover the origins or sources of competitive advantage. They often ask themselves questions, such as why are some firms more profitable than others or why do some firms outperform their competitors? In order to find the answer to these questions, researchers have come up with some theories which can be categorised as: inside focus and outside focus.

Early studies on competitive advantage point to the active presence of superior leadership (Andrews, 1971; Selznick, 1957; and Chandler, 1962). These studies were concerned with what managers or leaders needed to do in order to make a significance difference and stand out from their competitors.

Porter later appeared with his article, *Five Competitive Forces*, shifting the focus of the debate on strategy outwards, towards an analysis of a firm's microeconomic environment. Under this model, corporate strategy should meet opportunities and threats in the organisation's external environment. He stated that strategy is the act of aligning a company with its environment (Porter, 1991), and that it depends on a sophisticated understanding of industry structure. After understanding the industry structure, the firm is expected to adapt to the environment and seek an attractive position in the market which is also known as the positioning-based view (PBV), the sustainability of rents depends on the relative influence of competitive forces encountered by the firm (McGahan, Porter, 1997). In the same vein, Lamb's model was developed (1984), which suggests that an assessment of the business and the industries in which the company operates, and an assessment of competitors are the basis of strategy formulation.

Against this background emerged the resource-based view (RBV) which supports the contention that the sources of competitive advantage are ultimately unique assets owned and controlled by the firm. A firm can be regarded as a bundle of resources and those resources are simultaneously valuable, rare, imperfectly imitable and non-substitutable. Barney (1991) said that the competitive view implicitly adopts two simplistic assumptions. Firstly, it assumes that the firms within an industry, or group, are identical in terms of the strategically relevant resources they control and the strategies they pursue (Porter, 1981; Rumelt, 1984; Scherer, 1980). Secondly, it
assumes that if some heterogeneity develops in an industry, it will soon disappear because the resources that firms use to implement their strategies are highly mobile means can be bought and sold in markets (Barney, 1986; Hirshleifer, 1980). In contrast, the RBV assumes that companies within an industry or group may be heterogeneous with respect to the resources they control and that these resources may not be transferable across firms, and thus heterogeneity can be long-lasting (Barney, 1991). In light of these assumptions, Barney (1991) claims that a sustained competitive advantage is not attainable in industries where firms are homogeneous and resources are highly mobile, as the environmental models assume. At the same time, he challenges the existence of first-mover advantage (Lieberman & Montgomery, 1988), barriers to entry (Bain, 1956) and mobility barriers (Caves & Porter, 1977) when resources are perfectly mobile and are homogeneously distributed across firms.

The RBV is often positioned as an alternative to the environmental perspective. But from another point of view, both perspectives are complementary, the models are not exclusive. For example, while the environmental view focuses attention on external industry structure, the RBV points to the fact that internal capabilities and investments provide the tools to shape this external environment (Cockburn, Henderson, Stern, 2000).

While several authors sought to compare and contrast these two perspectives, other authors have dedicated studies to examining the relative impact of both the industry and firm's resources and capabilities on performance. In this vein Henderson and Mitchell (1997) consider both influences as significant indicators of performance. According to Wernerfelt (1984), Porter's framework and the resource-based approach constitute two sides of the same coin. Spanos and Lioukas (2001) suggest that industry forces influence market performance and profitability, while firm assets act upon accomplishments in the market arena and therefore affect profitability in the end.

Both perspectives can be summarised in the framework shown in Figure 2.61. It suggests that firms obtain sustained competitive advantages by implementing strategies that exploit their internal strengths in the face of environmental
opportunities at the same time that they are trying to neutralise external threats while working on their internal weaknesses.

Figure 2.61 SWOT analysis, the resource-based model and the environmental model
Source: Barney 1991

Several authors have linked the internal and external analysis to the determination of success factors during the strategic planning process. For example, Thompson and Strickland (1995) proposed a model for strategic business analysis which includes the determination of KSFs within the internal and external analysis, as shown in the figure below:
Defining the best strategy

1. The degree it corresponds to the company's situation
2. The possibility to help for building a competitive advantage
3. The possibility to improve company performance

Identification of the strategic options

1. Improving present strategy
2. Develop a new one

Industry and competitive analysis

1. Dominant Economic Characteristics of the Industry
   - market growth
   - geographic scope
   - industry structure
   - scale economies
   - experience curve effects
   - capital requirements

2. Competition analysis
   - rivalry among competing sellers
   - threat of potential entry
   - competition from substitutes
   - power of suppliers
   - power of customers

3. Driving Forces

4. Competitive Position of Major Companies/Strategic Groups
   - favorably positioned
   - unfavorably positioned

5. Competitor Analysis
   - strategic approaches/predicted moves of key competitors
   - whom to watch and why

6. Key Success Factors

7. Industry Prospects and Overall Attractiveness
   - factors making the industry attractive
   - factors making the industry unattractive
   - special industry issues/problems
   - profit outlook (favorable/unfavorable)

Company Situation analysis

1. Strategic Performance Indicators
   - market share
   - sales growth
   - net profit margin
   - return on equity investment
   - other

2. Internal strengths and weaknesses, external opportunities and threats

3. Competitive strength assessment using key success factors
   - quality/product performance
   - reputation/image
   - manufacturing capability
   - technological skills
   - dealer network
   - marketing/advertising
   - financial strength
   - customer service
   - other

4. Conclusions Concerning Competitive Position

5. Major strategic issues/problems the company must address

Figure 2.62 Model for strategic business analysis
Source: Own development based on Thompson 1995

Thompson and Strickland (1995) defined the KSFs as the three or four really major determinants of financial and competitive success in a particular industry. These factors are related to the things all the firms in the industry must do well and to the specific kinds of skills and competency necessary to compete successfully.
According to Schefczyk (1994) the success factor approach has an important place in the process of strategic management. More precisely, the identification of the success factors is an integral part from the process of business analysis. Therefore, the success factor approach provides the management with an adequate mechanism for the identification of the business determinants of the environment most relevant to the company. In addition, the approach provides the researcher or the manager with the opportunity to both measure the positioning of the company compared to its competitors and to control the implementation on the strategy. Schefczyk (1994) developed an explanation of the interdependency between success factors and strategic management that can be drawn on the basis of the model of strategic management processes presented on the following figure:

![Diagram of Strategic Management Process](Image)

**Figure 2.63 Relation between success factors and strategic management**
**Source:** Schefczyk 1994
The first step marked with the number zero on the Figure 2.63 is relevant to the goal positioning within the company. On the basis of the management vision, company values and specific business goals have been decided what the strategy should be. At this stage from significant importance are the success factors on macro level.

The second step (number 1) includes the analysis of the external risks and chances. At this stage the most relevant success factors are those on the macro and industry level. They provide the basis for benchmarking the best in class in the industry. This provides the company with the opportunity to correctly identify its relative competitive position.

Step 2 concerns the identification of the sources of internal competitive advantage. This is achieved through an analysis of the firms' internal strengths and weaknesses based on industry-specific and business-specific success factors.

Step 3, taken together with Step 4, represents the process of choosing the most adequate strategy to the specific situation and business. At this stage, the effect of all the success factor are influential.

Marschner (2004) proposed another model for business analysis: linking internal and external analysis to KSFs. The model consists of three important parts, each providing information for a different aspect of the business analysis. The information generated as an outcome of each is integrated together during the analysis process. Furthermore, the scope of each of these parts will be determined from the results obtained during the presiding stages. The three dimensions of the business analysis presented on Figure 2.64 are:

- Analysis of the environment and the success situation
- Goals and strategic analysis
- Analysis of the business situation based on success factors
Thompson and Strickland (1995) defined the KSFs as "...the strategy-related action approaches, competitive capabilities, and business outcomes that every firm must be competent at doing or must concentrate on achieving in order to be competitively and financially successful. KSFs are the business aspects all firms in the industry must pay close attention to - the specific outcomes crucial to market success (or failure) and the competencies and competitive capabilities with the most direct bearing on company profitability."
new competences quickly and that some assets are simply not readily tradeable. With regards to the idea that the RBV is less suited to dynamic environments, Eisenhardt and Martin (2000) found that the perspective encounters a boundary condition in high-velocity markets where the duration of competitive advantage is inherently unpredictable and time is central to strategy.

Other studies go further and identify what is known as the dynamic capabilities approach (Teece, Pisano and Shuen, 1997; and Eisenhardt and Martin, 2000). Dynamic capabilities refer to the ability of firms to integrate, build and re-configure internal and external competencies to address rapidly changing environments. Eisenhardt and Martin (2000) proposed that in moderately dynamic markets, dynamic capabilities resemble the traditional conception of routines – detailed, analytical and stable processes - with predictable outcomes. And in high-velocity markets they are simple, highly-experiential and fragile processes with unpredictable outcomes.

Cockburn, Henderson and Stern (2000) studied pharmaceutical firms and found that firms which analysed the environment maintained a constant watch on their competitors while balancing the development of their own resources. Later, Wirtz, Mathieu and Schilke (2007) studied 754 firms in high-velocity environments, mainly information and communications technology-related companies, and concluded that the strategies adopted in these environments is composed of elements from both perspectives: the market-based as well as the RBVs. They also concluded that strategy in high-velocity environments has a positive and significant effect on a firm’s performance, specifically on growth and profitability.

The determination of KSFs is adaptable to any kind of industry, regardless of the level of dynamism. It is clear that the success factors in stable environments will not be the same as those in dynamic environments. Their determination however, and the benchmark processes that follow, are valid for either stable or unstable environments. The advantage of basing a business analysis on success factors is that, initially, the industry and the competitors will be assessed.
2.3.6 The importance of dynamic capabilities within strategic planning

In order to get a better understanding of the importance and meaning of dynamic capabilities following authors describe the phenomenon in more detail. Helfat and Petera (2003, 2007) pointed out that scholars of the dynamic-capability view (DCV) are extending RBV to dynamic markets. These researchers doubt that the mere existence of appropriate bundles of specific resources is insufficient to sustain competitive advantage in situations involving rapid and unpredictable market change (Eisenhardt and Martin, 2000; Teece et al., 1997). Consequently, these researchers argue that dynamic capability, or the ability to integrate, build and reconfigure resources, is essential in learning competitive advantage under environmental volatility (Eisenhardt and Martin, 2000; Newbert, 2005; Rindova and Kotha, 2001; Teece, 2007; Teece et al., 1997; Zollo and Winter, 2002). More specifically, most DCV research focuses solely on conceptual discussions (e.g., Deeds et al., 2000; Eisenhardt and Martin, 2000; Griffith and Harvey, 2001; Helfat and Peteraf, 2007; King and Tucci, 2002; Luo, 2000; Madhok and Osegowitsch, 2000; Majumdar, 2000; Makadok, 2001; Petroni, 1998; Rindova and Kotha, 2001; Teece, 2007; Teece et al., 1997; Zollo and Winter, 2002), and empirical studies are rare (e.g., Wu, 2006, 2007).

A more specific definition about dynamic capability is pointed out by the next authors. Leonard-Barton (1992) define dynamic capabilities as the firm’s ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments. Dynamic capabilities (Leonard-Barton, 1992) reflect an organization’s ability to achieve new and innovative forms of competitive advantage given path dependencies and market positions.

Referring to Eisenhardt and Martin, 2000; Newbert, 2005; Rindova and Kotha, 2001; Teece et al., 1997; Wu, 2007; Zollo and Winter, 2002 dynamic capabilities are essential in identifying competitive advantage under environmental volatility. This proposition is antecedent to the suggestion that, regardless of degree of environmental volatility, dynamic capabilities represent an emerging and potentially integrative approach to understanding new sources of competitive advantage. Consequently the authors argue that the environmental volatility does not moderate the relationship between dynamic capabilities and competitive advantage.
More specific, dynamic capabilities consist of specific strategic and organizational processes like product development, alliancing, and strategic decision making that create value for firms within dynamic markets by manipulating resources into new value-creating strategies (Kathleen M. Eisenhardt and Jeffrey A. Martin, 2000). Dynamic capabilities are neither vague nor tautologically defined abstractions and second, these capabilities, which often have extensive empirical research streams associated with them, exhibit commonalities across effective firms or what can be termed ‘best practice’ (Kathleen M. Eisenhardt and Jeffrey A. Martin, 2000). Therefore, dynamic capabilities have greater equifinality, homogeneity, and substitutability across firms than traditional RBV thinking implies.

In view of Grant and Pisano, dynamic capabilities are the antecedent organizational and strategic routines by which managers alter their resource base — acquire and shed resources, integrate them together, and recombine them — to generate new value-creating strategies (Grant, 1996; Pisano, 1994). As such, they are the drivers behind the creation, evolution, and recombination of other resources into new sources of competitive advantage (Henderson and Cockburn, 1994; Teece et al., 1997). Similar to Teece and colleagues (1997), dynamic capabilities could be defined as: The firm’s processes that use resources — specifically the processes to integrate, reconfigure, gain and release resources — to match and even create market change.

Dynamic capabilities thus are the organizational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve, and die. This definition of dynamic capabilities is similar to the definitions given by other authors. For example, Kogut and Zander (1992) use the term ‘combinative capabilities’ to describe organizational processes by which firms synthesize and acquire knowledge resources, and generate new applications from those resources. Henderson and Cockburn (1994) similarly use the term ‘architectural competence’ while Amit and Schoemaker (1993) use ‘capabilities.’

In addition to the prior mentioned discussion, Cyert, March, Nelson and Winter are describing dynamic capabilities in more detail taking into account that effective patterns of dynamic capabilities vary with market dynamism. When markets are moderately dynamic such that change occurs in the context of stable industry
structure, dynamic capabilities resemble the traditional conception of routines (e.g., Cyert and March, 1963; Nelson and Winter, 1982). That is, they are complicated, detailed, analytic processes that rely extensively on existing knowledge and linear execution to produce predictable outcomes. In contrast, in high-velocity markets where industry structure is blurring, dynamic capabilities take on a different character. They are simple, experiential, unstable processes that rely on quickly created new knowledge and iterative execution to produce adaptive, but unpredictable outcomes.

In order to clarify the applicability of DCV to environmental volatility an empirical study was done by (Lei-Yu Wu, 2009). Through examining 253 Taiwanese firms, the study finds that RBV is applicable when environmental volatility is ignored (cf. Barney, 1986; Dierickx and Cool, 1989; Grant, 1991; Newbert, 2007; Ray et al., 2004; Uhlenbruck et al., 2006; Wernerfelt, 1984). However, considering environmental volatility reduces the effectiveness and competitive advantage of resource firms (e.g., Eisenhardt and Martin, 2000; Newbert, 2005; Teece et al., 1997; Rindova and Kotha, 2001; Zollo and Winter, 2002). Nevertheless, the RBV is still somewhat effective, and firms with VRIN resources still have competitive advantages; however, this study finds that the DCV has better explanatory ability than the RBV.

2.3.4. Summary

The evolution of studies regarding strategic planning has lead to the existence of a trade-off in strategy concepts. The prescriptive and descriptive perspectives present different points of view when studying strategic planning. The prescriptive perspective aims to control the strategy process through analysis, while the descriptive perspective aims to observe how strategies arise. Represented by the planning school and the learning school of thought, both perspectives are frequently discussed in specialist papers. Mintzberg (1999) attempted to gather all the different schools into an inclusive model where all the schools are part of the process, and suggested that some schools fit different types of environment. However, several studies show that in spite of the existence of diverse environments, a combination of both perspectives is always present and that even in dynamic environments, learning processes cannot substitute planning processes.
Concerning the focus of analysis on which the strategies will be based, the prevailing external-focused analysis was challenged by the RBV. The outside focus emphasises the analysis of the environment and the industry structure in order to find a position for the company. Conversely, the inside focus emphasises the analysis of the internal strengths and resources in any given company. Both views can be gathered in a SWOT analysis, in which the internal strengths and weaknesses of a company are contrasted with the external opportunities and threats of the industry and environment. Studies showed that both have an effect on the company’s performance and both should be taken into account during the strategic planning process. The relationship between environmental analysis and the determination of KSFs was also discussed, as they are considered to be an integral part of the business analysis process and they provide the opportunity to measure the positioning of the company, in comparison with its competitors, as well as providing the opportunity to control the implementation of the strategy.

The moderating role of the environment in order to determine the type of strategic planning has been discussed at length in literature. It was implied that certain conditions in the environment call for certain type of planning, that stable environments are related to rational planning processes and that dynamic environments are related to incrementalism and learning processes. However, empirical research in several levels of environmental dynamism and industries (Priem, Rasheed and Kotulic, 1995; Andersen, 2004; Grant, 2003; and Brews and Purohit, 2007) showed that firms modify their planning behaviour, but not completely. They included some learning in the process, but did not abandon rational planning. In fact, they increased their planning activity. The RBV was found to reach its limitations in high-velocity environments, and consequently, it was necessary to switch to dynamic capabilities which allowed firms to manage their resources in order to adapt to the environment and become competitive. This is complemented by an exhaustive analysis of the industry structure to identify the competitive forces acting in it.
The figure 2.65 summarises the findings. Conceptually, stable environments are generally related to a deliberate approach with a mix of outside and inside. As per dynamic environments, some argue that they should be related to emergent, learning approaches while others claim that rational planning processes are also valid. At the same time, the RBV reaches its boundary and is translated into dynamic capabilities, which allows a firm to manage its resources in order to adapt to dynamic environments.
Empirical studies

Stable environment

Dynamic environment

Deliberate

- Key variable forecast
- Centralized, formal
- Staff driven
- Long term

Emergent

- Scenario planning
- Decentralized, informal
- Less staff driven
- Short term, goal focused

Outside Focus (competitive forces)

Resource Based View

Dynamic Capabilities

The second figure summarises the findings after the empirical studies were undertaken. These show that deliberate, rational planning processes take place under stable environments and are used under dynamic environments with variants in the specific characteristics of the models. Regarding the perspective, field studies show that both internal and external analyses are carried out in parallel as an integral part of a compound model and both are important in the strategic planning process.

2.4 The general valid process

The analysis of trade-offs in strategic concepts shows the importance of having a rational, deliberate strategic planning process in place which has, as a core element, the development of a strategy that will bring the company competitive advantages (see figure 2.67).
Moreover, it shows the importance of carrying out an analysis of both the external environment and the industry characteristics, as well as an internal analysis of the company. These analyses serve as input to the core element of the process, providing an understanding of the current situation of the company in its context and the desired situation (see figure 2.68).

Finally, in order for a strategy to be applied to real life operations, an implementation process is required. During this process the strategy will be translated into actions and a small share of emergent learning will complement the strategy as proposed by Mintzberg (1994) since the intended strategy in the form of a deliberate strategy mixes with the emergent strategy to result into the realised strategy. Therefore, a generic model would consist of three basic steps:
This generic process can be identified with different degrees of adaptation and/or sophistication, in models proposed by several authors (Ansoff 1988; Porter 1980; Farjoun 2002; Fleisher and Bensoussan 2003; Schefczyk 1994; Thompson and Strickland 1995; and Mintzberg 1990). Yet a fourth step could be considered as an evaluation, assessment or control which, in time, provides the generic model with a dynamic characteristic as long as it is able to reformulate and incrementally correct the process according to the results of the continuous evaluation.

The first step is strategic analysis. According to Ohmae (1982), analysis is the critical starting point of strategic thinking. Fleisher and Bensoussan (2003) believe that in business, decision-makers are encouraged to make decisions which are supported by systematic study and reflection. As a result, formal analysis could help organisations make better decisions. Porter (1982) remarked on the need for comprehensive competitor analysis and the need for an organised mechanism to insure that the process is efficient. The strategic analysis stage is aimed at acquiring all the necessary information that is needed both to formulate and to implement a strategy (Yip 1992).

The second step is the core centre of the process, the strategic planning itself; the formulation of a strategy that will lead the operations of the firm towards its objectives. While the previous step serves the process by informing the strategist, this step is where he/she actually strategises and makes decisions and choices based on the previous analysis. This is where the strategy is created, conceived, defined, developed, determined, selected, formulated or invented, depending on the
perspective of each author (Farjoun 2002; Gleister and Falshaw 1999; Mintzberg 1994; Hart 1992; Porter 1980; Schefczyk 1994; Ansoff 1988; and Ohmae 1982).

Porter (1980) suggests that after performing a complete analysis of the industry structure, the firm and the environment, a strategy should be chosen out of the three generic ones he identified. Fleisher and Bensoussan (2003) propose that at this stage of the generic strategic planning process, a strategic direction should be determined before defining and selecting a base strategy and contingency plan. Schefczyk (1994) put under this stage the definition of strategy alternatives and the choice of the adequate strategy.

The third step, after having decided on a general base strategy, is the implementation. During this stage, the strategy is put into action through policies, programs, activities, etc. In Ansoff's view (1988), the implementation of the strategy requires a strategic budget which, in turn, depends on the availability of financing articulated by a financial strategy. He also states that in order to make a strategy become a reality, specific projects must be generated, planned and executed, and the strategic activity must be co-ordinated with the operating activities.

According to Schefczyk (1994), this stage involves managing resources and structures, arranging the workflow and the administration, all according to the needs of the strategy. For Farjoun (2002), this sub-process deals with the realisation of selected goals and complementary choices like organisational structure. It should be guided by a plan that goes to lower-level steps. He says it also includes the action-interaction with the external context of the strategic change.

Minzberg (1994) said that during the implementation process the intended, deliberate strategy mixes with the emergent strategy leaving a realised strategy and an unrealised part of the strategy. Finally, in Yip's view (1992), the implementation phase is challenging and difficult. He identified four key factors - organisational structure, culture, management processes and people - which determine the firm's ability to implement a strategy.
2.5 Strategic analysis

As outlined in the previous chapters, the first step in the general basic process of strategic planning - the strategic analysis - plays an essential role in the process and it is the basis for all further steps. From a strategic planning standpoint, the purpose of analysis is to draw out the pertinent features in a company's internal capabilities and external environment. Furthermore, according to Porter (1980) and for the purposes of strategic planning, it is imperative that the current competitive position of the company in relation to the industry and competitors, is correctly determined. This is achieved by carrying out comprehensive analysis.

Taking into account all the strategic concepts, theories and models gathered in previous chapters, it is possible to summarise the diverse positions regarding strategic analysis in one table. Table 2.15 shows the objects of the analysis proposed by the authors studied. The objects can be clustered in two groups identified in previous studies, namely internal and external elements. Classified as internal elements are all those that are controlled by the company, as opposed to those external elements that are out of the company's control. While in the internal elements only company analysis is present, in the external group there is the analysis of competitors, suppliers, customers, substitutes, new entrants, market opportunities, and the social, political, cultural, technological, and economic factors of the industry.

Through an observation of the table, it becomes evident that there is consensus on the need for an analysis of the competitors, the company and the customers. Nevertheless, the other factors should not be neglected.
<table>
<thead>
<tr>
<th>Concept</th>
<th>Object of analysis</th>
<th>Own company</th>
<th>Internal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value-based</td>
<td>Financial values of Capel, Ström</td>
<td></td>
<td>Yes</td>
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<tr>
<td></td>
<td>Customers' value approaches of Leev, Golub, Henry and others</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Portfolio-based strategies</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Formal planning model of Angoff</td>
<td></td>
<td></td>
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<tr>
<td>SWOT related</td>
<td>Henderson's SWOT, McKenney Matrix, McKinsey's grid</td>
<td>Yes</td>
<td></td>
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<td></td>
<td>Pest</td>
<td></td>
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<tr>
<td>Resource-based approach by Colus and Montgomery</td>
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<td></td>
<td>Portfolio-portfolio-learn concept of Covindrajan and Trumble</td>
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<tr>
<td>Capabilities-based</td>
<td>Core competence of Hamel Freeland</td>
<td>Yes</td>
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<td></td>
<td>Blue oceans of Kim and Mauborgne</td>
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<td></td>
<td>Simple rules of Eisenhardt and Sull</td>
<td>Yes</td>
<td></td>
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<td>Opportunity-based methodologies of Brey, Courtney, Kirkland</td>
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<td>Druker's three basic alternatives</td>
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<td>Vip's strategic and competitive advantages</td>
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<td>Value disciplines of Tracey and Wersema</td>
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<td>Generic corporate strategies</td>
<td>Handball strategies by Stalk and Lachner</td>
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<td></td>
<td>Ohmae's four basic strategies</td>
<td>Yes</td>
<td></td>
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<td></td>
<td>Porter's five forces</td>
<td></td>
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<tr>
<td>External Factors</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Competitors, Competition</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Suppliers</td>
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<tr>
<td>Substitutes</td>
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<td></td>
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<td>Legal, Regulation, Society,</td>
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<tr>
<td>Technology, Economic</td>
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</table>

Table 2.15 Strategic analysis summary  
Source: Own development
2.5.1. **Environmental analysis**

According to previous findings, Porter’s (1998) framework of five forces covers most of the external factors. Clearly Marschner (2004) also bases her environmental analysis on the framework proposed by Michael Porter (2004), taking into account the five forces that rule the industry context of a company. The framework is summarised in the following illustration:

![Diagram showing Porter's five forces framework](image-source)

**Threat of New Entrants**
- Number of suppliers
- Size of suppliers
- Uniqueness of service
- Ability to substitute them
- Cost of changing

**Power of Suppliers**
- Time and cost of entry
- Economies of scale
- Cost advantages
- Barriers to entry
- Differentiation

**Competitive Rivalry**
- Number of competitors
- Quality differences
- Other differences
- Switching costs
- Customer Loyalty
- Cost of leaving the market

**Power of Buyers**
- Number of customers
- Size of each other
- Price sensitivity
- Ability to substitute
- Cost of changing

**Threat of substitutes**
- Substitutes performance
- Substitutes relative price
- Cost of change

**Figure 2.70 Forces driving industry competition**

*Source: Porter 2004*

The external analysis is completed by considering trends in the global environment. Besides the analysis of the forces acting in the industry, it is important to also consider the elements of the global analysis because they have an impact on the situation of the industry and therefore an impact on competitors. Changes in the political, economical, socio-cultural, as well as ecological environment of an industrial region, can bring consequences for suppliers and consumers in a market and therefore must be taken into account. Marschner is basically referring to a variation of
the PEST analysis - Political, Economic, Social, Technological - (Macmillan and Tampoe 2000) and including the ecological factor.

Political changes can include changes to the domestic or foreign political climate, and changes to legislation. Changes to regulations can include increases to the safety requirements in automobiles, ergonomic standards and materials. Economic changes usually include effects of the economic cycles, world trade, currency exchange rates, prices of the resources, patterns in the capital markets, labor markets and interest rates, and changes in the structure of suppliers. Social changes include trends in demographics, tastes and habits, ecological and safety concerns as well as future development. Technological change reviews the effects of the technological innovations in products, processes and distribution channels.

![Figure 2.71 Base for PEST Analysis](Source: Own graph based on Macmillan and Tamnoe 2000)

According to Marschner (2004), determining the current and future position of a competitor is the starting point of a competitive analysis. In order to successfully do this, it is important to ask two questions:

- How successful is the competitor?
- Which environmental influences is the competitor subjected to?

In order to document the success of a competitor, it is important to choose some meaningful and stable indicators of success.
<table>
<thead>
<tr>
<th>Success Indicators</th>
<th>Classification criteria</th>
</tr>
</thead>
</table>
| **Success measures / ratios** | - per business unit  
- per sales regions  
- development over time  
- per production units |
| - Net sales  
- Earnings before taxes  
- Operational profit |  |
| - Net Operating margin ROS  
- Return on investment ROI  
- Return on Equity ROE |  |
| **Market position measures** | - development over time  
- per business unit  
- per sales region  
- development over time |
| - Sales volume  
- Classic market share  
- Relative market share |  |

Figure 2.72 Success measures in a competitor analysis  
Source: Marschner 2004

This framework will not only help analyse the competition, but will also provide an aid to analyse the own company, as it will be discussed later.

Marschner (2004) also emphasises the importance of paying special attention to the strategies and objectives of competitors, as well as their possible reactions to the own company's new strategy.

According to Porter (1999) the following points must be explored:

- Objectives of the competitors
- Strategies of the competitors
- Assumptions of competitors
The objectives of the competitors shed light on their satisfaction level and willingness to assume risks. For a competitive analysis, the following types of objectives are important:

- Overall corporate objectives
- Division objectives

Corporate objectives are the starting point of the strategic planning process of a company. They reflect the direction of development of a company and form the basis for the formulation of the company's and the competitors' strategies. Determining the corporate objectives of competitors is necessary for two main reasons: they reflect the current achievement level of the competitors, and thus reveal any possible strategy adjustments; and the knowledge of the business objectives allows the estimation of the magnitude of counter-reaction to strategic measures.

Once the information about the corporate objectives of the competitors is known, then conclusions about plausible strategic alternatives can be considered. From the corporate and division objectives result the strategy types:
Corporate strategy
Competitive strategy

The knowledge of the competitor strategies and the action field of each will allow a company to know better the possible future actions and reactions of the competitor against certain eventualities.

2.5.2. **Internal Analysis**

The importance of carrying out an analysis of the own company and its internal environment has been emphasised in previous chapters. According to Professor Gray from the University of Purdue (2002) the aim here is to perform an objective assessment of the company's strengths and weaknesses in relation to competitors and the ones which are important to customers. The challenge of the internal analysis is to identify, develop, protect and deploy resources, capabilities and core competencies.

A first step to performing the internal analysis is based on classical corporate functions (Marschner, 2004). Under this approach the different departments and/or functions of the company are studied individually and in detail. As an example, the following functions could be examined:

- General corporate development
- Marketing
- Production
- Research and development
- Finance
- Personnel
- Leadership and organisation
- Innovative capabilities

A checklist can be developed for each function or element, which can include the monitoring of key ratios and values, the identification of trends and cycles, and so on.

Hamel and Prahalad (1990) provide an alternative point of view with their "core competencies" concept, which is closely linked to the RBV. Core competencies are those capabilities which are critical to a business achieving a competitive advantage; a set of unique internal skills processes and systems that provide competitive
advantage in the market (Dix and Mathews, 2002). The starting point for analysing core competencies is by recognising that competition between businesses is a race for competence mastery as it is a race for market position and market power. The management cannot focus on every little activity of the business and the competencies required to undertake them. So the goal is to identify and focus attention on competencies that really affect competitive advantage.

Prahalad and Hamel suggest that there are three factors to consider when attempting to identify the core competencies within any business. Analysts need to determine whether a core competency:

- Provides potential access to a wide variety of markets
- Makes a significant contribution to the perceived customer benefits
- Is difficult for competitors to imitate.

A competency which is central to the business operations but is not exceptional in some way, should not be considered a core competence because it does not differentiate the business from other similar business.

Porter (1980) suggested using the Value Chain Analysis (VCA) framework. According to him, a value chain is a chain of activities which adds value to a product...
as it passes through each step of the chain. Porter classified activities in a company as primary activities and support activities, as illustrated in the figure below.

Figure 2.75 VCA
Source: Porter (1985)

The primary activities are directly concerned with creating and delivering a product. The support activities, although they may not be directly involved in production, they may increase effectiveness or efficiency.

VCA is considered to be a powerful analysis tool for strategic planning and its ultimate goal is to maximise value creation while minimising costs. It is also a useful aid to identifying which activities are best undertaken by a business and which are best provided by others.

VCA can be broken down into three steps: break down a market/organisation into its key activities under each of the major headings in the model; assess the potential for adding value via cost advantage or differentiation, or identify current activities where the business appears to be at competitive disadvantage; and determine which strategies are built around activities where competitive advantage can be sustained.

Both approaches might be combined to gain better and deeper results. VCA can be used as a framework to identify core competencies inside the firm and in the supply chain. A firm’s value chain must be compared to a competitor’s value chains in order to determine where the competitive advantage exists. To be a source of competitive advantage, a resource or capability must allow a firm to perform an activity in a way
that is superior to competitors performances or must allow a firm to perform a value-creating activity that competitors cannot compete with.

Another approach or tool to perform the internal analysis is the left side of the world famous SWOT analysis; the identification of strengths and weaknesses inside the company. This analysis is better performed in combination with the previous exposed tools and in combination with the external analysis, since the left and right side of the matrix must be connected and matched. As mentioned in previous sections of this paper, this analysis was developed initially by Humphrey. Strength is defined as something a firm is good at doing or a characteristic that gives a firm an important capability. Weakness is something a company lacks or does poorly in comparison to others, or a condition that puts it at disadvantage.

Marschner (2004), from a different point of view, proposes that the analysis of a business situation, namely the internal analysis, can be performed based on the KSFs approach along with "success potentials". KSFs are factors that are a necessary condition for success in a given market. For example, a company that does poorly on one of the factors identified as critical to success in its market is certain to fail. Moreover, KSFs are functions, activities or business practices, defined by the market and as viewed by the customer, that are critical to the vendor/customer relationship. KSF are defined by the market and by the customer, not by the company. They revolve around skills, processes and systems. Outstanding performance in those areas result in "order winners".

In previous chapters the concept of core competencies was introduced. Core competencies focus on internal activities, practices and functions. When these competencies are aligned with the KSFs, the value of the business relationship blossoms and grows for the benefit of both the company and the customer (Dix and Mathews, 2002). This is why an internal analysis based on KSFs gains significance.

According to Jenner (1999), strategic success factors are derivates of the success potentials of the enterprise. They affect the marked success of the business entity by being the object of the client’s perception. Therefore, the success determinants can be categorised accordingly as:
Success factors. Defined features that, because of their constancy and conspicuousness, are considered very important to client attraction

Success potentials. Defined features that are not perceived by the clients but form significant importance for the overall competitiveness of the enterprise

When integrating success determinants in the business analysis it is important in the first instance to check if these factors correspond with the specifics of the branch. Therefore, it is important that the existing market conditions and specifics of the industry are well defined before proceeding with the identification of the strategic success determinants.

Listed benefits of using success factors as well as their importance for the process of business analysis make the ability to identify the most important for particular industry KSFs an attractive perspective. Unfortunately, the success factors differ from industry to industry and often they are different even in the same industry, especially when conditions are subject to change. In practice, rarely has more than three or four success factors been identified for any one industry. In addition, the fundamental idea of success factors is to provide a company’s senior management with only that information which is crucial to achieving an enterprise’s strategic goals.

As it can be seen, both internal and external analyses must be conducted together since they complement each other and need each other in order to achieve a comprehensive and balanced picture of the current situation. A company does not have an absolute position in the industry, nor does it possess an absolute advantage by itself. The position of a company is relative and depends on the other competitors, in much the same way that the internal capabilities that bring about competitive advantages are relative to the capabilities of the competitors.
3. RESEARCH METHODOLOGY

3.1 Methodology description

Philosophy

Saunders et al (2003) identifies three basic research philosophies which dominate literature - positivism, interpretivism and realism. Each philosophy provides a different but not mutually exclusive view about how knowledge is developed.

Positivism is the preferred philosophy for natural scientists. It involves working with an observable social reality which exists apart from the knower, and can be known through a careful process of data collection, and that the end product of such research can provide law-like generalisations similar to those produced by physical and natural scientists (Remenyi et al, 1998).

Under this philosophy the only knowledge is that which is based on the actual sense experience, and such knowledge comes from the affirmation of theories through strict method; that which cannot be tested empirically cannot be regarded as proven. The researcher assumes the role of an objective analyst, making detached interpretations about the collected data. The research is carried out with an emphasis on a highly structured methodology, in order to facilitate replication (Fill and Johnson, 1997); and on quantifiable observations, which are then subjected to statistical analysis.

Tests for the validity of a statement are that the statement must be grounded on observation, the observations (experiment) must be repeatable, and that the experiments should use the scientific method agreed by the entire scientific community. Positivism holds that an accurate and value-free knowledge of things is possible, and that human beings and their actions and institutions can be studied as objectively as the natural world (Fisher, 2003). Positivists attempt to look for laws and determine causality through objective analysis of the facts that have been collected. The researcher is independent of the subject of research and cannot affect nor be affected by it (Remenyi et al, 1998).

Positivism has, however, been criticised for its universalism, which contends that all "social processes are reducible to the relationships between and the actions of
individuals". In addition, detractors of the philosophy argue that the social world of business and management is too complex to lend itself to theorising by definite laws.

Positivism was also criticised for failing to appreciate the extent to which the social facts it yielded did not exist in the objective world but were rather a product of a socially and historically mediated human consciousness. Positivism also ignored the role of the observer in the constitution of a social reality. The representation of social reality produced by positivism was conservative, helping to support the status quo rather than challenging it.

On the other side of the argument stands interpretivism. This philosophy maintains that the world is subjective. The interpretivist attaches importance to meaning and tries to understand what is happening (Easterby-Smith, 2002) and argues that rich insights into a complex world are lost if the complexity of this world is reduced entirely to a series of law-like generalisations (Saunders, 2003). Under this philosophy it is necessary to explore the subjective meanings motivating people's actions in order to be able to understand them. It is also important to understand the subjective reality of the subject of study in order to be able to make sense of and understand its motives, actions and intentions in a way that is meaningful for the research participants.

A third philosophy exists which shares some key features of both positivism and interpretivism. Realism is based on the belief that a reality exists that is independent of human thoughts and beliefs. In the study of business there are large-scale social forces and processes that affect people without them being aware of the existence of such influences on their interpretations and behaviors. Social objects of phenomena that are external to, or independent of, individuals will affect the way in which these people perceive the world, whether they are aware of these forces or not.

While realism shares some of the philosophical aspects of positivism, related to the external, objective nature of some aspects of society, it also recognizes that people should not be studied in the style of natural science. Realism recognizes the importance of understanding people's interpretations and meanings, or their subjective reality, within the context of seeking to understand social forces, structures or processes that influences people's views and behaviors.
As Saunders (2003) explains, the practical reality is that research rarely falls into only one philosophical domain, business and management research is often a mixture between positivist and interpretivist thought, reflecting realism at the bottom line.

This research project is no exception. As it can be seen from the methodology, the research design is influenced from both positivism and interpretivism. Seen through the interpretivist's eye, the exploration of subjective motivations through an analysis of market particularities and the conduction of primary research in the form of a questionnaire is necessary to fully comprehend how strategic planning models, synthesized within the theoretical research and practically deployed, are affected by market specifics of the automotive supplier industry. This, as explained previously, shows a tendency towards an inductive approach, closely linked to interpretivism.

In contrast, the theoretical research examines the objective reality (Saunders et al. 2003), without evaluating its results and therefore with 'detached interpretations' (Saunders et al. 2003:83).

The researcher explored current theories on strategic planning delving into the heart of the matter before pitting the findings against primary research conducted on the automotive supplier industry. This methodology certainly reflects the school of positivism, and therefore assumes a deductive approach, which is closely related to this research philosophy. Influences of positivistic body of thoughts are also found in the development of the strategic planning model for automotive suppliers. The model was developed with a strong focus on structure in order to facilitate a future application to any automotive supplier.

In this academic research paper, parts of both approaches exist, which leads to the conclusion that 'realism' (Saunders et al. 2003) is the underlying and adequate philosophy that shares some philosophical aspects with both positivism and phenomenology, especially as it concludes with a first verification of applicability through a case study, where an external objective nature is recognised but at the same time it seeks to understand people's interpretations and reactions against broader social forces.

The research design and therefore the underlying philosophy were constructed on this belief. It would not be possible to develop a specific model for automotive
suppliers without using the objective reality of the theoretical research and without understanding the subjective reality of the industry from the input of industry experts.

Secondary research

Starting with the secondary research, the aim was to review the existing theories of strategic planning concepts. Initially, a study was undertaken on the definition of strategic planning; in other words, the word strategy was studied etymologically. This was followed by linking the word's original usage to its use in the business world today. This was achieved by studying contemporary business philosophers. The importance and necessity of strategic planning for organisations was discussed and a brief literature review of the main thinkers on the topic was provided.

This was followed by a review of the existing theoretical concepts of corporate strategy, starting with two opposing views from Ansoff (1998) and from Mintzberg (1994), prescriptive versus descriptive. Both theories were explored in detail. Mintzberg's view was supported by a study of Whittington's concepts which was used to provide a summary of outcomes and findings.

Then a review of the generic strategies proposed by the main authors on the subject like Porter (1998), Ohmae (1982), Stalk and Lachenauer (2004), Treacy and Wiesema (1995), Kaplan and Norton (2002), Drucker (1993), and Yip (1992), took place. Each author's concept was presented along with their supporting models, frameworks and tools.

Following the literature review there was a discussion about strategies based on capabilities and opportunities where authors like Kim and Mauborgne (2005), Hamel and Prahalad (1994), Govindarajan and Trimble (2005), Collis and Montgomery (1998), Eisenhardt and Sull (2002), Bryan (2002), and Courtney, Kirkland and Viguerie (1999), were studied and their approaches and theories towards strategy were summarised. This section was complemented with the SWOT-based strategies proposed by Humphrey, Urick and Orr; and with the portfolio-based strategies from Henderson's viewpoint. The strategy and corporate structure studied by Chandler (2000), the scenario planning according to Godet and the value-based concepts from several other authors were also included in this section. The theoretical concepts
were clustered into 10 schools defined by Mintzberg, separating prescriptive and descriptive perspectives and remarking on the findings.

From a different approach, more philosophical, but connecting with the lessons learnt, the trade-offs in strategic planning were also discussed. The prescriptive perspective against the descriptive – a lengthy discussion – was studied by considering the views of several authors of research journals and by remarking on the findings of several empirical studies on a firm’s behavior.

Another trade-off in strategic planning, the outside view against the inside view, was also discussed in the same way based on studies of authors supporting the positioning-based view and the supporters of the RBV. The influence of environmental dynamism on these trade-offs was also studied out of several theories and research projects that attempted to determine the role of environmental dynamism on strategic processes. This section was developed mainly on the basis of research journals focusing on strategy. Based on the findings and conclusions of the theoretical research, three aspects of strategic planning were identified which, in turn, constitute a generic valid process and a general basic model. The importance of strategic analysis has been found and further studied in order to identify the most important elements to analyse and the factors which influence the next phases.

Primary research:

In order to gain an insight into what automotive supplier experts expect from a strategic planning model suited to the requirements of the market, the next step in the research was primary research in the form of a questionnaire. The questionnaire was developed on the findings of the secondary research and it was aimed at confirming or refuting the conclusions from the literature review.

Specifically, the questionnaire dealt with the trade-offs in strategy concepts in an attempt to gain an insight into the current situation in the industry and the situation as desired by these industry experts. At the same time, the questionnaire dealt with the steps of the general valid process, aimed also at confirming or refuting the findings of the literature review. In the third part of the questionnaire, the respondents were asked more in-depth questions relating to the specific methods and elements to be
considered during the strategic analysis process, which was found to be the fundamental basis of the rest of the process in strategic planning.

The questionnaire was self-administered. This means that the researcher prepared a pre-determined set of standard questions and these were answered by the respondent alone without the presence of the researcher. It was sent to direct contacts through email, which according to Saunders et al (2003), allows for a high level of confidence that the right person has responded, and there is a low likelihood of contamination or distortion of the respondent’s answers. Other advantages of direct contact questionnaires are that the sample size can be large and geographically dispersed; the low-cost; and the possibility to automate the input of data. The questionnaire was sent to 136 industry experts and a response rate of 50% was initially expected.

The type of data to be collected was focused to undertake a descriptive research, which allowed describing the opinions of experts regarding strategic planning. The responses to the questionnaire became input data and was analysed by the statistical software programs Stat::Fit and SPSS. Moreover, based on Stat::Fit’s statistical test results, most of the input data fits with the Binomial distribution which mostly arises in public opinion surveys.

Moreover, the responses were analysed and verified through the findings that were mentioned in the trade-off of strategic planning concepts chapter. Besides that, the relationship between environmental dynamism and the prescriptive-descriptive approach was explored with the help of the Pearson correlation test and proved with the hypothesis test. All the results can be seen in detail in the statistical analysis chapter.

At the end of the primary research the researcher expects to have a clear indication of whether the real-life results are in line with the conclusions of the literature review or whether there is a big gap between what the theory and what actually happens in real life. The conclusions of this study provides the basis for the construction and development of a strategic planning model suited to the automotive supplier industry.

Questionnaire and validity
The questionnaire was developed to verify the findings of the secondary research and was aimed at confirming or refuting the conclusions of the literature review. The questionnaire was also designed to obtain new findings. As mentioned previously, the questionnaire can be divided into three sections: trade-offs, the general valid process and the strategic analysis.

The first section dealt with the findings of the secondary research regarding trade-offs in strategy concepts. In this section two approaches were considered. In the first instance, the researcher attempted to gain an insight into the actual conditions within the industry. Consequently, the questions posed addressed the actual position of the company regarding the trade-offs. For example, theoretical research shows that companies in relatively stable environments lean towards a deliberate process in strategic planning. However, companies operating in turbulent environments include some learning in the process. The researcher attempted to understand the current situation of the industry, whether it leans towards deliberate or emergent processes. The same applied to the outside versus inside trade-off positions. Theoretical research states that there should be a balance between both, that each complements the other. In this instance too, the researcher attempted to get an accurate picture of what was actually taking place in the industry.

The question about environmental dynamism rounded off the concept by situating the company within an environment. This allowed the researcher to make an analysis of the results. However, the researcher did not only want to know the current situation of the company - which in the case of companies under changing processes might bias the research - but the research went one step further in an attempt to get an expert opinion of industry insiders about what is the desired situation in the company regarding trade-offs. This allowed the researcher to initially determine whether there is a gap between what is done and what experts think should be done in terms of strategic planning. It also allowed the researcher to contrast the theoretical findings against the ideas of industry experts, because it was possible that many managers know how it should be done but they have not yet implemented the ideas due to a myriad of factors. Consequently, Questions 1 to 6 in the first section were devoted to the study and analysis of trade-offs in the real business world.
The second section of the questionnaire dealt with another finding of the theoretical research. It was found in previous chapters that a general valid process of strategic planning involves three basic stages. The researcher attempted to prove this finding existed in the real business world. For this purpose the industry experts were asked initially if their companies adhered to one, two or all stages during the process. The answers to this question reveals whether the theoretical findings are in line with what is taking place in the industry or not. Just as in the previous section, the research went one step further to ask the experts if their companies current situation matched what they consider constitutes best practice. A second component of each question dealt with the level of importance that the respondent gave to each stage. Once again, the questionnaire's aim was to reveal if there was a gap between what is being done and what the experts think should be done. The four possible outcomes were helpful to further refine a strategic planning model for the automotive industry. Questions 7 to 12 made up the second section of the questionnaire.

The third section addressed another topic studied during the literature review within the strategic analysis. In this section the experts were asked in detail about the specific elements and tools that were used during this stage. In the case of the external environment, they were asked what elements were analysed by their companies. In the case of internal environment, they were asked how the company actually performs an internal assessment. With the same thinking during the whole questionnaire, the expert was once more asked to separate what is being done from what should be done or what they thought it was important to do. Questions 13 to 18 made up the third section of the questionnaire.

Finally, an additional space was provided for the experts to express their opinions or provide supplementary information about the topic of the questionnaire. This was left as an open question and allowed the researcher to identify topics not taken into consideration or topics for future research. With this purpose in mind, there was a specific field left available after each question which was intended to collect the additional thoughts of the respondent about the question.

The questionnaire was distributed among automotive suppliers operating in Germany. This was considered to be sufficient as most of these companies operated globally. In order to have an idea about the targeted population, the researcher
referred to the "Automobil-Zulieferer in Deutschland, 2007/2008", which lists automotive suppliers with operations in Germany. This guide is published by the VDA (association of the automobile industry), a renowned institution in Germany, and lists around 900 companies which represent the population for this research. A sample of this population was surveyed according to the calculations below. As required by statistics, the companies which formed part of the sample were chosen randomly with the help of a spreadsheet which generated random numbers between 1 and 900 and each iteration was related to a company listed in the guide.

**Sample and pilot study**

Since it is not possible to gather information from all the automotive suppliers in the world, a sample was taken. The calculation of the sample follows the formula (Saunders et al, 2003):

\[ n = p\% \times q\% \times \left[ \frac{z}{e\%} \right]^2 \]

The researcher assumed a level of confidence of 90% equaling a z value of 1.65 and a margin of error of 10%. The calculation gave a total of 68. However, as Saunders et al (2003) point out, the researcher should consider a response ratio when calculating sample size. Therefore the adjusted sample size was:

\[ n^a = n \times \frac{100}{re\%} \]

The researcher assumed for this instance a response rate of 50%, and thus the adjusted sample size was 136. This means that 136 executives from different companies were sent the questionnaire via email and it was expected that at least half of them would respond with a filled out questionnaire.

The questionnaire was taken into a pilot test. In this pilot test, 20 executives were asked to fill out the questionnaire and provide feedback about the clarity of the questions, time to complete the questionnaire, attractiveness of the layout and provide any other comments. After the pilot test, a small analysis of the results took place and the necessary corrections to the questionnaire were made before sending it to the whole sample.
The pilot test revealed a lack of clearness in one question, which was re-formulated, and that the questionnaire could be filled out in 20 minutes. The pilot also revealed that many of the respondents were reluctant to provide company names because they thought it compromised their anonymity and placed a heavy burden on their shoulders. This raised ethical issues regarding their suitability to answer the questionnaire. Regarding the technical issues, the pilot test helped to identify difficulties with the website hosting the questionnaire early on. The website was changed to a more appropriate one which provided more freedom, flexibility and ease of data recovery.

Reliability

Mitchel (1996) outlines three common approaches when assessing reliability, in addition comparing the data collected with other data from a variety of sources. Although the analysis for each of these occurs after data collection, they need to be considered at the questionnaire design stage. The test re-test involved administering the questionnaire twice. The internal consistency involved correlating the responses to each question in the questionnaire with other questions and therefore measured the consistency of responses across the questionnaire. The alternative form involved the inclusion of check questions; this offers reliability by comparing responses to alternative forms of the same question or groups of questions.

The form chosen for this research was the alternative form. Therefore, the reliability of the questionnaire was obtained by cross-checking answers to the different questions in the questionnaire. For this purpose the following relationships were established:
As shown in the figure 3.1, Question 1 was cross-checked against Question 7. For example, if the respondent chose a predominantly prescriptive approach for his company in Question 1, he should answer checking “Perfectly” or “Acceptably” in Question 7 where it was asked how the process is carried out in his company. On the other hand, if the respondent chose a rather descriptive process in Question 1, that suggests that his company is not carrying out a process or that it is doing it poorly, and another combination would reveal an inconsistency. The same relationship applied between Questions 2 and 8, where the “should be” state should match the importance of a process.

Similar relationships apply for the rest of the cases; an often used outside-in approach in the company cannot be consistent with the application of only internal analysis. The importance attributed to each approach in Question 4 also needs to match the level of importance attributed in Question 11. In the case of Question 7, if the respondent checked the box of strategic analysis perfectly done, he should also have checked the boxes of internal and external analyses “often used”. At the same
time, if the company was using often internal and/or external analyses, that should be reflected in Questions 13 and 16. The same logic applies to the questions dealing with “should be” situations and the level of importance attributed to each factor.

Final research:

Based on the theory, the primary and secondary research, and the results of the questionnaire, a strategic planning model will be developed. The model will be based on the basic general processes found in theory and the industry conditions, and will be reinforced by and become more detailed with the opinions of industry experts. Once the model is set up it will be ready to undergo an initial verification test.

This testing is done through a case study, taking a company as representative of the industry and carrying out a first verification test. The main point of the case study will be concerned with testing the applicability of the model developed. For this purpose the developed model will be applied practically on an automotive supplier and its environment. As stated previously, a generic model consists of three basic phases: strategic analysis, strategy formulation and strategy implementation. During the case study, a major effort will be devoted to applying the first phase of the generic model and its elements to a business case study. The strategic analysis will be performed in a customised way in a company within the automotive supplier industry under actual conditions, and the process will involve the comprehensive collection of data of the company used in the case study and its complete environment – competitors, suppliers, customers, etc. For this step a global player was chosen. Company F is one of the leading automotive suppliers worldwide. Ranked among the 40 top global suppliers, it supplies the major automotive manufacturers and offers a wide range of products based on cutting-edge technology. The results of the first phase application will be analysed, synthesised and consolidated to serve as the starting point of the next phase. The case study will continue through the formulation of objectives and strategies based on the previous phase and testing the practicability of the model. A practicability test is necessary to ensure that the developed model can be applied in the real business world, therefore making a contribution to the industry. The success of the model will be determined by the level of its applicability on the company during the case study.
The different steps are shown graphically in the following figure:

Step 1: Review of theoretical concepts + trade offs (secondary research)

- General valid steps of a model

Step 2: Input of industry specific experts (primary research)

- Analysis of responses and findings

Step 3: Development of a strategic planning model for the industry

Step 4: Case Study / First verification

Step 5: Evaluation and recommendations

Figure 3.2 Research design
Source: own elaboration

Finally, all the findings and conclusions achieved alongside the development of the paper and the case study will be presented along with recommendations for the company. Furthermore, the methodology used and the strategic planning model developed will be evaluated in terms of its applicability and relevance to other suppliers within the industry.

3.2 Verification of the methodology

In order to answer the research questions, a research approach had to be defined. In this instance, a research of theoretical concepts was chosen followed by an exploratory research of industry-specific conditions in order to develop a strategic planning model for automotive suppliers. Primary research in the form of a questionnaire was also used, and finally a case study was carried out to test the
validity of the model. This approach presents strengths as well as weaknesses which had to be considered and evaluated.

This research can be split into three main parts. The first part deals with the development of a strategic planning model through secondary research, followed by analysing and verifying the findings through quantitative primary research, and the third part deals with the testing of the developed model in reality.

As Saunders et al. (2003) remark, business and management research is often a mixture between positivism and interpretivism, revealing realism. In much the same way, this research combines these philosophies to achieve its goal. However, it is evident that a deductive approach underlines the research, as it is used to develop a theory based on theoretical research and then verify and test it. As Saunders et al. (2003) state, deduction involves the development of a theory that is subjected to a rigorous verification and testing process. It is important to remark that the specific process of developing a strategic planning model follows a deductive approach. According to Robson (1993), there are five sequential stages through which deductive research will progress:

- Deduce a hypothesis from the theory
- Expressing the hypothesis in operational terms
- Test the operational hypothesis (which involves an experiment or some other form of empirical inquiry)
- Examine the specific outcome of the inquiry
- If necessary, modify the theory in the light of the findings

This research project leans towards this structure revealing clear tendencies towards a deductive approach.

As is evident from the above stated structure, the statement of a hypothesis based on theory precedes any experimental or empirical action. In this case, the research is not aimed at verifying a relationship between two variables. Therefore, instead of a hypothesis it has a research question, which still is based on theoretical research preceding any empirical action. This means that the researcher, detached from
reality, gathers all the relevant theory related to the topic and other research projects before the collection of data begins. Following such a sequence allows the researcher to retain an impartial position towards the validity of different theories which in time forces him to maintain a broadly open mind. Keeping the researcher impartial and with an open mind will favor the development of new theories or new knowledge which latter can be verified and tested to be proved or rejected.

A different approach (in this case, a totally inductive approach) would imply that a deeper research into the subject matter would need to be undertaken in order to gain an understanding of the human role and to get a closer understanding of the research context collecting qualitative data and keeping a flexible structure to permit changes as the research progresses. A purely inductive approach would mean studying the strategic planning models currently being deployed by existing firms in the branch. The analysis and processing of the collected data would result in a model which combines the best characteristics of the existing models.

A disadvantage of a purely inductive approach is that the sources of knowledge are limited to the models currently being used, which might leave out a significant amount of theory. In another case, an exhaustive inductive research approach focused on existing models would narrow the possibilities, hinder the development of new models and prevent the evolution of knowledge.

At the same time a purely deductive approach would be completely detached from the real world, basing all the development of the model on theoretical principles without taking into account the context of the specific industry. Although a very state-of-the-art strategic planning model would result, its applicability in the real world would be questionable and the verifying process would show that explicitly.

It is not possible to affirm that the research follows purely a deductive approach, since at some point the research receives some inductive influence as it studies the specific context of the industry to incorporate the results of this primary research to the theoretical part combining both currents to develop a customised model suited to the needs of the automotive supplier industry. As a consequence, the generalness of the results achieved after the validation process is significantly reduced and limited to the industry boundaries.
The strength of the chosen approach lies in the combination of the deductive and inductive approaches to take advantage of all the relevant theoretical knowledge available in the strategic research stage without prejudices or paradigms to adapt it considering the specific conditions of an industry. As mentioned previously, the impartial position of the researcher as he reviews the literature allows for the meaningful inflow of concepts towards the development of the model without having the limitation of the models currently being deployed by the competing companies in the industry.

On the other hand, a weakness of this approach is the detachment to reality and to the current strategic planning models used in the competitive arena. Although literature may be reach in concepts developed as strategic research evolved in the past, it is possible that some companies are using valuable new strategic concepts in their models which are not yet registered in literature. In order to offset this weakness, the researcher decided to conduct primary research to strengthen the model. Another weakness is the limited potential for generalisation. However, any other approach would face the same weakness since it is not possible to make broad generalisations in the business world where situations are complex and unique (Saunders et al, 2003).

The theoretical findings resulting from the secondary research are to be verified with the primary research. In order to conduct a primary research to reinforce the model, there is also a wide variety of methods to use. Initially, Thietart et al (2001) distinguishes between methods to collect primary data for quantitative research and methods to collect data for qualitative research. For quantitative research, the most widely used form is the Questionnaire method, then observation and experimental methods. For qualitative research there is the interview, observation and unobstrusive methods (which are not affected by the reactions of the subject).

Saunders et al (2003) also mentions three methods: observation, interviews and questionnaires. However, he focuses more on the philosophy of the research. For example, he believes that observation should be separated in participant observation, which he feels is better suited to qualitative, exploratory research. For him structured observation is better suited to quantitative research, either explanatory or descriptive.
Interviews are also separated into three categories: structured interviews, which resemble a questionnaire; semi-structured interviews; and in-depth interviews. In-depth interviews are more related to exploratory research, given its nature of low structure and high openness to discussion. Finally, questionnaires, including structured interviews, are better suited to quantitative research, more specifically for explanatory or descriptive research where an interrelation among variables is sought. Saunders et al (2003) define questionnaire as a general term to include all techniques of data collection in which each person is asked to respond to the same set of questions in a pre-determined order. Questionnaires can take many forms, such as the structured interview, the online, postal, delivery and collection, and the telephone questionnaires, to name but a few.

For this research project, the questionnaire method was chosen. While the other two methods of primary data collection offer advantages, especially regarding depth of insight, they also present disadvantages. On the side of direct observation, a significant amount of time is needed because the researcher must be present observing the subject at the moment that the desired events take place. Not only is time needed, so are financial resources if the object of observation is some distance from the researcher. In addition, direct observation, as well as being time-consuming, does not allow for the collection of data from several subjects. Interviews present the same disadvantages, time, distance and resources, with complications arising from the time availability of the subjects to interview. Usually interviews take much longer than structured questionnaires. One advantage of questionnaire method is that it is not time-consuming. After the questionnaire has been formulated it can reach the subjects via the internet, email, post or by personal delivery. The subject can choose the best time for him/her to complete the questionnaire and send it back. The analysis of data collected by questionnaires is also simpler than the analysis of data collected through interviews or observation.

The disadvantages of questionnaires are the impossibility of gaining a deep insight into the issue being examined and their reliability, since it is hard to ensure that the questionnaire was completed by the intended subject. There is also a possibility of contamination of the respondents’ answers – guessing or asking other people opinions (Saunders et al, 2003).
For the second part of the research, the validity test, a case study was chosen as a research strategy. According to Robson (2002), this strategy involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence. Saunders et al (2003) argue that even though case study research might feel unscientific, it can be a very worthwhile way of exploring existing theory. The clear advantage of the case study strategy is the availability of data collection methods which may include questionnaires, interviews, observation, documentary analysis and others.

In the view of Saunders et al. (2003), there are several research strategies that can be used by the researcher. The experiment strategy, closely linked to the deductive approach, is a classical form of research that owes much to the natural sciences. It involves the definition of a theoretical hypothesis, the selection of samples of individuals from known populations, the allocation of samples to different experimental conditions, the introduction of planned change on one or more of the variables, the measurement on a small number of the variables and the control of other variables.

The problem with experiments in business research, as in this case, is the difficulty of taking the research subject out of the normal context to submit it to experimental conditions. For this research paper, an experimental strategy would not be feasible since the strategic planning processes of companies are too important to be experimented with, and the effects of the experiment would have a significant impact on the future performance of the company.

Another research strategy that could have been used is the survey strategy, also associated with the deductive approach. It is a common and popular strategy in business and management research because it allows for the collection of a large amount of data in an economical way. Although the survey strategy should give the researcher more control over the research process and more independence from other sources of information, it is also important to be aware that it requires a lot of time to design and pilot the questionnaire. Also, analysing the results can also be time consuming and the data collected may not be as wide-ranging as those collected by other research strategies. In addition, there is a limit to the number of
questions that a questionnaire (or survey) can contain. A key drawback of this method is the capacity for the researcher to do it badly (Saunders et al., 2003).

The grounded theory strategy (Glaser and Strauss, 1967) appears to be the best example of the inductive approach, although it also combines deduction. In this strategy, data collection begins before the statement of an initial theory. Moreover, theory is developed following the generation and analysis of data. The data leads to the generation of predictions that are later tested to confirm or disprove the predictions. The advantages and disadvantages of the inductive approach concerning this research project have been previously mentioned. Given the predominating deductive approach of this project, the grounded theory approach was not considered as a possible strategy.

Emanating from the field of anthropology comes ethnography as a research strategy. It is also rooted in the inductive approach. The purpose of this strategy is to interpret the social world the research subjects inhabit, in the way that they themselves interpret it. This represents a time consuming way of working, with an extended time period (Saunders et al. 2003). A characteristic of this strategy is that as the researcher gets on with the project, he or she will constantly develop new patterns of thought about the subject of observation; therefore the research process needs to be flexible. In the same way as the previous strategy, ethnography as a research strategy was not chosen due to the predominantly deductive approach of the project and its time requirements.

Finally, Saunders et al (2003) propose the action research strategy which is used in research projects where the purpose is the management of a change. In this type of strategy the practitioners are involved in the research and there is a close collaboration between practitioners and researchers. Eden and Huxham (1996) argue that the findings of an action research strategy results from an involvement with members of an organisation over a matter which is of genuine concern to them. Therefore the researcher is part of the organisation within which the research and change process are taking place (Zuber-Skerritt, 1996).

Another characteristic of this strategy is that it should have implications beyond the immediate project; the results could inform other contexts. Thus action research
differs from other forms of applied research due to its focus on action, especially in terms of promoting change within the organisation.

Coghlan and Brannick (2001) noted that the purpose of action research is not just to describe, understand and explain the world but to also change it. The strengths of an action research strategy are the focus on change, the recognition that time needs to be devoted to reconnaissance, monitoring an evaluation and the involvement of employees (practitioners) throughout the process. Given the explicit focus on change and the consultancy face of this strategy, it was not considered for the verification of the model.

The case study strategy was chosen for this research because of the advantages regarding data collection and because it was consistent with the deductive approached followed. As per time horizon, the most appropriate form is a cross-sectional study. This means that the study will take place at a defined point in time and will not be recurrent, as opposed to a longitudinal study where the subject is observed and analysed over a certain period of time.

It is clear that in order to test the results coming out of the implementation of the developed model, a longitudinal case study would be necessary. In this way, it would be possible to gather enough data before and after the implementation of the model, to submit it under statistical analysis in order to determine the positive or negative impact of the implementation of the model in the long-term performance of the company. However, time constraints force the researcher to conduct a cross-sectional study to verify simply the applicability and implementability of the proposed model in real business life.

This first verification is intended to be carried out only to test if the procedure developed is of practical use for a company in the automotive supplier industry, not to test the impact of its implementation on the long-term performance of the company.

Further empirical studies or research would be necessary to find out the real value of putting this model into practice in the real business world. This procedure would involve the identification of two companies with similar profiles and similar practices; one would be the control and the other the subject. A first step would involve the collection of data to determine the starting point of both companies before
implementation. The second step would involve the implementation of the model in one of the companies and third would be the collection of data to compare the performance of both companies.

The evaluation of the results in the short-term would be misleading; results have to be assessed in the mid and long-term, since strategic planning deals with the future. The validity and value of the implementation of the model should be determined through the comparison of performances between the subject company and the control company, between the subject company and the industry average, and finally between the subject company before and after the implementation. The combination of all those results have to be weighed, studied and analysed in order to discover the real contribution of the implementation of the model into the real business world.
4. PRIMARY RESEARCH

The responses to the questionnaire are examined in two ways: by providing a description of the responses and through a statistical analysis of the responses. In the first way, the responses are identified with the help of charts, and the results are explained. In the second way, the responses are analysed by the statistical software Stat::Fit and afterwards a hypothesis test is carried out to clarify some of the arguments.

4.1 Description of the responses

As explained in the chapter on methodology, the questionnaire was sent to 200 companies operating in the automotive supplier industry through email with a link to an internet-based questionnaire. The questionnaire on the website was held open until the number of respondents reached 69, which was the minimum response required according to the calculations in the previous chapter. After receiving 69 responses, the researcher preceded to tabulate, consolidate and analyse the results.

In order to gain an insight into what automotive supplier experts expect from a strategic planning model which is best suited to the requirements of the market, the description of the responses are extremely important. Basically, the responses can be divided into three sections according to the questionnaire: trade-offs, the general valid process and the strategic analysis. Other headlines are grouped under these three basic sections.

Before the three basic sections, the general data about the respondents is analysed in order to get an overview of the respondent, the company and its environment.

The first section - responses regarding trade-offs - deals with the perspective ratio, the outside-in versus the inside-out approach and the environmental conditions. The main aim is to gain an insight into the actual conditions inside the industry and the current position of the company regarding the trade-offs. Another objective is to analyse the desired situation in the company regarding trade-offs.
The second section, responses regarding general valid process, deals with the strategic planning steps carried out in companies and elements of strategic analysis. A general valid view of strategic planning has three basic steps. The aim is to check this situation in real world, in other words, find out whether companies apply these three stages or not. Another aim is to reveal if there is a gap between what is being done and what the respondent thinks should be done. The outcomes are helpful to go further with the strategic planning model.

The third section, responses regarding strategic analysis, deals with the factors considered during the external analysis and tools used in internal analysis. The main objectives are to search through what elements are analysed by the companies in the case of external analysis and to examine how the company actually performs an internal assessment in an internal environment. In addition, to explore the gap between what is done and what is important are compared.

General data about the respondents

In order to have a general picture of the kind of respondents who completed the questionnaire, a few introductory figures are shown.

![Company's sales in million Euro](image)

**Figure 4.1 Company’s sales in million Euro**

Source: Own elaboration
From the point of view of sales, 45% were companies with sales between 100 and 500 million Euros, followed by 35% of companies with sales lower than 100 million and the rest were companies with sales of more than 500 million Euros. As it can be seen in the second figure, most of the companies perform on a global scale; 35% operate Europe wide, and only 12% of the companies operate locally. This assures the international character of the findings.
Regarding the people who answered the questionnaire, 41% were sales or business development directors; 23% were chief executive officers and the rest were middle managers or other executives. This ensures that the respondents had high levels of responsibility in the company and also had a good idea about the strategic direction of the company. Time in the company was also an important factor in the questionnaire. As the figure shows, only 9% of the respondents had been with the company for less than two years. This ensures that the respondent has a clear idea about the company's operations and its strategic direction.
When asked about the environmental conditions surrounding the company, 68% of the respondents said their companies’ environment was dynamic, implying predictable continuous change in the industry.

This general information acts as the basis for the rest of the questionnaire, and follows the individual analysis of the answers starting from the perspective chosen by the company regarding strategic planning.

4.1.1. *Responses regarding trade-offs*

**Perspective ratio chosen by the respondent**

![Prescriptive vs Descriptive](source: Own elaboration)

As it can be seen from the figure, companies tend to choose a prescriptive perspective. This is though by no means pure since 75% of the respondents reported that a mixed perspective is used in their companies. The picture changes a little when the respondent is asked to suggest a change in the perspective. There is still some tendency towards a prescriptive perspective, but the inclusion of emergent practices gets more emphasis; 85% of the total responses report a prescriptive perspective of at least 50%. It is important to note that a mixed approach of 50% and 75% increases remarkably. This is convergent with the findings of the theoretical research where it was suggested that companies should never neglect a prescriptive
process but dynamic environments call for some influence of emergent learning as well.

The outside-in versus the inside-out approach

The following set of questions dealt with another trade-off in the strategic planning process, the outside-in versus the inside-out approach.

The answers to this question revealed that companies use both approaches in almost the same proportion. In other words, companies do not focus on only one approach but they attempt to bring both of them together. It is important to note that only 50% of the companies used these approaches frequently and almost 50% use it rarely. The following graph shows the importance level attributed to each approach, which leads to a desired state.
It is important to note that no one classified any of the approaches as “not important”. However, the outside-in approach received more support and is considered more vital than the inside-out approach. These results also converge with the theoretical research where it was found that both approaches are important in the process of strategic planning and that neither of them can be neglected. However, the primary research shows that the outside-in approach still has a predominant role to play in the minds of strategic thinkers in the industry. A contradiction with the previous chart is obvious; while only 50% of the companies use them frequently, 100% considered them to be important or vital.

Environmental conditions

The next issue to review is the environmental conditions in the automotive supplier industry viewed from the point of view of industry experts.

![Figure 4.9 Environmental dynamism in the automotive supplier industry](image)

The predominance of a dynamic environment is evident in the industry, currently as well as in the future. A minority of the respondents replied that they believe that the future will bring turbulence to the supplier industry. A smaller group assumes a stable future environment. Going into deeper detail, it was found that those respondents who assumed a stable industry environment in the future and in the present, also reported that their companies acted in a stable environment, which means that they expect to maintain the current stability experienced by their companies.
In the trade-offs of strategic planning concepts chapter, it was mentioned that there are two opposing views: the prescriptive and descriptive perspectives. Environmental dynamism has an influence on these views. This hypothesis will be tested in the statistical part of the paper to validate this claim. Moreover, with the help of the correlation test, the direction of the relationship will be found.

4.1.2. Responses regarding the general valid process

Strategic planning steps carried out in companies

The next question dealt with the basic steps carried out in the company during the strategic planning process.

As it can be seen from the graph, many companies perform a strategic analysis and within this group the majority does so in an acceptable way. The formulation of strategy does not seem to be absent in companies either, most of them perform it acceptably. The implementation process proves to be the hardest step for companies, where the percentage of ‘poorly’ or ‘not done’ grows in comparison with the other steps. But the respondents were also asked to rank the importance of each step, as is shown next.
Again it is important to state that no respondent ranked any of the steps as 'not important'. This implies that they are all important to a greater or lesser degree to all companies, and this is confirmed by the fact that companies are applying them in their processes, although not always successfully. The strategic analysis received the highest rank with 58% of the respondents ranking it as 'vital', followed by the implementation which received 56% and the formulation of the strategy was ranked as 'vital' by 42%.

In this question an open space was also provided to allow respondents to express other ideas about other steps that they consider important. Although most of the respondents left the space blank, a few of them contributed with some ideas such as: “the three steps are best to use”, which implies that the three steps carried out in a good manner are the best way to perform a strategic planning process.

Process Oriented Marketing, Benchmark Competitive Analysis, Adaptive Gross Margin Strategy, from these three concepts the first and third would fall in the strategy formulation step and the second would fall under the strategic analysis step. Crafting and executing the strategy - these are other words to describe the formulation and implementation of a strategy, while analysis of Business Partners i.e. banks”, falls under strategic analysis.
Elements of strategic analysis

Further in the topic of strategic analysis, respondents were asked about the elements considered in this step.

![Diagram showing elements considered in Analysis]

Figure 4.12 Elements of Strategic Analysis
Source: Own elaboration

Previously it was stated that companies use the outside and inside approach in almost the same proportion. Here this statement is confirmed, but it should be noted that companies believe they perform the internal analysis more often than they do external analysis. A significant percentage of companies replied that they perform internal or external analyses rarely. Few respondents said that their companies do not perform these analyses.
Regarding the importance of these elements, nobody ranked them as 'not important'. However, the external analysis was given more importance than the internal if both have to be compared, which concurs with the previous statements that the outside approach is more vital than the inside out. In any case, the difference is not significant and the result shows that both analyses are important.

Even though all the respondents consider the analyses to be important or vital, only 60% and 40% of the companies perform them frequently. This illustrates the gap between what is carried out and what is considered to be important.

Once again an empty space was provided for the respondent, allowing him/her to provide other inputs about other elements they considered important. Most of the respondents left the space blank, but some of them gave the following answers: financial analysis; benchmarking; internal financial situation, availability of production assets; and consideration of future trends.

Depending on the type of financial analysis, it could fall under two elements. A financial analysis of the company falls under the internal analysis and the financial analysis of other entities falls under external analysis. Benchmarking would fall under internal analysis, although it uses a lot of data from external sources. The internal financial situation falls under the internal analysis while the availability of production assets (for example, human resources, raw materials, etc) would also fall
under internal analysis. Consideration of future trends would fall under external analysis.

4.1.3. **Responses regarding strategic analysis**

Factors considered during the external analysis

The next question dealt with the factors that are considered by the company during the external analysis.

![Factors considered in External Analysis](image)

**Figure 4.14 Factors considered by companies in the External Analysis**

**Source:** Own elaboration

As the figure shows, the factors could be classified into three groups according to the percentage of companies that consider them to be in the external analysis category. Clearly, the majority of the companies analyse their competitors and, to a lesser extent, their customers and technology. These three factors were used at least rarely in 40% of the companies.

The second group is made up of factors that are used by more than 20% of the companies. These included market opportunities, the economy, suppliers. The third
group consists of factors that the respondents consider seldom during the external analysis process: substitutes, potential entrance, regulations, government and society.

While this graph shows the factors used by companies, the next graph shows the importance of these factors during the external analysis stage. It is important to note that the percentage of ‘often used’ is not so high, with the exception of competitors; the percentage of companies that consider these factors rarely is remarkably high.

<table>
<thead>
<tr>
<th>Competitors</th>
<th>Customers</th>
<th>Technology</th>
<th>Mkt Opportunities</th>
<th>Suppliers</th>
<th>Economy</th>
<th>Pot. Entrants</th>
<th>Substitutes</th>
<th>Society</th>
<th>Regulations</th>
<th>Government</th>
</tr>
</thead>
</table>
| ![Graph showing factors considered important in External Analysis](image)

Figure 4.15 Importance of the factors considered in the external analysis
Source: Own elaboration

The importance attributed to the factors in the external analysis process is similar to the factors used by companies, and thus the three groups remain. The first group with the highest level of importance consists of competitors, customers and technology, which is in accordance with what companies actually examine. The second group is made up of market opportunities, suppliers, the economy, potential entrants and substitutes. The third group of less important factors includes society, regulations and the government.
This figure reflects the current situation in the automotive supplier industry, an industry characterised by stiff competition, where keeping an eye on your competitor is very important, and maintaining a close relationship with and a detailed knowledge of your customer is vital. This is finished off with the fact that this industry is technology-driven, due to the consumer requirements regarding safety, environmental issues and so on. Clearly these three factors are evident when a company performs an external analysis. Also important, but to a lesser extent, are the opportunities offered by the market or the behavior of economy, and at the same time monitoring the performance of suppliers and the potential entrants to the business through vertical integration. The importance of substitutes lies in the development of new technologies that might replace the old ones in the future.

An additional space was provided to include comments on other important factors. The following answers were received: "In a global business local governments and regulations are important since some countries have certain restrictions when companies want to produce there". This places more emphasis in the government and regulations category. Whereas "potential customers" should be an outcome of analysing market opportunities. "Global financial situation" should be part of analysing the economic situation in a global range category. "Raw materials costs/availability", are part of analysing suppliers and economic trends; "cost forecasting i.e. oil-price, metal prices", as a result of the external analysis the company might need to perform a scenario analysis based on the present situation of the market and the industry therefore the scenario analysis is an important factor to consider after the external and internal analyses are concluded.

The next figure shows the gap between what is regularly used and what is considered to be important.
The contrast between what is usually done and what is considered to be important or vital is evident once again. As it can be seen in the figure, the gap is significant and reveals that the important factors are not always used in the real situation. The gap is big for the first group and becomes even bigger for the second group of factors in the external analysis. While the first and second groups are considered to be important or vital by more than 85% of the respondents, approximately 30% of the companies use them frequently in their regular analyses.

**Tools used in the internal analysis process**

Once finished with the external analysis, next is the internal analysis.
As the figure shows, the most widely tool used for internal analysis is the assessment of an individual entity's strengths and weaknesses. The second most widely used tool is the analysis of individual departments and functions. In a third place, 30% of the companies use KSFs to analyse their situation. Less than 5% of the companies use core competencies or VCA. The next figure shows the importance attributed to these tools.

**Figure 4.17 Tools used by companies in the internal analysis**

*Source: Own elaboration*
The use of KSFs to analyse the current situation of the company turns out to receive the highest level of importance, followed by the assessment of strengths and weaknesses. The analysis of individual departments and functions, core competencies and VCA are still important but not as much as the previous ones.

Other tools suggested by the respondents are financial tools; time management; time-to-market; tools to prevent forecast uncertainty; analysis of interdisciplinary communication; group dynamic; interdisciplinary profit; and revenue contribution.

With regards to financial tools, although the tool is not specified, the need to perform a financial analysis of the company is clear. Despite being an important factor, time management is not a tool, while time-to-market is an indicator which might be included in another tool like KSFs. Tools to prevent forecast uncertainty, although the tool is not clearly stated, it is important to perform a scenario analysis as previously stated. Analysis of interdisciplinary communication; group dynamic, interdisciplinary profit and revenue contribution might be included in the analysis of individual departments and functions.
In the comparison of what is done in the companies versus what is considered important, once again there is a gap. The biggest gap is seen in the application of an internal analysis based on the success factor category. Almost all of the respondents said it was important but less than 30% performed it in a regular basis. The analysis of strengths and weaknesses was proved to be the most-used among the respondents, although there remained a significant gap between its importance and usage.

**Relationship between perspective used and environmental dynamism**

Regarding the relationship between the answers, the next figures attempt to show the possible relationships between the perspectives used and environmental condition. The first figure shows the number of companies that use a certain combination of perspectives and their environmental condition.
In terms of the perspective used in the company, there is some relationship between prescriptive practices and stable environments. On the other hand, there appears to be a relationship between descriptive practices and turbulent environments. Although the relationship is not strong. For dynamic environments, however, the trend towards prescriptive practices is stronger; not towards a pure but towards a combined perspective.
In terms of what was reported to be a desired state by the respondents, a pure descriptive approach was almost never desired under any circumstances, nor was a purely prescriptive approach desired under turbulent environments. The trend under dynamic environments continued to be the same, with a combined perspective emphasising a prescriptive view.

4.2 Reliability of the responses

In terms of reliability, the previous chapter showed relationships between questions which reveal the level of reliability of the answers to the questionnaire.

In the first instance, the relationship between Question 1 and 7. In Question 1, 75% of the respondents stated that they applied a prescriptive perspective in their companies of at least 50%. This is consistent with more than 90% of the answers applying the three basic steps of strategic planning. In Question 2, 85% of the respondents affirmed that a prescriptive perspective of more than 50% is desired. This is consistent with the results of Question 7 where no one labelled any of the three steps as 'not important'.

The relationship between Question 3 and 10 is also evident. The application of inside-out and outside-in approaches in companies was well balanced in Question 3, which is confirmed by the answers in Question 10 where more than 95% of the companies use, at least rarely, internal and external analyses. However, Question 10 shows that even though both analyses are performed, the external analysis is done more often than the internal analysis. In Question 4 neither of the approaches was classified as 'not important', although the outside view got a higher percentage as vital. The answers to Question 11 are consistent but the difference between the vitality of the external and internal analysis is not as significant as in Question 4.

In Question 7, 99% of the respondents stated that their companies rarely carried out strategic analysis. Consistent with this, more than 95% of the answers in Question 10 stated that they carried out internal and external analysis 'at least rarely'. In Question 8, close to 60% of the answers said strategic analysis was vital. At the same time, with regards to Question 11, 64% and 70% of the answers said that internal and external analyses, respectively, were vital.
The last reliable relationship is between Question 10 and 13 and 16. In Question 10, 97% of the companies said they do external analysis; 42% did it frequently. In Question 13, it was evident that three factors are considered by more than 90% of the companies and these three factors are frequently used in more than 40% of the companies. The rest of the factors recorded a usage of less than 75%, with a frequent use of less than 30%, which shows a consistency between the two questions but shows that three factors are mostly used in external analysis. With regards to importance, 100% of the respondents said the external analysis was important, while only three factors received close to 100% as important.

While 95% of the respondents stated their companies performed an internal analysis, the answers to Question 16 shows that this percentage is only comparable to the usage of strengths and weaknesses, other elements are considered in fewer companies. Regarding importance, 100% of the respondents said the internal analysis is important. This was only reflected in Question 17 by KSFs and strengths and weaknesses; other tools did not receive the same level of importance.

In general, the reliability of the answers was confirmed by the analysis of the results, although it is also evident that not all the companies have the same understanding of the concepts or tools and not all the companies applied all the concepts and tools in the same way. It is also important to mention that there is a level of subjectivity in the way of interpreting the possible answers, which might differ from respondent to respondent.

4.3 Statistical analysis

This chapter is concerned with the statistical analysis of the responses. This chapter also contains an analysis of the relationship between environmental dynamism and the prescriptive approach. This chapter seeks to find out whether environmental dynamism has an influence on the strategic planning process? To determine whether this is the case, hypothesis testing will be applied.

The analysis will be done for each question of the questionnaire by using the Stat::Fit statistical software. According to the official website of the software, www.geerms.com, Stat::Fit statistically fits the input data to the most useful analytical distribution. It is designed to help users more easily test the fit of hypothesized
statistical models to empirical data and, ultimately, to identify the best candidate
distribution for a given scenario.

4.3.1. Preliminary analysis of responses to the questionnaire

The preliminary analysis serves to prove the independence of the responses,
determine the distribution of the responses and to display their distribution with the
help of histogram. The questionnaire and the responses can be found in Appendix A.

All the responses for each question of the questionnaire are exposed to a distribution
test in order to clarify which distribution test is best suited to the responses. Based on
the preliminary analysis results, which are provided by Stat::Fit software, most of the
determined analytical distributions are binomial. Pallant (2005) points out that the
binomial distribution is used when a researcher is interested in the occurrence of an
event, not in its magnitude. The binomial distribution is specified by the number of
observations, which is denoted by n, and the probability of occurrence, denoted by p.
The situations in which binomial distributions arise are quality control, public opinion
surveys, medical research and insurance problems.

The most important questions are analysed and discussed in the results of the
preliminary analysis. The preliminary analysis for the rest of the questions can be
seen in the appendix.

Results of the preliminary analysis

**Question 1:** According to your knowledge and experience, which approach is used
in your company, prescriptive or descriptive? (100% Prescriptive=1, 75%
Prescriptive=2, 50% Prescriptive=3, 25% Prescriptive=4, 0% Prescriptive=5)

According to questionnaire, companies tend to prescriptive perspective and the
responses are used as an input data for the statistical analysis. The steps for
statistical tests are autocorrelation, fitted distribution and auto distribution tests of the
input data in order.
As it can be seen in the figure; the correlation changes between 0.222 and -0.133. This means that there is no correlation between the responses. Therefore, the responses to the Question 1 are independent.
The possible distributions are given in the figure. The Auto::Fit function of the software points out that the responses, input data, certainly fit the binomial distribution ($N=5$, $p=0.632$). As it can be seen in the fitted distribution graph, the theoretical and the realised binomial distributions are compared by the software. The red line shows the theoretical and the blue line shows the realised binomial distribution. In accordance with the graph, the responses fit the binomial distribution.

**Question 3 (Analyse Company): What approach is currently being used in your company, inside-out (company analysis) or outside-in (environment analysis)? (Not used=1, Rarely used=2, Often used=3)**

In the questionnaire, companies tend to answer how often they use the company analysis approach. Moreover, the response to this question also illustrates how much they focus on the inside. The responses are used as an input data for the statistical analysis to test the independence and the distribution.

![Autocorrelation of Input Data](image)

**Figure 4.24 Autocorrelation of responses to Question 3a**

*Source: Statistical software*

As it can be seen from the figure, the correlation changes between 0.246 and -0.145. For that reason, there is no correlation between the responses. Therefore, the responses to the Question 3 provide independent data.
From the point of acceptability, the binomial distribution (N=3, p=0.691) is accepted as a fitted distribution by the software. Moreover, the input data also fits a discrete uniform. However, its ranking is less than the binomial distribution. Based on the histogram, the company analysis responses fit the binomial distribution. As a result, company analysis approach is often used (2) by the most of the companies; then rarely used (3); and not used (1) in that order.

**Question 3 (Analyze Environment): What approach is currently being used in your company, inside-out (company analysis) or outside-in (environment analysis)? (Not used=1, Barely used=2, Often used=3)**

According to questionnaire, the companies' responses to how often they use the environmental analysis approach are used for input data. That data also reveals how much they focus on the outside.
As it can be seen from the figure, the correlation changes in (0.115, -0.151) intervals. This means that there is no correlation between the responses. From this, it is possible to say that the input data is independent.

The auto fit function of the software indicates that the binomial distribution (N=3, p=0.623) is fitted best by the input data. From this fact, the binomial distribution is accepted. In accordance with the histogram, the environmental analysis responses fit the binomial distribution. As a result, the environmental analysis approach is often...
used (2) by most of the companies. Then it is rarely used (3) and not used (1) in that order.

**Question 5:** In your judgment, what level of dynamism (change in demand, competitors, technology and regulation) is the automotive supplier industry currently undergoing? (Stable=1, Dynamic=2, Turbulent=3)

According to questionnaire, the environmental conditions are asked and the responses are used as an input data for the statistical analysis.

![Autocorrelation of Input Data](image)

**Figure 4.28 Autocorrelation of responses to Question 5**
Source: Statistical software

First of all, before finding the fitted distribution, the independence of the input data should be proved. According to the autocorrelation graph, the correlation changes in (0.0996,-0.152) intervals. This means that there is no correlation and the responses have produced independent data.
The possible distributions are given in the figure. The auto fit function of the software points out that environmental responses certainly fit the binomial distribution (N=3, p=0.623). As it can be seen in the histogram, the theoretical and the realised binomial distributions are compared by the software. The red line shows the theoretical, while the blue line shows the realised binomial distribution. In accordance with the histogram, the environmental responses fit the binomial distribution.

**Question 11** (Importance level of internal analysis): *What is, in your opinion, the specific importance level of each step? (Not important=1, Important=2, Vital=3)*

Depending on the questionnaire, the companies are asked to rank the importance of internal analysis. The aim here is to show the level of importance from a company perspective. The responses are accepted as an input data and statistically analysed by the Stat::Fit software.
According as autocorrelation of input data, the correlation changes in (0.24, -0.185) intervals, suggesting that there is no correlation between the responses. Therefore, the importance level of the internal analysis responses are considered to be independent data. This means that it is possible to use this data in the statistical analysis.

The Auto::Fit function of the Stat::Fit software gives the possible distributions and subsequently accepts the best fitted distribution regarding the rank. As a result, the binomial distribution (N=3, p=0.715) is accepted. As a result of the theoretical and
observed binomial distributions comparison in the histogram, the input data has a binomial distribution.

**Question 11** (External analysis): *What is, in your opinion, the specific importance level of each step? (Not important=1, Important=2, Vital=3)*

Based on the questionnaire, the companies were asked to rank the level of importance their companies place on external analysis. The responses are taken as an input data and were later statistically analysed by the Stat::Fit software.

![Autocorrelation of Input Data](image)

*Figure 4.32 Autocorrelation of responses to Question 11b
Source: Statistical software*

According to the autocorrelation of input data, the correlation changes in (0.0996, -0.152) intervals. In other words, there is no correlation between the responses. Therefore, the importance level of internal analysis’s responses are independent data. As a result, this data can be used in statistical analysis.
The Auto::Fit function of the Stat::Fit software points out that the input data fits the binomial distribution (N=3, p=0.71) and forms a discrete uniform at the same time. However, the binomial distribution has a higher rank. In the histogram, the theoretical and the realised binomial distributions are compared by the software. In accordance with the histogram, the responses fit the binomial distribution.

4.3.2. **Hypothesis testing**

Thietart et al (2001) state that "a statistical hypothesis is generally presented in two parts: the null hypothesis and the alternative or contrary hypothesis. The researcher's goal is to disprove the null hypothesis in favor of the alternative hypothesis."
In the trade-offs of strategic planning concepts chapter, it was suggested that environmental dynamism has an influence on strategic processes. In this chapter, the researcher's aim is to prove that there is a relationship between environmental dynamism and deliberate (prescriptive approach) emergent (descriptive approach) strategies.

H₀: there is no interdependency between environmental dynamism and the prescriptive approach

H₁: there is interdependency between environmental dynamism and the prescriptive approach.

In order to determine the relationship between the two variables, environmental dynamism and the prescriptive approach, SPSS software is used. SPSS provides an opportunity for easy calculation of the value of the correlation coefficient. Furthermore, Cohen (1988) offers a guideline for the interpretation of a correlation coefficient. This table explores the scale of the correlation.

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Negative</th>
<th>Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>-0.3 to -0.1</td>
<td>0.1 to 0.3</td>
</tr>
<tr>
<td>Medium</td>
<td>-0.5 to -0.3</td>
<td>0.3 to 0.5</td>
</tr>
<tr>
<td>Large</td>
<td>-1.0 to -0.5</td>
<td>0.5 to 1.0</td>
</tr>
</tbody>
</table>

Table 4.1 Guideline for the correlation coefficient
Source: Cohen (1998)

The given results based on SPSS are shown here:

<table>
<thead>
<tr>
<th>Definition</th>
<th>Correlation</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>correlation between environmental and prescriptive practices</td>
<td>0.5432619</td>
<td>Large positive relationship</td>
</tr>
</tbody>
</table>

Table 4.2 Correlation coefficients between two variables
Source: Own elaboration based on SPSS

On the basis of the given data and by use of the SPSS software, the test statistic is calculated. The calculated value for the correlation is \( r = 0.543 \).
The given level of significance is 95%, which corresponds to $\alpha = 0.05$. The following step concerns the calculation of the degree of freedom. The degree of freedom is calculated by using the formula df=$n-2 \Rightarrow df=69-2=67$. From Table 1.1 it can be determined what is the critical value for degree of freedom of 67 and significance level equal to $\alpha = 0.05\%$. The critical value, taken from the Table 1.3, is 0.2369.

In order for null hypothesis to be true, the critical value must be higher than the calculated one. In this test, the critical value is much less that the calculated value of correlation. As a result, the null hypothesis is rejected.

It can be concluded that there is a relationship between environmental dynamism and the prescriptive approach. Furthermore, the calculated value of the correlation coefficient of $r=0.543$ shows a large positive relationship. This means that if a stable environment is present, the company adopts prescriptive practices. Conversely, if the environment changes from stable to more dynamic, the company is expected to adopt more descriptive practices.

<table>
<thead>
<tr>
<th>Table 4.3 Critical Values Pearson's Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: <a href="http://frank.mtsu.edu/~dkfuller/tables/correlationtable.pdf">http://frank.mtsu.edu/~dkfuller/tables/correlationtable.pdf</a></td>
</tr>
</tbody>
</table>
4.4 Findings of the questionnaire

Following summary highlights the primary findings in contrast to the secondary findings.

Concerning environmental condition and prescriptive approach:

As an initial finding, it has been confirmed that the industry is going through a dynamic environmental phase and this is expected to remain the case in the future. Bearing this in mind, the second finding is the confirmation of the theory, that companies operating in dynamic environments use deliberate, prescriptive planning processes but also include a portion of emergent learning theory. The trade-off regarding the analysis approach and the theoretical findings are also confirmed. Both approaches, inside-out and outside-in, are important in the process of strategic planning and must be carried out in a balanced way with the same level of attention.

After the hypothesis testing, it has been verified that there is a relationship between environmental dynamism and the prescriptive approach. The calculated correlation coefficient also proves a large positive relationship. In a stable environment, companies apply prescriptive practices; in a turbulent environment, companies apply more descriptive practices.

In comparison the secondary research highlighted different positions. Ansoff proposes that formal planning is beneficial in both stable and unstable environments (Ansoff, 1991, 1994). On the other hand, Mintzberg favors incrementalism and emergent adaptation, especially in unstable and unpredictable environments (Mintzberg, 1991, 1994).

Mintzberg and Lampel (1999) suggest, for example, that deliberate, formal planning models should be applied in mature mass-production industries and governments - implying some sort of stability in those environments. They also believe that adaptive emergent strategies (incremental planning) should be applied to dynamic, high-technology industries.

As mentioned in the previous chapter, some researches argue that applying rationality to the strategy-making process is harmful in dynamic environments and beneficial in stable environments (Fredrickson, 1984; Fredrickson and Mitchell, 1984;
and Fredrickson and Laquinto, 1989), others indicate that applying rationality to the decision-making processes in dynamic environments is associated with higher performance (Eisenhardt, 1989; Miller and Friesen, 1983; and Judge and Miller, 1991). They show that an increase in environmental dynamism is accompanied by increases in planning rationality.

In an attempt to resolve the debate between these two perspectives in strategy formation, planning versus learning, Brews and Hunt carried out an analysis of 656 firms. The objective of the research was to determine the relationship between the specificity of ends (what an organisation wants to achieve); the performance among firms operating in stable environments; and the relationship between the specificity of means (how to achieve the ends) and performance.

a) One of their main findings was that the external performance of a firm is associated with formal, specific planning, regardless of the environment.

b) They also discovered that multiple deliberate strategies (means) are preferable to unspecified ends and waiting for strategies to emerge as the organisation interacts with the environment.

c) In their study clear evidence of the co-existence of formal, specific and flexible planning was found in very unstable environments. A firm that pursues incrementalism alone, without previous specific planning, can spend more time in the experimentation (trial and error) stage which will ultimately affect its performance.

The latter theory was also supported by the study of Priem, Rasheed and Kotulic (1995), where they surveyed 101 firms to find out the relationship between positive performance and rationality. They concluded that process rationality is positively related to performance in dynamic environments and that a similar relationship is not so evident under moderate or low levels of dynamism. Furthermore Andersen (2004), in his investigation of 185 manufacturing organisations operating in diverse industries, concluded that strategic planning processes are important in all industrial environments and that they, in conjunction with distributed decision authority (decentralised strategy making), improve economic performance even further in dynamic environments.
In the same vein Brews and Purohit (2007), after conducting a multinational, multi-industry survey of 886 firms, found that in more unstable environments planning is more present. They propose that in stable environments there is less need for planning (either because the status quo is suitable or because less adjustment is necessary), and it is only when environments become unstable does the need for more and better planning arise. They identified four planning dimensions and found that the ones related to adaptability and innovation were more sensibly suited to environmental instability. The other two, which refer to vision and goals and programming, are more associated to firm size than to environment.

Concerning the three basic steps of strategic planning:

The three basic steps for a general model of strategic planning were also confirmed by the respondents who declared them as important and vital in 100% of the cases. Even though the question had an open component no additional steps were suggested.

This goes in line with the secondary findings. After completing the research about strategic concepts and trade offs the steps strategic analysis, strategic formulation and implementation had been found as the core strategic process.

Concerning the need of internal and external analysis:

The elements considered important inside the strategic analysis were also confirmed by the questionnaire with 100% for each case, which means that in a strategic planning model both elements are important, although the external analysis received more emphasis.

Here a possible relation could be seen as in dynamic environment a kind of more emphasis on external analysis. In literature so far nothing specific about this relation could be found so a deeper research could highlight important new knowledge.
Concerning the elements of external and internal analysis:

Regarding the factors to consider in the external analysis, it was found that the automotive supplier industry places more importance to three key factors: competitors, customers and technology. Other important factors include market opportunities, the economy, suppliers, potential entrants and substitutes. Government, regulations and society were not ranked as highly.

With regards to internal analysis, it was discovered that KSFs are considered by the industry to be important tools. This is followed by the appraisal of a company's strengths and weaknesses and the assessment of individual departments and functions. The importance of scenario planning in order to reduce future uncertainty and forecast key variables for the business was also raised by respondents.

Both contents of internal and external analysis are industry related findings and no specific description of other study could be found within literature.

Concerning additional finding:

It was also discovered that a large gap exists between what processes are used and what processes should be used. This suggests that there is a difference between what companies actually do and what their executives think is important. The phenomenon might be due to several reasons like executives being unaware of the right tools to use or lack of a concrete plan or lack of experience. The development of a strategic planning model customised to the needs of the automotive supplier industry should help companies to reduce this gap and start doing what is really important.

Summary of primary findings:

1. The three basic steps for a general model of strategic planning were confirmed

2. Companies operating in dynamic environments use deliberate, prescriptive planning practices but also include a portion of emergent learning theory. In a stable environment companies apply prescriptive practices.
3. It was also seen a first indication of a relationship between stable environments and the use of inside-out approaches, and between turbulent environments and use of outside-in approaches. These findings suggest that companies operating in stable environments can focus more on internal capabilities since the external conditions are not rapidly changing. On the other hand, companies operating in turbulent environments are forced to keep their eyes open to the abrupt changes in the environment and have to adapt their systems to the changing conditions. Companies in dynamic environments need to maintain a balance between both situations, matching internal strengths to external opportunities.

4. With regards to the external analysis process, the automotive supplier industry needs to focus on competitors, customers, technology, the economy, suppliers, potential entrants and substitutes.

5. It was found that KSFs are an important tool for use in the internal analysis process.

6. This was followed by the undertaking of a SWOT analysis

7. Strategic formulation is the next step after SWOT analysis

8. The last step is the strategic implementation

In addition, a large gap was found to exist between what is actually done and what executives think should be done during the strategic planning process stage.

Although most of the topics mentioned above have been already discussed thoroughly during the theoretical research stage of this paper, the findings about the importance of a KSFs-based analysis reveals the need for further research in this area. This is especially important when one considers that the key factors for success vary among industries and that it is necessary to develop an industry-customized framework. Therefore, the next chapter deals with the theoretical foundation of KSFs and provides a customized framework for the automotive supplier industry.
5. KEY SUCCESS FACTORS

5.1 Discussion of success factors research projects

The business analysis based on success factors has a significant presence in literature with regards to strategic management. Several books cover the development and application of the approach based on success factors. Early publications by Daniel (1961) and Rockart (1979) were concerned with the need to determine a few factors which, if properly controlled, would guarantee the achievement of the company’s goals and, at same time would, help to avoid overloading the management with information. Boynton and Zmud (1984) further discussed the applications of the success factors approach, defining its strengths and weaknesses as well as proposing guidelines to offset its downfalls. In their study Leidecker and Bruno (1984) suggested several useful methods for the identification of the success factors.

The next stage in the development of the approach is the empirical research to find the success factors determined by the business practice. The analysis is based on the empirical data collected from the Profit Impact of Market Strategy (PIMS) project and has been a main topic of research among business scholars during the 1980s and 1990s. Buzzell and Gale (1987), who conducted a well-known study concerning PIMS, investigated the influence of different variables on profitability. On basis of their findings, a set of success factors can be determined.

The factors for success in this case can be characterised as quantitative in contrast with the qualitative identified by the Peters/Waterman’s (1982) study. Other studies dealing with the results of the PIMS project have been conducted by Barzen and Wahle (1990) and Neubauer (1999). These authors described some of the most common applications from the results of the PIMS project.

From a different perspective, Peters and Waterman (1982) identified factors for success by comparing the practices employed by the most successful companies in America. The approach for the identification of these factors was qualitative and was based entirely on the expert opinion of the authors.
Studies concerning the determination of success factors have been conducted by Diller and Lucking (1993), Fritz (1994), Steinle (1996) and Becker (2002). Each of these authors uses a different approach when collecting the necessary research data and each identified different success factors.

Other authors have concentrated their efforts on investigating the success factors that affect specific markets or stages of development. Cooper and Kleinschmidt (1995) defined the success factors for new product developments while the research projects of Schefczyk (1994) and Göttgens (1996) identified the success factors in stagnating and shrinking markets. Haedrich and Jenner (1999) focused their study on the determination of success factors in customer goods markets.


Regarding the case of the automotive supplier industry, the analysis of specific market conditions, conducted by Dudenhöffer (2002), helps with identifying industry-specific KSFs. The findings from the Roland Berger Strategic Consultants' research paper and the analysis presented by Sachsenmeier and Schottenloher (2003) provide an insight into the trends in the automotive supplier industry as well as new aspects of the relationship between suppliers and original equipment manufacturers (OEMs). The issue is reviewed further in the work of Becker (2006).

5.1.1. Reasons and objectives

In modern business practices, the availability of the right information at the right moment is of critical importance to the success of the management actions and the overall success of the company (Marschner 2004). There are different approaches by which this can be achieved. One of these approaches is related to the necessity of strategic planning built around the idea that in order for the management to be effective, future activities must be organised in relation to existing conditions in the business environment and the current positioning of the company. The competitive analysis done on the basis of the so-called KSFs is one of the developments in the
field. The idea is that there are several determinants with a significant impact on the
target positioning of the company and for the control of the strategy implementation.

KSFs can be defined as "...the strategy-related action approaches, competitive
capabilities, and business outcomes that every firm must be competent at doing or
must concentrate on achieving in order to be competitively and financially successful.
KSFs are the business aspects that all firms in the industry must pay close attention
to - the specific outcomes crucial to market success (or failure) and the competencies
and competitive capabilities with the most direct bearing on company profitability" (Thompson A, Strickland A., 1995:p. 83).

John F. Rockart (1979) first recognised the importance of the success factors for the
purposes of management. However Rockart’s conception is based on the ideas of
Ronald Daniel (1961) who first recognized the need for the identification of success
factors. The approach was developed as a response to the need of valuable
information for executive managers. In spite of the availability of more and more
information, practice has shown that the senior management still lacks the essential
information necessary for making effective decisions – decisions that will result in
meeting the enterprise’s objectives.

5.1.2. Further developments of the approach

During the 1980s and 1990s many authors dedicated their efforts to establishing a
theoretical basis for success factors analysis. The topic became so popular that it
was established as an independent business discipline. Its main focus lies in the
identification of success factors and further business analysis is based on them.

In 1981 Rockart, together with Christine Bullen, further developed his ideas in his
study A Primer on Critical Success Factors. This research project, which represents
taking a certain approach to collecting and analyzing the data necessary for the
creation of a set of organisational success factors, is considered by the majority of
scholars to be the first description of a formal approach for the identification of the
KSFs.

A following study, focused on the evaluation of the success factors approach, was
conducted by Boynton and Zmud (1984). Their research focused on the use of the
success factors and showed that an analysis based on success factors can be used for the identification of the concerns of the senior management during the strategic planning process. Success factors can be also used to help managers achieve high performance and establish a guideline for monitoring corporate activities.

Leidecker and Bruno (1984) further developed the success factors approach. They suggested several useful methods for the identification of success factors. They include the analysis of the environment, the analysis of the industry structure, the analysis of the competition, reviews of the business experts, the analysis of the dominant firms in the industry, company assessment; and temporal/intuitive factors.

In addition, the success factors can be identified in best-practice benchmarking studies and from the PIMS results. Later, Schefczyk (1994) came out with an adaptation of Leidecker and Bruno's methodology for the identification of success factors.

Different techniques used for the identification of success factors are presented in Table 5.1. The techniques used for the identification of success factors in this project are the results of the success factors studies and an analysis of the market-specific conditions.
<table>
<thead>
<tr>
<th>Technique</th>
<th>Focus</th>
<th>Resources</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental-analysis</td>
<td>Macro</td>
<td>• Environment analysis</td>
<td>• Orientation towards future</td>
<td>• On business level difficult for operational implementation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Econometric model</td>
<td>• Analysis based on industry focus</td>
<td></td>
</tr>
<tr>
<td>Analyse structure of the industry</td>
<td>Industry/macro</td>
<td>• Industry structure reference framework</td>
<td>• Specific Industry focus</td>
<td>• Little opportunities for application on enterprise level</td>
</tr>
<tr>
<td>Industry/business experts interviews</td>
<td>Industry/business</td>
<td>• Organisations</td>
<td>• Including of the actual insights</td>
<td>• Absence of objectivity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Manager</td>
<td>• Analysis of difficult deducible information</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Finance analysts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competition analysis</td>
<td>Industry/business</td>
<td>• Specialists in the administrative departments</td>
<td>• Availability of periodical specific data</td>
<td>• Narrow focus on the competitive factors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Direct manager</td>
<td>• Acceptable analysis on enterprise level</td>
<td></td>
</tr>
<tr>
<td>Analysis of the dominating industrial enterprises</td>
<td>Industry/business</td>
<td>• Specialists in the administrative departments</td>
<td>• Dominant competitors having influence on success factors</td>
<td>• Focus on the business</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Direct manager</td>
<td>• Valuable knowledge on business level</td>
<td>• Definition of strategic reactions</td>
</tr>
<tr>
<td>Business-specific quantitative firm analysis</td>
<td>Business</td>
<td>• Internal direct and department organization</td>
<td>• Clarifying business strengths and weaknesses</td>
<td>• Neglecting results of the macro-analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Wrong conclusion based on quantitative data</td>
</tr>
<tr>
<td>Business-specific qualitative firm analysis</td>
<td>Business</td>
<td>• Administrative departments</td>
<td>• It is possible to consider soft factors</td>
<td>• Setting a priority among critical success factors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Brainstorming</td>
<td>• Consideration of short-term relevant success factors</td>
<td>• Neglecting of the long term relevant success</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Results from success factor studies</td>
<td>Industry/business</td>
<td>• Publicised success factors studies</td>
<td>• Often they are result from empiric research</td>
<td>• Often not providing general testimony</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Possible adaptation as a base of operations</td>
<td>• Often not firm-industry specific</td>
</tr>
</tbody>
</table>

Table 5.1 Methodology for identification of success factors
Source: Schefczyk M 1994
5.1.3. Classification of success factors research projects

Marschner (2004) summarised the differences between the approaches used by different strategic thinkers. After reviewing the relevant theory, the author proposed the following basis for classifying success factors studies.

- Strategic basis
- Expert's evaluation
- Empirical analysis

According to Marschner (2004), a different classification can also be developed in relation to the level of analysis. The main differentiation criterion here is the scope of the study:

- Specific branch studies (e.g. PIMS study)
- Studies within the specific industries
- Project-specific studies (e.g. success factor for diversification)

The results of the analysis therefore can have global, industry-specific or project-specific validity.

Schefczyk (1994) proposed a detailed classification of success factors studies. He compared the results from 65 studies conducted between the periods 1974 and 1994. On the basis of this analysis he was able to classify success factors studies into four categories:

- General success factor studies. These are the studies which are not industry- or situation-specific. These studies can be used as a broad foundation for further success factor research. Additionally, they have a significant contribution to clarifying the variation of the used criteria.

- Industry-specific success factor studies. Here, the focus of the studies is limited only to specific industries. However, the methodology used is relevant to all success factor studies.
Special success factors studies. These are studies which are not limited to a particular industry but which consider the effects of small group success factors or specific developments on the overall business success.

Special industry-specific success factor studies. These are specific success factor studies concerning several industries.

Schefczyk (1994) found that the initial 65 studies were distributed as follows: 36.9% special industry specific; 30.8% special; 24.6% industry specific; and only 7.7% general success factors analysis.

The success factors found in studies will be combined together and compared and classified. Consequently, the most important points that must be considered when identifying the relevance to the case study's success factors will be identified.

5.1.4. Essential results of research projects

Up until now the first steps of a discipline based on success factors analysis has been presented. The early authors dealt mainly with defining a methodology for the identification of KSFs. The main objective of this chapter is, however, to determine the factors for success in the business and more specifically in the automotive supplier business. Therefore, the focus will not be on the theoretical explanation of the success factors approach but the application of this approach in the strategic analysis. The next section will describe the findings and the results of previous research projects related to KSFs.

5.1.4.1. PIMS project

The PIMS program can be viewed as the pioneer research project in the empirical studies related to the identification of success factors. The idea for the program (Buzzell and Gale 1987) came from the studies done during the 1960s at the General Electric Company (GE). By the early 1970s, this project had produced a statistical model known as the Profit-Optimising Model (PROM). The senior management at GE used the PROM to test the reasonableness of the plans submitted by the general managers of its operating units. When the model was deemed to be robust enough to evaluate GE's planning activities it was not clear whether the model was valid only
for the company's existing kind of businesses. This led to the idea of inviting other companies to participate in the project.

The PIMS program was initiated in 1972. By the end of the year it had grown to include 57 companies and 620 business units. In 1975 a separate organisation was set up to carry out the PIMS research – the Strategic Planning Institute (SPI).

Since then, more than 450 companies with around 4000 strategic business units have participated in the program for various periods of time.

Over the time of the project the data from different branches has been systematically collected and evaluated. The main objective of the research was to prove that there is an interdependency between market structures, competitive position, a company's competitiveness, and the profit achieved by the firm.

The data was carefully evaluated using the quantitative approach and by applying multiple regression analysis. The collected information can be used for various applications. F. Neubauer proposed a summary of the possible application of the collected empirical data in 1999. The PIMS databank model is shown in Figure 5.1

![PIMS Databank Model](image)

**Figure 5.1 PIMS databank**  
Source: Neubauer, F. F. 1999
One of the most valuable interpretations of the PIMS output can be found in *The PIMS Principles*, the book co-authored by Buzzell and Gale (1987). The authors identified 37 independent variables, the majority of which (80%) are related to the return on investment (ROI). Out of these 37 key variables Buzzell and Gale were able to derive nine more general factors for success. They are as follows:

- Relative market share
- Product quality
- Relative research and development (R&D) costs
- Capital intensity
- Order frequency
- Size of the business
- Market growth
- Efficiency
- Vertical integration

Buzzell and Gale's explanation of the factor's effect on profitability is provided below:

**Relative market share.** This is one of the most important success indicators, apart from the framework of the PIMS study. There is a strong positive relationship between market share and profitability. Its effect is related to the size of the business, the learning curve and the market power.

**Product quality.** Product quality is defined as the evaluation of the quality of the product or service in comparison with its competitors. This factor is positively correlated with ROI and cash flow.

**Relative R&D costs.** A higher relative R&D cost has a positive influence on profitability. According to Buzzell and Gale (1987), the effect of the market share on profitability is greater for R&D intensive businesses compared with manufacturing intensive businesses.

**Capital intensity.** This has been proved to have a significant impact on the profit. The analysis of the empirical data shows that the capital intensity is negatively correlated with profitability. The enterprise with higher intensity of the investments will have lower ROI and cash flow compared with less investment-intensive business.
Order frequency. The impact on the profitability of order frequency should also be considered. The analysis of empirical data shows that the concentration of the purchases within fewer suppliers slightly improves ROI and return on sales (ROS). The amount of the purchase is negatively correlated with the profitability. Markets in which transactions involve big sum of money tend to be less profitable that ones characterised by small purchase amounts.

Size of the business. The bigger the business, the bigger the profit a company realises.

Market Growth. Market growth has a positive effect on the profit and a negative effect on the cash flow. The influence of this variable on the level of ROI is insignificant.

Efficiency. There is a positive relationship between the efficiency and the profitability. The analysis of the data shows that the ROI and cash flow are higher for enterprises with higher added value per employee.

Vertical integration. For enterprises operating in stable markets, a high vertical integration ratio has a positive effect on the ROI and cash flow and vice versa. Controversy, for enterprises operating in fast-growing, declining and unstable markets the effect is negative.

Despite the wide popularity of the PIMS program its conclusions have attracted criticism at several important points (Marschner 2004):

- Adequacy of the model. It is not clear whether the proposed model for multifactor regression analysis is the most appropriate method for the identification of the success variables.

- Subjectivity. While operating within the framework of the PIMS program, researchers have taken a subjective approach when interviewing managers about market variables and the quality of their products.

- Universal validity. The study does not take in account the branch specifics.
“Hard” factors. The important qualitative aspects (enterprise culture, image) have been not considered in the study.

Size of the sample. The study includes mostly American companies. In addition, the majority of the presented companies are big corporations, which raises questions about the validity of the sample.

Despite its critics, the PIMS program is considered to offer an important contribution to the development of the science of success factors. The biggest attribute of the study is that it was conducted over many years. Moreover, the project is considered to be extremely valuable because of the comprehensive documentation, models and results, the broad empirical findings and its (consecutive) ability to validate the theoretical knowledge it generated.

5.1.4.2. Study of Peters and Waterman


It includes a sample of 62 American companies. Even if it was not intended to be a perfect representative of the American industry, it included a fairly broad spectrum of the American companies. From the very beginning, the researchers focused their attention on companies which were considered to be innovative and excellent by a number of experts. The companies were grouped into various categories in order to ensure that there was a good representation of the industry segments the researchers were interested in. These categories can be defined as follows:

1. High-technology companies including Digital Equipment, Hewlett-Packard, Intel and Texas Instruments
2. Consumer goods companies such as Procter & Gamble, Chesebrough-Pond’s, Johnson & Johnson
3. General industrial companies such as Caterpillar, Dana and 3M
4. Service companies, including Delta Airlines, Marriott, McDonald’s and Disney Productions

5. Project management companies like Bechtel and Fluor

6. Resource-based companies including Atlantic-Richfield, Dow Chemical and Exxon.

The research continued with an evaluation of the collected data. For that purpose six measures of long-term superiority were imposed. They were grouped into two groups. The first group consisted of measures of growth and the long-term creation of wealth; the second consisted of measures of return on capital and sales. The measures are

- Compound asset growth
- Compound equity growth
- The average ratio of market to book value
- Average return on total capital
- Average return on equity
- Average return on sales

All of these measures were applied to the companies from 1961 through to 1980. In order for a company to be identified as a top performer, it should have been ranked top in its industry in at least four out of six of these measures over the full 20-year period. Through the use of these measures and taking into consideration the opinions of the industry experts, the most successful companies were determined. In addition, some separate interviews were conducted. Eventually the information was analysed and conclusions were drawn.

On the basis of the research Peters and Waterman (1982) defined eight attributes for the identification of the excellent and innovative companies. They are:

1. A bias for action. Successful companies make their decisions mostly based on practical techniques avoiding being more analytical than is necessary.

2. Close to the customer. Successful companies tend to take notice of their clients' needs and are able to provide excellent quality, services and dependability for their functional and durable products.
3. Autonomy and entrepreneurship. Successful companies tend to encourage creativity and imaginativeness among their employees and, at the same time, mistakes are tolerated.

4. Productivity through people. Successful companies tend to view their employees as their most valuable asset and the key to quality and productivity improvement.

5. Hands-on and value-driven. Successful companies tend to be focused on the value system and do everything possible to enhance compliance with the value system.

6. Sticks to the knitting. Successful companies tend to remain in the area of their business expertise and proven by the time core competence (?).

7. Simple form, lean staff. Successful companies tend to focus on simple structures of the workflow and systems and are therefore focused on reducing bureaucracy.

8. Successful companies tend to be both centralised and decentralised. They manage as much as necessary and control as little as possible.

The Peters/Waterman study is considered to have made a significant contribution to the research related to success factors. The study is considered to be a qualitative equivalent of the PIMS project. However, Marschner (2004) believed that its weakness lie in the following points:

➢ What criteria used in the study is useful in practice

➢ The 62 evaluated companies were picked by experts, therefore there is a strong possibility that some form of subjectivity took place

➢ The scope of the research is based around American businesses and therefore the validity of the findings for all companies worldwide can be disputed.

➢ The study has included a group of successful business. In order to prove its validity it is necessary to test another group of presumably less successful
companies. This way ensures that the less successful businesses do not meet the success criteria

➢ The results are based entirely on personal experience and observations. There is no empirical proof that the success determinants have been correctly identified.

The studies presented above have a substantial influence on the development of thought related to the identification and use of the success factors. The first part of the studies dealt with the methodology that must be used in order to correctly identify the success factors. The main objective of second part was to identify the determinants affecting the performance of the strategic business units. However, the actuality of these studies can be questioned taking in account the fact that they were conducted in the 1970s and 1980s. Recent developments regarding the subject of strategic success factors analysis are presented further on in this paper.

5.1.4.3. General studies for the identification of success factors

In 1992 Diller and Lucking (1993) conducted a study which dealt with the use of success factors in practice. During the study, they asked 104 senior managers from big enterprises to rank the success factors on an organizational level. As a result of the analysis, five factors were determined. They are as follows:

➢ Quality of the product
➢ Cost management
➢ Market share
➢ Innovation
➢ Employee quality

The result of the interview combines both hard and soft success factors which were identical to the findings of the PIMS study and those in the Peters/Waterman research.

Another interesting study relevant to the topic was that published in 1994 by Wolfgang Fritz. His study was based on the extensive research of 40 earlier studies which too explored success factors. From his research Fritz identified five of the most frequently scientifically proven success factors:
Human resource
Proximity to the clients
Innovation
Product quality
Management style

The results of the research undertaken by Diller/Lucking (1993) and Fritz (1994) showed that, in practice, both 'hard' and 'soft' success factors such as market share and costs, and management style and human resources, are evident.

Roman Becker (2002) conducted the next research project relevant to the topic. In his Excellence Barometer Weist Unternehmerische Erfolgsfaktoren Nach article, he provides a summary of the results. Through a series of telephone calls, he asked 800 German senior managers to list the most important factors for business success. They were also asked to rank them in relation to their relevant importance. The identified success factors, as well as their comparative rankings, are presented in Figure 5.2.

Figure 5.2 Ranking of the success factors
Source: Becker R 2003 in: QM-Systeme, Jg. 48, Nr.3, p.204

The success factors can be ranked in the following order:

1. Product/service quality
2. Quality of workforce
3. Customer-oriented approach
4. The economic climate
5. Innovation
6. Market situation
7. Efficiency of the process/service
8. Flexibility
9. Business politics and strategy
10. Marketing/sales efforts
11. Management competence

From the results of the study it can be concluded that senior managers believe that soft factors, like management competence, and business politics and strategy, are relatively less important than hard factors like product and service quality.

5.1.4.4. Success factors in production management

Another study which was designed to determine the importance of success factors for senior management is the HEFAP project, undertaken by Steinle (1996). The research is centred on the results of various production businesses based in Baden-Württemberg and Niedersachsen, Germany, between 1992 and 1994. The main objective of the research was to find what the success factors are, based on their relation to preliminary determined performance indicators such as ROI (long-term measure) and cash flow (short-term measure). Ten success factors were determined from the research, which is presented in the following order:

- Innovation management
- Time management
- The overall concept
- Use of computer applications
- Planning
- Market environment factors
- Strategy control
- Degree of possible influence on the environment
- Strategic choice
5.1.4.5. Success factors in shrinking markets

The next study that has contributed to the development of the success factors approach was that realised by Olaf Göttgens (1996). His study focuses on the analysis of the success factors impact on stagnating and shrinking markets. Bearing in mind that three-thirds of the businesses in the most economically advanced nations can be characterised as stagnating or shrinking, the results of the study are of significant importance for the entire business spectrum.

During the research, managers from 152 separate business units were asked to determine the most important factors for business success. The results of the study are summarised in Table 5.2. On basis of the results from the analysis, Göttgens concluded that factors such as the good quality of the workforce and the market orientation of the business, are of significant importance for enterprises operating on stagnating or shrinking markets.

<table>
<thead>
<tr>
<th>Successful businesses operating in shrinking and stagnated markets are classified as follows</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees and market oriented corporate culture</td>
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<td>Multidimensional business strategies</td>
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<tr>
<td>Priorities of the company’s management:</td>
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<tr>
<td>- Employee</td>
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<td>- Market</td>
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<td>- Production</td>
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<td>- Costs</td>
</tr>
<tr>
<td>- Finance</td>
</tr>
<tr>
<td>Central business factors:</td>
</tr>
<tr>
<td>- High R&amp;D costs/Process costs</td>
</tr>
<tr>
<td>- High productivity</td>
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<tr>
<td>- Geographic expansion</td>
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<tr>
<td>- High product quality</td>
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<td>- Politic of niche</td>
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<tr>
<td>- Poor classification</td>
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<tr>
<td>- Investment in the future of the employee</td>
</tr>
<tr>
<td>- Decision delegation</td>
</tr>
<tr>
<td>- Proximity to customers</td>
</tr>
<tr>
<td>- Market share</td>
</tr>
<tr>
<td>- Expense situation</td>
</tr>
</tbody>
</table>
Priorities in the goal system: General environmental factors:
- Client satisfaction
- Quality of the offerings
- Competitiveness
- Safety of the company's portfolio
- Low business dynamic
- Low exit barberries
- More certainty than uncertainty
- Low business concentration

Table 5.2 Success factors in stagnating and shrinking markets
Source: Marschner K, 2004 p. 59

5.1.4.6.

Success factors in the consumer goods markets

Haedrich and Jenner (1996) conducted a study called Strategic Success Factors in the Consumer Goods Markets. As the title of the study suggests, the main topic of this study was the determination of success factors on consumer markets. However the findings of the research are useful for the determination of some important factors for success relevant to all businesses. Interviews were conducted with 150 businesses. The success factors determined by the study can be ranked as follows:

- Design
- Product image
- Price
- Product quality
- Services
- Sales

5.1.4.7. Success factors in new product development

The last study presented in this research project concerns success factors in new product development. Robert G. Cooper and Elko J. Kleinschmidt (1995) undertook the study in 1995. Bearing in mind the importance of new product development for the automotive supplier industry, the findings of this study should be taken into consideration.
The authors conducted a multi-firm benchmark study in which 135 companies participated. The authors used 10 performance measures for the companies' new product programs: success rate; percentage of sales; profitability relative to spending; technical success rating; sales impact; profit impact; success in meeting sales objectives; success in meeting profit objectives; profitability relative to competitors; and overall success.

Further in the research these performance measures are reduced to two underlying dimensions: program profitability and program impact. On that basis companies were divided in four categories: solid performers; high-impact technical winners; low-impact performers; and dogs. The main objective here was to determine which factors separated the solid performers from the companies classified in other categories. As a result of the authors' study, nine success factors for new product development, were determined. According to their impact on performance they are arranged as follows:

1. High-quality new product process
2. Clear, well-communicated new product strategy for the company
3. Adequate resources for new products
4. Senior management commitment to new products
5. Entrepreneurial climate for product innovation
6. Senior management accountability
7. Strategic focus and synergy (i.e., new products close to the firm's existing markets and leveraging existing technologies)
8. High-quality development teams
9. Cross-functional teams

5.1.5. Summary

A summary of different success factors studies as well as their chronological order and outcome is presented in Table 5.3. This integral representation of the empirical findings provides a solid ground for comparing both the different approaches and results.
<table>
<thead>
<tr>
<th>Identified success factors</th>
<th>Type of the identified success factors</th>
<th>Method used</th>
<th>Focus and Size of the sample</th>
<th>Study</th>
<th>Author</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hands-on value driven</td>
<td>Qualitative</td>
<td>Expert interviews/ experience based analysis</td>
<td>General (successful American companies, 62 companies)</td>
<td>In search of Excellence</td>
<td>Peters/Waterman</td>
<td>1980</td>
</tr>
<tr>
<td>Sticks to the knitting</td>
<td>Quantitative</td>
<td>Quantitative explorative analysis/ multiple regression analysis</td>
<td>General (PIMS database, 2600 business units)</td>
<td>The PIMS principles</td>
<td>Buzell/Gall</td>
<td>1987</td>
</tr>
<tr>
<td>Simple form, lean staff</td>
<td>Qualitative</td>
<td>Expert interviews</td>
<td>General (Big companies, 104 top managers)</td>
<td>The PIMS principles</td>
<td>Diller/Luckin</td>
<td>1992</td>
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<td>Simultaneous loose-tight properties</td>
<td>Qualitative</td>
<td>Expert analysis</td>
<td>General</td>
<td>Fritz</td>
<td>1994</td>
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<td>Size of the business</td>
<td>Qualitative</td>
<td>Expert interviews</td>
<td>General</td>
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<tr>
<td>Year</td>
<td>Study</td>
<td>Methodology</td>
<td>Results</td>
<td>Key Success Factors</td>
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</tbody>
</table>
| 1995 | Cooper/Kleinschmidt | Benchmarking Firm's Success Factors in New Product Development | New product development: 135 companies | Results from 40 studies | - Innovation  
- A high-quality new product process  
- A clear, well-communicated new product strategy for the company  
- Adequate resources for new products  
- Senior management commitment to new products  
- An entrepreneurial climate for product innovation  
- Senior management accountability  
- Strategic focus and synergy (i.e., new products close to the firm's existing markets and leveraging existing technologies)  
- High-quality development teams  
- Cross-functional teams |
| 1996 | Steinle | HEFAP project | Production businesses, 146 interviews of production businesses from Baden-Württemberg and Niedersachsen businesses | Correlation analysis | - Innovation management  
- Time management  
- The overall concept  
- Use of computer applications  
- Planning  
- Market environment factors  
- Strategy control  
- Degree of possible influence at the environment  
- Strategic choose  
- Strategy implementation |
<table>
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<tr>
<th>Year</th>
<th>Author</th>
<th>Erfolgsfaktoren in stagnierende und schrumpfende Märkten</th>
<th>Stagnating and shrinking markets</th>
<th>Confirmatory-explorative analysis/ LISREL-Method</th>
<th>Quantitative/ Qualitative</th>
<th>Central business factors:</th>
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<tr>
<td>1996</td>
<td>Göttgens</td>
<td>152 business units</td>
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<td>Employees and market oriented corporate culture</td>
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<td>Client satisfaction, Quality of the offerings, Competitiveness, Safety of the company's portfolio, General environmental factors, Low business dynamic, Low exit barberries, More, certainty than uncertainty, Low business concentration</td>
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<td>1996</td>
<td>Haedrich</td>
<td>Consumer goods markets 150 business units</td>
<td>Computer based interviews</td>
<td>Qualitative/ Quantitative</td>
<td>Design</td>
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<td>Jenner</td>
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<td>Becker</td>
<td>General- German businesses 800 top managers</td>
<td>Expert interviews</td>
<td>Qualitative/ Quantitative</td>
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<td>• Customers oriented approach</td>
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<td>• The economic situation</td>
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<td>• Innovation</td>
<td>• Management Competence</td>
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<td>• Market situation</td>
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Table 5.3 Summary of the success factors studies
Source: Own development
5.2 Criteria for the classification of key success factors

After reviewing the research projects concerning success factors, it is possible to propose a classification for those success factors which were identified as a result.

Rockart (1979) used the following criteria for the determination of success factors:

- The industry in which the organisation competes or exists
- An understanding of the organisation’s peers
- The general business climate or organisational environment
- Problems, barriers or challenges of the organisation
- Layers of management

On the basis of this criteria, Rockart (1979) identified different success factors relevant to the respective area of application:

- Environmental success factors. These reflect the environmental factors over which the organisation has very little control or ability to actively manage. By making these factors explicit, the organisation can at least be mindful of them and actively monitor their performance relative to them.

- Industry success factors. These are not generic, but are industry-specific. For example, success factors in the (automotive supplier?) industry may be design engineering, strong dealer distribution networks, cost control, and pollution abatement processes and technologies. Additionally, it is important to note in this instance that the success factors are a function of the industry structure and will change as the industries evolve.

- Competitive position success factors. These are defined as those success factors that are specific to the organisation’s unique position relative to their peer group in the industry in which they operate or compete. Innovation by rivals may warrant assessment of a potentially new set of success factors.

- Firm-specific success factors. These are the success factors critical to the successful functioning of the firm’s internal organisation. The firm must ensure that these success factors are being executed well before considering the other types of success factors listed here.
Temporal success factors. Over the strategic planning period the organisation's success factors may remain fairly constant, adjusted only when the organisation makes major changes, such as changing its mission or the industry in which it competes. However, at one time or another, every organization encounters temporary conditions or situations that must be managed for a specific period of time while maintaining its performance in other areas. These temporary conditions or situations can result in temporal success factors - areas in which the organisation must temporarily perform satisfactorily in order to ensure that its ability to accomplish its mission is not impeded.

Management position success factors. Every layer of management has a different perspective and focus in the organisation. This ensures that both tactical and strategic actions are taken in order to accomplish the organisation's mission. Managers have different focuses and priorities depending on the layer of management in which they operate. This translates into a set of success factors that reflect the type of responsibilities required by the manager's position in the organisation.

The next figure presents the success factors relevant to the automotive supplier industry.
Figure 5.3 Example for enterprise success factors of the supplier industry according to Rockart's classification.
Source: Own development
Schefczyk (1994) presented one of the examples for further development in the classification of the success factors. He emphasized that it was important to consider the existence of three levels that could be used as a classification factor to define the different types of success factors. These are the business level, the industry level and the macro level.

Consequently he proposed the following classification of the success factors:

- **Functional versus function overlapping success factors.** Through the use of strategic success factors it is possible to consider such different business functions as marketing/sales and production/logistics to be functionally related to the business. Potential success factors of the function marketing/sales are the costs of that function, the abilities to attract new clients and the relationship with them. Corresponding examples for the function production/logistics are product quality, degree of vertical integration or achieving the desired level of efficiency.

- **Internal versus external success factors.** Internal success factors are the variables that can be controlled directly by the management compared to the external success factors such as the overall business conditions, government regulations or the overall business situation of the most important industries that cannot be controlled by the management.

- **Operative versus strategic factors.** Operative success factors are the short-term controllable determinants. Such additional often determined factors are classified as business functions. Further there are coming the strategic success factors in which are included just long-term controlled and often function-related success factors.

Schefczyk (1994) also defined two different approaches for success factor analysis - quantitative and qualitative. The identified success factors can be classified as either quantitative or qualitative.

Thompson and Strickland (1995) classified the success factors in relation with their functional area aspects such as the technical expertise, the manufacturing efficiency, effective advertising and product innovation skills.
Different identification methods, scope of research and level of analysis used in the success factors studies resulted in the identification of success factors different in their nature. Marschner (2004) proposed a classification of the success factors identified as a result of the success factors studies. The model is presented in Figure 5.4. Three differentiation criteria are used. They are the analysis level, the research field and the identification method.

![Figure 5.4 Classification of the success factors delivered from success factors studies](Source: Marschner K, 2004, p. 50)

### 5.2.1. Limitations of the empirical research projects

The empirical studies dedicated to identification of KSFs have proved to be very useful in the practice and have been very popular among business researchers. Despite its virtues, the approach for identification of KSFs is not without its critics.

Schefczyk (1994) summarised the weaknesses of the approach as follows:

- Identification and verification. There is a difficulty in the identification of the exact relationship between the success factors and the actual business achievements.

- Choice of success factors. The researcher is meeting certain difficulties when choosing the most appropriate success factors for each of performance perspectives.

- Data ascertainment and implementation. Often, the correct identification of the KSFs requires and it is possible that there is a lack of compatibility with the information concerning different businesses.
Ability for practical implementation. This problem is a result of the discussed limitation of the validity and understanding of the data collected as a result of the studies.

Analysis based on historical data. As a result, there is a decrease in the reliability of the analysis for planning future actions. A study reveals that validity of the empirical research projects for planning of future is more insecure in the case of qualitative studies than in the case of quantitative studies.

Construction of the success factors studies. The problems can be a result of the existence of defects in the theoretical findings. Demonstration of strong subjectivism; not defining important success factors; and results based on the findings of wrong theoretical assumptions are some examples.

Lack of adequate empiric models. The most common case is lack of the validity of the sample.

Insufficient specialisation of the research.

Gottgens (1996) identified three major points defining studies limitations: the different degree of correlation between the success factors; inadequate theoretical foundations; and the problems related to availability, reliability, manipulation and interpretation of the data collected as a result of the research.

Marchner (2004) proposed another classification of the success factors research weaknesses. She identified the possibility of emerging problems in relation to the following success factor studies flaws:

Multi functionality and dimensionality. The success determinants are related with each other. The result is that a change of one of them is usually accompanied by a change in another. On other hand, it is difficult to determine how strong that internal relationship is.

Constructive limitations. There are many success factors that can be determined on the basis of their effect at ROI. Therefore it is important that additional limitations are put in place.
5.2.2. Defining key performance indicators

Before proceeding further with a description of the analysis techniques based on success factors, it is important to make clear the distinction between them and key performance indicators.

On basis of the identified success factors are defined the appropriate for the purpose of the analysis key performance indicators. According to Mard et al (2004):

"Every critical success factor has a various performance indicator that affects it. Since management can only manage a limited number of items, it is important to select the most important performance indicators for that CSFs, and these are called key performance indicators (KPIs)." (Mard et al 2004 :p. 117)

KPIs have unique characteristics that management consider when selecting them:

- They should relate to a specific procedure or process
- There is an input item for a specific performance indicator
- They must have consistency of measurement
- They must be manageable

Frost (2000) proposed a practical method for the identification of KPIs. The sequence involved in the so-called three-step method is provided bellow:
5.3 Identification of the success factors

The identification of the success factors is one of the most important considerations that must be taken into account when undertaking competitive analysis. In order to be able to correctly identify the factors for competitive success, managers must know their industry.

When integrating success determinants in the strategic analysis, it must be checked to see whether these factors correspond to the specifics of the branch. Therefore, it is important that the existing market conditions and specifics of the industry are well defined before proceeding with the identification of the strategic success determinants.

Environmental conditions differ significantly from one industry to another, therefore success factors also differ from industry to industry and very often they are different even in the same industry, especially when the conditions change. In practice, rarely has more than three or four success factors been identified for any one industry. Moreover, the fundamental aim behind the idea of success factors is to provide the management with only the crucial information required to achieve their strategic goals. Therefore, it is very important that the researcher focuses only on success factors that are of significant importance to the business.
Furthermore, when choosing the most useful factors for the strategic analysis it must be considered that not all of the information needed is available. Another shortcoming is that the management cannot directly control all the success factor determinants.

The researcher needs to determine not only the most appropriate success factors that can be used but also how these factors should be categorised and organised in the context of the strategic analysis. The categorisation can be done by dividing the success factors according to their relevancy to all businesses or their specificity to different business areas.

At this point, it is necessary to identify the most important factors that can be applied to the automotive supplier industry. Marschner (2004) proposed a methodology for identification of the key success factors. Her concept is presented in the next figure.

![Diagram of the strategic success determinants process](source)

**Figure 5.6 Process of definition of the strategic success determinants**  
*Source: Own development based on Marschner K, 2004*

The first stage concerns the defining of the competitive driving forces and global trends. For the purpose of their identification, the researcher must get involved in the details of the company’s specific and generic environment. Furthermore, he or she must be able to understand what the trends of the industry are and what the factors for success are which allow a company to meet these new challenges.

The evaluation of the competitive driving forces will be done on basis of the methodology proposed by Porter (1980) and the PEST analysis.

The second stage deals with identification of the strategic factors for success, the factors which make a company’s products attractive to the customers in the existing market conditions. The identification process will consider not only the factors...
identified in the analysis of the specific market but also the factors determined by previous research projects.

The last stage presented in Figure 5.6 is the identification of the strategic success potentials, the internal factors that form significant importance for ensuring a stable competitive position.

In order to obtain a list of success factors that are applicable to the automotive supplier industry, an analysis of specific market conditions will be conducted. Furthermore, these success factors, together with the ones identified in previous research projects, will be used for the definition of a final set of key success factors which will be used in the strategic analysis.

5.3.1. Study of Dudenhöffer

In the study on the Centre for Automotive Research, Dudenhöffer (2002) proposed a that number of success factors need to be achieved by the automotive suppliers in order that they remain successful in the future. Dudenhöffer (2002) proposed to use the approach of four levels of influence introduced in the BSC (Kaplan and Norton 1992). Therefore, he classified the identified success factors into four groups: market/customer perspective; innovation and growth perspective; management perspective; and financial perspective.

The success factors are presented together in Figure 5.7. Here, the results for 2000 can be compared with expected results for 2005. The forecast here is that the importance of each one of the factors will increase.
The highest influence for 2005 is expected to be by the group of factors in the innovation and growth perspective. Through an analysis of the expected changes in the level of importance of each success factor, it can be concluded that there are four challenges lying ahead of the automotive suppliers industry.

The first one is the management of the supply chain. Increasingly, the ability to manage the complex purchasing, production and logistics system is a prerequisite for growth in the automotive supplier industry.

The second important challenge is the international presence. Suppliers often need to open plants as close as possible to the OEMs. Therefore, they need to open new facilities in the same geographic markets where the automakers have located their production sites. It is expected that this tendency will become even stronger in near future.
The third challenge resides with strategic cost management and control. It is anticipated that in the near future the use of control instruments will increase. Therefore, new challenges related to information management and computer systems must be considered. The ability to effectively control these costs is a key determinant for the management of automotive suppliers.

The fourth challenge concerns time-to-market and supplier management. Time-to-market in this instance stands for fast and determinate (?) marketing management with regards to new products and product modifications.

From Figure 5.7, it becomes evident that cost management is a very important factor for the general competitiveness in the automotive supplier industry. In addition, new developments can also be seen also in the process control. At the same time, the price advantage, process assurance, product innovation and product quality are less sustainable. The factors, whose relative importance for the success in the automotive supplier industry have increased, are management quality, supplier management and supply chain management.

5.3.2. Study of Sachsenmeir and Schottenloher

According to Sachsenmeir and Schottenloher (2003) the process of change affecting the automotive manufacturers has its impact on system and component suppliers. Suppliers need to deal with ever-lower prices, higher investment output, and higher risk from recall actions and with the transfer of the responsibilities for technical innovations from OEMs to the suppliers. More specifically, the new requirements that need to be fulfilled by the suppliers include (Sachsenmeier; Schottenloher 2003):

- Global activities in the areas of development, production, sales and services
- Concentration on core business
- Creation of flexible structures and procedures
- Module and system-based thinking
- Increases in the level of development expertise

The transfer of the responsibility for technology development from OEMs to the suppliers has resulted in the formation of mega-suppliers, who possess the financial
and technological expertise to sponsor these R&D activities. Becker (2006) identifies the following requirements that need to be fulfilled by automotive suppliers in order to remain competitive:

- The development of high quality and, above all, innovative products
- The geographical proximity to the OEM or system supplier
- Readiness to acquire new business areas in the value-added chain
- The formation of development and production co-operation
- Cost cutting wherever is possible and where it makes sense

5.3.3. Study of Roland Berger Strategic Consultants

Roland Berger Strategic Consultants (2006) conducted another survey concerning the expectations of leading automotive suppliers. They spoke to 100 senior executives in the global automotive supplier industry while undertaking the survey. They discovered that senior executives remained sceptical about the developments of the automotive suppliers industry in 2006 versus those a year earlier.

The challenges lying ahead of the automotive suppliers industry in 2006, as seen by the industry’s senior executives, are presented on Figure 5.8.
### Figure 5.8 Short term challenges affecting automotive supplier

Source: Roland Berger Strategic Consultants 2006

One of the important questions is centred on how the relationships between suppliers and OEMs can be developed further. Most of the senior executives believe that relationships will continue to deteriorate. The expected areas of disagreement are shown on Figure 5.9. It is expected that the biggest source of disagreement will concern pricing. The second and third sources of disagreement, respectively, will concern the payment for R&D by suppliers and the payment for module and system management to second-tier suppliers.
At the same time, as a result of globalisation, there is a significant tendency towards widening the traditional markets, export production facilities on different continents and increasing the use of the local suppliers. Figure 5.10 presents the trend towards transferring activities to low-cost countries.

Figure 5.10 Trend toward the exporting of activities to low-cost countries
Source: Roland Berger Strategic Consultants 2006
It can be concluded that the trend of OEMs transferring their operations to low-cost countries and the tendency for them to increasing sourcing from low-cost countries continues is very likely to continue.

The expected developments in R&D spending and the rate of new technology introduction are shown on Figure 5.11.

<table>
<thead>
<tr>
<th>Supplier industry's spending on research and development in 2006 vs. 2005</th>
<th>Rate of introduction of new technologies in the automotive industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>43%</td>
<td>48%</td>
</tr>
<tr>
<td>18%</td>
<td>1%</td>
</tr>
<tr>
<td>1%</td>
<td>9%</td>
</tr>
<tr>
<td>Decrease a lot</td>
<td>Decrease a lot</td>
</tr>
<tr>
<td>Decrease</td>
<td>Stay the same</td>
</tr>
<tr>
<td>Increase</td>
<td>Increase</td>
</tr>
<tr>
<td>Increase a lot</td>
<td>Decrease</td>
</tr>
<tr>
<td>Increase</td>
<td>Stay the same</td>
</tr>
<tr>
<td>Increase</td>
<td>Increase</td>
</tr>
<tr>
<td>Increase</td>
<td>Increase</td>
</tr>
<tr>
<td>Increase a lot</td>
<td>Increase</td>
</tr>
</tbody>
</table>

Figure 5.11 R&D spending and the rate of introduction of new technology
Source: Roland Berger Strategic Consultants 2006

It can be concluded that spending on R&D and the introduction of new technologies will increase or stay the same in 2006 compared with 2005.

Finally Roland Berger Strategic Consultants (2006) asked the participants in the survey to identify the major long-term challenges facing the automotive supplier industry. The results are summarised on Figure 5.12.
The most important long-term challenge for the supplier base is considered to be the acquisition of new customers. The second factor to be considered by importance is product innovation. At the same time, suppliers are increasingly beginning to see that process-innovation is becoming almost as important as product innovation in terms of maintaining their long-term competitiveness.

5.4 Summary of success factors derived from specific market analysis

In his study Dudenhöffer (2002) identified a number of success factors relevant to the automotive supplier industry. On the basis of interviews with senior executives from the industry he was able to cluster success factors in relation to their level of importance. It became evident that the most important factors for success are those centred on innovation and growth, followed by those on finance and management.

From the results of the research studies undertaken by Sachsenmeir and Schottenloher (2003) and by Becker (2006), as well as from the analysis of Roland Berger Strategic Consultants, it is clear that one more factor for success can be added to the list proposed by Dudenhöffer (2002): export of activities to low cost countries. Consequently, on basis of the presented market description in , a ranking of the key success factors in the automotive supplier industry is proposed. They are grouped into three groups in relation to their importance to the overall success of the automotive supplier.
<table>
<thead>
<tr>
<th>Meeting delivery dates</th>
<th><strong>Financial Perspective</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of the management</td>
<td>Controlling/ Strategic cost management</td>
</tr>
<tr>
<td>Know-how</td>
<td>Transparency of the costs</td>
</tr>
<tr>
<td>Employee motivation/ Qualification</td>
<td>Financial power</td>
</tr>
<tr>
<td>Innovation</td>
<td></td>
</tr>
</tbody>
</table>

A Controlling/ Transparency of the costs

- Change management/ Flexibility
- Time to Market/ Reaction time
- Strategic cost management
- Project Management
- Service/ faster customer service

Competitive price

International presence

Move to low-cost countries

Supplier management

B Key-Account-Management

- Clear defined business goals
- Brand name
- Equity
- Market share

Supply-Chain-Management

Size of the business

C Supervision

- Service processing
- Extremely important
- Very important
- Less important

Management Perspective

- Move to low-cost countries
- Employee motivation/ Qualification
- Clear defined business goals
- Quality of the management
- Supervision

Market share

Size of the business

Key-Account-Management

International presence

Service/ faster customer service

Service processing

Competitive price

Brand name

Innovation

Know-how

Change management/ Flexibility

Time to Market/ Reaction time

Meeting delivery dates

Project Management

Supply-Chain-Management

Supplier management

Innovation and Growth Perspective

Key Success Factors

Figure 5.13 Level of importance of KSFs identified in the analysis of specific market conditions
Source: Own development

Figure 5.14 Success factors identified by analysis of specific market conditions
Source: Own development
The factors identified in the analysis of the specific market are grouped into four groups along the same lines as those proposed in the BSC (Kaplan and Norton 1992).

The proposed classification of the success factors is used in the consecutive process of development of a concept for identification of key success factors useful for competitive benchmarking.

The final set of KSFs will be determined after comparison with the results from the general studies and with those from the analysis of the specific market.

Figure 5.15 presents the process of the identification of the KSFs by comparing the results from the empirical studies with the KSFs identified in the analysis of specific market conditions.
<table>
<thead>
<tr>
<th>Financial Perspective</th>
<th>Success factors from research projects</th>
<th>Identified success factors</th>
<th>Success factors from specific market conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cost management</td>
<td>Profitability and cost management</td>
<td>Controlling/Strategic cost management</td>
</tr>
<tr>
<td></td>
<td>Capital intensity</td>
<td>Transparency of the costs</td>
<td>Transparency of the costs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Financial Power</td>
<td>Financial power</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>Low Cost Countries</td>
<td></td>
<td>Move to low cost countries</td>
</tr>
<tr>
<td>Quality of work force</td>
<td>Quality of work force / entrepreneurship</td>
<td></td>
<td>Employee motivation Qualification</td>
</tr>
<tr>
<td>Business politics and strategy</td>
<td>Clear defined business goals</td>
<td></td>
<td>Clear defined business goals</td>
</tr>
<tr>
<td>Management Competence</td>
<td>Management Competence</td>
<td></td>
<td>Supervision</td>
</tr>
<tr>
<td>Focus on core competence</td>
<td>Focus on core competence</td>
<td></td>
<td>Quality of the management</td>
</tr>
<tr>
<td>Results oriented approach</td>
<td>Results oriented approach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market share</td>
<td>Market share</td>
<td></td>
<td>Market share</td>
</tr>
<tr>
<td>Size of the business</td>
<td>Size of the business</td>
<td></td>
<td>Size of the business</td>
</tr>
<tr>
<td>Marketing / Sales efforts</td>
<td>Key-Account-Management</td>
<td></td>
<td>Key-Account-Management</td>
</tr>
<tr>
<td>Geographic expansion</td>
<td>International presence</td>
<td></td>
<td>International presence</td>
</tr>
<tr>
<td>Close to the customer</td>
<td>Close to the customer</td>
<td></td>
<td>Service / faster customer service</td>
</tr>
<tr>
<td>Product / service quality</td>
<td>Product / Service quality</td>
<td></td>
<td>Service processing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Competitive price</td>
<td>Competitive price</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brand name</td>
<td>Brand name</td>
</tr>
<tr>
<td>Innovation</td>
<td>Innovation</td>
<td></td>
<td>Innovation</td>
</tr>
<tr>
<td>Adequate resources for R&amp;D</td>
<td>Know-how / R&amp;D resources</td>
<td></td>
<td>Know-how</td>
</tr>
<tr>
<td>Flexibility</td>
<td>Flexibility / Reaction time</td>
<td></td>
<td>Change management / flexibility</td>
</tr>
<tr>
<td>Efficiency of the process / service</td>
<td>Time to market</td>
<td></td>
<td>Time to Market / Reaction time</td>
</tr>
<tr>
<td>High-quality development teams</td>
<td>Project Management</td>
<td></td>
<td>Project Management</td>
</tr>
<tr>
<td>Cross-functional teams</td>
<td></td>
<td></td>
<td>Meeting delivery dates</td>
</tr>
<tr>
<td>Order frequency</td>
<td>Supply Chain Management</td>
<td></td>
<td>Supply Chain Management</td>
</tr>
<tr>
<td>Vertical integration</td>
<td>Vertical Integration</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 5.15 Identification of key success factors
Source: Own development

Key Success Factors
6. DEVELOPMENT OF THE STRATEGIC PLANNING MODEL

Based on the theoretical findings and the findings from the primary research in the form of a questionnaire, the task now is to develop a strategic planning model customised to the needs of the automotive supplier industry.

Finding: Step 1 of the strategic model

According to secondary findings: it was discovered that a basic model consists of three main steps: strategic analysis, strategy formulation, and strategy implementation. The validity of this basic model was also confirmed through the questionnaire.

According to primary findings: The three basic steps were confirmed.

![Figure 6.1 Basic steps of the strategic planning model](Source: Own elaboration)

The first step - the strategic analysis step - is predominantly prescriptive, although adaptation and learning will not be omitted completely. The other steps may have more descriptive influences but are always guided by the rational process.

Finding: Step 2 of strategic model

In alignment with the secondary findings: Companies operating in stable environments should use the prescriptive perspective when it comes to developing strategy, and companies in turbulent environments should include a certain portion of emergent learning in the process.
Out of the primary research: It emerged that companies in the automotive supplier industry are operating within a dynamic environment. Therefore, the process should be strongly prescriptive with some descriptive perspective influences.

This means that there has to be a rational, deliberate, linear process combined with some portion of adaptive, incremental learning in response to the changing environment.

![Figure 6.2 Deliberate process combined with emergent learning](source)

Finding: Step 3 of strategic model

According secondary research: Further studies of the strategic analysis step revealed that there are two trends. One approach, that based on the belief that competitive advantage comes from the external environment, more specifically the industry context in which the company operates, pursues the analysis of external factors as a fundamental to formulating a strategy, adapting the company to the external conditions. Another approach, based on the belief that competitive advantage comes from the internal capabilities of the company, pursues the analysis of internal elements as a basis for the formulation of the strategy.

It was found, in the theoretical research, that both approaches are important and both contribute to competitive advantage, and an analysis of both, internal and external, will allow the company to formulate strategies matching the external requirements to the internal capabilities.

Results of the primary research confirmed these findings: Companies consider both of approaches important to the process. However, the research also discovered that
there is some relationship between stable environments and the inside-out approach, and between turbulent environments and outside-in approaches. This suggests that companies operating in stable environments can focus more on internal capabilities, since the external conditions are not changing rapidly.

On the other hand, companies operating in turbulent environments are forced to remain alert the abrupt changes in the environment and to adapting their systems to the changing conditions. Companies in dynamic environments need to maintain a balance between both approaches, matching internal strengths to external opportunities.

![Diagram of Outside-in and Inside-out Approaches in Strategic Planning](image)

**Figure 6.3 Outside-in and inside-out approaches in strategic planning**  
*Source: Own elaboration*

Since this model was still too general it was necessary to go deeper into the internal and external analyses in light of the knowledge and experience of experts in the automotive supplier industry. In addition, it was also discovered that the basis for a good strategic plan is the elaboration of a sound strategic analysis. Consequently, further research was conducted in order to determine the most important elements to observe in the external analysis and the tools that can enable a good internal analysis.
Finding: Step 4 of strategic model

As it discussed earlier, the strategic analysis consists of external and internal analysis. The most important part of the customization of the model takes place in this step and it was further researched through the questionnaire.

Therefore, the external analysis combines elements from two frameworks – the five forces (Porter, 2004) and the PEST analysis (Macmillan and Tampoe, 2000) – with special emphasis in the ones identified as "most important" for the industry.

![Diagram showing the combination of Five Forces and PEST frameworks]

Figure 6.4 Factors to include in the external analysis
Source: Own elaboration

The primary research results revealed that: The most important factors are competitors, customers and technology. Also important, but to a lesser extent, are suppliers, economy, potential entrants and substitutes. Finally, society and politics (government and regulations) was ranked as unimportant.

Finding: Step 5 of strategic model

The secondary research showed different possibilities perform an internal analysis.

According the primary research: The internal analysis is to be primarily based on the KSFs. The key success factors identified are shown next.
Finding: Step 6 of strategic model

The strategic analysis will be then complemented by the deployment of the well-known SWOT analysis which brings both internal and external elements together in one framework. The strengths and weaknesses identified in the internal analysis must be then matched with the opportunities and threats identified in the external analysis.
Finding 7: Strategy formulation

After performing the strategic analysis, which is the most important part and basis for the rest of the process, is the strategy formulation. In this step, all the findings and conclusions from the strategic analysis must be considered before setting the objectives. Once the objectives are set for the short- and long-term, there follows a definition of how these objectives are going to be achieved. This is the formulation of the strategy.

In the second chapter devoted to the review of existing concepts about strategy, several strategies were explored. The following table summarises some of the generic strategies proposed by the different authors that were reviewed.

<table>
<thead>
<tr>
<th>Porter</th>
<th>Ohmae</th>
<th>Stalk &amp; Lachenauer</th>
<th>Treacy &amp; Wieserma</th>
<th>Drucker</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Cost leadership</td>
<td>- Based on KSF</td>
<td>- Unleash massive and overwhelming force.</td>
<td>- Operational excellence</td>
<td>- Specialization</td>
</tr>
<tr>
<td>- Differentiation</td>
<td>- Based on relative superiority</td>
<td>- Exploit anomalies</td>
<td>- Product leadership</td>
<td>- Diversification</td>
</tr>
<tr>
<td>- Focus</td>
<td>- Based on aggressive initiatives</td>
<td>- Threaten competitor’s profit sanctuaries</td>
<td>- Customer intimacy</td>
<td>- Integration</td>
</tr>
<tr>
<td></td>
<td>- Based on strategic degrees of freedom</td>
<td>- Take it and make it your own</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Entice competitor into retreat</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Break compromises</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6.1 Strategies proposed by the main thinkers
Source: Own elaboration

Other types of strategies were also discussed such as the opportunities and capabilities-based strategies, the SWOT-based strategies and the portfolio-based strategies, etc.

In this part of the process, one or more strategies must be chosen which will allow the company to achieve its goals considering the current situation determined through the strategic analysis. Once the strategy or strategies are defined, the next step is the implementation of the strategy.

Finding: Step 8 of strategic model
After the strategies are clearly defined, the final step of the model deals with implementation. The management is in charge of elaborating a plan to execute the strategies through the publication of the objectives and strategies, the development of operative plans at corporate and department levels, and through the use of budgets and control tools like the BSC.

The next graphs shows all the steps and finding integrated into a strategic model.

Figure 6.7 General strategic planning model
Source: Own elaboration
Strategic Planning Model for Automotive Supplier:
Process: Inside-out combined with outside-in, adaptive, incremental, learning process

Finding 1: Strategy Analysis
Finding 2: Emergent learning
Finding 5: Internal Analysis
Finding 6: SWOT Analysis
Finding 7: Strategy Formulation
Finding 8: Strategy Implementation

Environmental Conditions Dynamic
Finding 3: External Analysis
Finding 4: Internal Analysis
Financial Perspective
Management Perspectives
Market/Customer Perspectives
Innovation & Growth Perspectives
Customers Economy
Competitors Potential Entrants
Technology Substitutes
Suppliers

Figure 6.8 Strategic planning model for automotive supplier by AMBROSI
Source: Own elaboration
7. CASE STUDY: APPLICABILITY OF THE MODEL

7.1 Introduction

Based on secondary research and the results of the questionnaire, a model of strategic planning has been set up. The aim of the secondary research was to review a number of strategic planning theories in order to explore the important findings and apply the relevant hypothesis.

In order to gain an insight into what automotive supplier experts expect from a strategic planning model which is best suited to the requirements of the market, the next step was to conduct some primary research in the form of a questionnaire. The respondents were asked a series in-depth questions about the methods and elements to should be considered during the strategic analysis stage. Their answers provided the fundamental basis of the strategic planning model. The industry conditions have been become more detailed with the opinions of industry experts.

After combining the primary and secondary research results to develop the strategic planning model best suited to the needs of the industry, the model was set up.

As the model has now been established, it is ready to undergo its first verification test. The testing is done through a case study which draws on the experiences of Company F which can be considered to be representative of the automotive supplier industry. The main point of the case study is testing the applicability of the developed model.

7.2 Case study preparation

7.2.1. Methodology

The following case study clearly favors a deductive approach being a bridge from primary and secondary research findings to practical application. By practically testing of the developed strategic planning model for an application inside the automotive supplier industry, it gives the opportunity to explore the automotive supplier business.
As the result of the following case-study, the applicability of the proposed model will be either confirmed or rejected.

![Diagram of the scientific method](image)

**Figure 7.1 The scientific method**  
**Source:** Adapted from Thietart et al. 2001, p. 113

Even though it is not the aim of this case-study to prove whether the model right or wrong, it will still provide the first evidence for the applicability of the developed strategic planning model for an automotive supplier.

### 7.2.2. Execution of the case study

![Diagram of the case study steps](image)

**Figure 7.2 Steps to execute the case study**  
**Source:** Own elaboration
As was mentioned in theoretical research section, environmental dynamism has an impact on the types of strategic planning. As a result of this fact, the first step is concerned with determining the level of dynamism present in the industry. Since the level of dynamism in the automotive supplier industry has been defined as dynamic, companies operating in dynamic environment need to maintain a balance between both stable and turbulent environments. They must attempt to match the internal strengths of the company with external opportunities. Therefore, it is necessary to delve deeper into the external and internal analysis.

The second step is the external analysis. The external analysis is based on the findings from the primary research. For that reason, only those factors ranked as ‘most important’ will be analysed. These external factors consist of competitors, customers, technology and the economy. All these factors will be analysed and considered in detail throughout the case study.

The third step in the case study is the internal analysis. An analysis of Company F will be conducted alongside the findings of the KSFs chapter. As a result, the internal analysis will be done by the perspectives of financial, customer/market, cost management, technology and globalisation.

The fourth step is the SWOT analysis. The internal and external analysis will be completed with the SWOT analysis. The strengths and weaknesses clarified by the internal analysis will be presented alongside the opportunities and threats identified by the external analysis.

The next step is the strategy formulation. In this step, all the findings and conclusions of SWOT analysis, and the internal and external analysis will be considered. Afterwards, short- and long-term objectives will be set. Depending on these objectives, a strategy will be formulated in order to achieve these objectives.

After the formulation of the strategy, the final step is implementation of the strategy. Because the senior management is in charge of executing the strategies and operating plans in a corporation, the implementation of the strategy will not be justified in this case study.
7.2.3. **Practicability**

The aim of the case study is to test just how practical the developed model is in terms of producing reliable and practicable results for the use of strategic planning purposes. Subsequently, the developed model and data used during the application should provide the contributions presented below:

- The data, which the analyst needs during the application of the developed model, should be easy to obtain.

- The data should be reliable and up to date. Unknown and out-of-date sources should not be referred to.

- The data should be comprehensive. In other words, the data should have a thorough understanding of the subject.

- The data applied in order to find reliable results should have an informative value or provide useful information.

- The developed model should not be time-consuming for the analyst. It should be an application which is easy to use and also should be easy to apply.

7.2.4. **Definition of market segment and product**

The case study takes is rooted in the automotive industry, one of the most significant industries worldwide. The (German) automotive industry designs, develops, manufactures, markets and sells vehicles to worldwide. It is the leading sector in terms of growth rate in many countries. As a result of globalisation, competition in the industry is getting stiffer. In addition, the world is struggling with a global economic crisis and which has had a negative impact on automotive industry. As a result of these issues strategic planning is now more important than ever for the industry.

To meet the current challenges facing the automotive industry, suppliers are working to collaborate more closely with OEMs and operating in a seamless, global network with a range of partners. For years, automotive suppliers have worked hard to increase efficiency, service and quality levels as a result of the pressure applied by OEMs. To shape their environment and ultimately thrive in an evolving industry, strategic planning plays a major role for suppliers.
The field of case study is specified by the product instrument clusters. Being a complex electrical-mechanical device, instrument clusters were divided by OEMs into three classes according to their functionality, design and complexity: low-line (LL), middle-line (ML) and high-line (HL). Technologically, instrument clusters remain one of the most complicated and high-technologically driven modules in the car.

The case study is also focused on German OEMs. German automotive manufacturers enjoy a global presence and possess important market share. BMW, Daimler AG, Porsche and Volkswagen are some of the major German OEMs that dominates the industry, and they are analyzed in the case-study.

Throughout the case study, the instrument clusters suppliers in Europe are explained. It is essential for European suppliers to be able to deliver quality solutions in changing market place. Because the instrument clusters differentiate a vehicle through its technology, features and appearance, they have to be capable of engineering, sourcing, manufacturing and presence in various markets.

As it is mentioned previously, the testing is done through a case study taking a company F as representative of the automotive supplier and other market segments in order to test the practicability of the model.

The competitors of Company F are named as following:

Company A: Continental AG
Company B: Visteon
Company C: Robert Bosch GMBH
Company D: Johnson Controls
Company E: Nippon Seiki

7.3 External Analysis

7.3.1 Case study – external analysis

Since a good strategic planning model is the elaboration of a strategic analysis made with high attention, the most important part of the customization of the model takes place in this step and it was further researched through the questionnaire.
According to the strategic planning model developed, the strategic analysis step consists of external and internal analysis. The external analysis combines elements from two frameworks – Porter’s Five Forces and the PEST Analysis.

Moreover, deeper research was done to identify the most important elements in the external analysis concerning the automotive supplier industry. As a result of the questionnaire, it was found that the most important factors are competitors, customers, technology and economy.

In this chapter, the customised external analysis is applied through the case study in order to test its applicability.

7.3.1.1. Competitor analysis

The detailed analysis of the competitors can be found in the appendix. The main findings are summarised below:

- Company A has 32% of the European market share for instrument clusters, which makes it the market leader. The acquisition which took place in 2007 will make Company A more powerful in Europe, North America and Asia. Its customers in Europe are Volkswagen, Daimler, BMW and Audi. Currently, the whole instrument cluster production volumes of company A is about 12.6 million units. Three million out of them are produced in NAFTA; six million in Europe; approximately 2 million clusters are produced in Brazil; and 1.6 million in the Asia-Pacific.

- Company B has 13% of the market share in Europe. Company B has a close relationship with the Ford Group which makes it the major supplier for clusters of Ford automobiles. The production volume of instrument cluster is approximately 6.5 million units worldwide. Of this figure, 2.1 million are produced in NAFTA and 2.3 million in Europe.

- Company C is the technological leader in the field of automotive technology. Production of instrument clusters is not the main focus of its business. However Company’s C superiority in technology, excellent project management as well as established relations with its customers make it a desired supplier of instrument clusters for luxury and high-class vehicles. As a result, Company C’s strategy concerning instrument cluster is to concentrate on the high-end and luxury vehicles
market. It main customers in Europe include Porsche, Daimler, Volkswagen, Audi, and BMW. The production volume of instrument clusters is 2% worldwide.

- Traditionally, Company D is one of the most profitable automotive suppliers in the industry. Nevertheless, the instrument cluster business is a relatively new one for the company. It has 19% share of the European market for instrument clusters. Its customers in Europe are PSA, Renault, Daimler, BMW and Audi. Currently the total production volumes of instrument clusters are 4.3 million, from which 3.8 million are produced in Europe.

Company D will lose market share depending on the decreasing sales of GM and Ford. Company D will enter to luxury vehicle market in 2010. Because of the company's dependence on the US market, its strategy is likely to change to focus on European market. In addition, Company D has enough resources for merger and acquisitions, R&D and capital expenditure. In conclusion, Company D will become a very strong competitor in long-term.

- Company E is strong in the Asian and US markets. Over last five years, it has experienced a number of financial achievements. Company E is dependent on its Honda and Mini customers. Its strategy, in the short-term, is to expand in China. In the long-term it aims to become more powerful and have more market share in European automotive market.

- Company F is a European automotive supplier. Its main production activity is instrument clusters for automobiles (47% of the total sales). In addition, Company F produces clusters for automobiles of low, middle and high line for OEMs. Company F has a 17% market share in Europe for instrument clusters. Its main customers are Fiat, PSA, VW, Audi and Porsche.

The detailed competitor analysis is shown in the appendix.

### 7.3.1.2. Customer analysis

The detailed analysis of the customers can be found in the appendix. The main findings are summarised below:

Summary of customer analysis
• VW passenger cars have increased sales and profits in the last few years. Moreover, VW is planning to foster a long-term co-operative with a number of key suppliers. To become a VW supplier, three important keys must be met. These are cost, quality and innovation.

• BMW is planning to be the world’s leading premium class car producer in 10 years. China is it the fastest growing market where BMW has a 26% market share. In addition, emerging markets are considered to be key areas for the company. To become a long-term BMW supplier, suppliers must possess quality, have experience and be flexible to new requirements.

• Daimler’s product range is mainly centred in middle and upper class segments. The company is the market leader in commercial and luxury segments. To be a long-term supplier of Daimler, suppliers must meet its requirement for quality, innovation, cost and global presence.

• Porsche made record sales in 2007 with the help of markets in China, Russia and the Middle East. The key expectations of Porsche from its suppliers are on-time delivery, quality and continuous improvement.

The detailed customer analysis is shown in the appendix.

7.3.1.3. Technology Analysis

The detailed analysis of the technology can be found in the appendix. The main findings are summarised below: Summary of technological analysis:

• Suppliers are gaining more responsibilities in the vehicle development process.

• Suppliers have gradually started to manufacture and supply complete systems

• Human Machine Interface (HMI) and electronics are the key factors that will influence the future design of cockpit modules.

• Total world market for OEM automotive electronic systems is forecast to increase to $161 billion in 2015.
• China, Eastern Europe and South America are forecasted to increase to 25% in 2015.

• The total world market for OEM automotive electronic systems (as defined) is forecast to increase from $129 billion in 2006 to $161 billion in 2015 (CAGR of 2.5%).

• Up until 2015, North America is forecast to continue to be the largest market for automotive electronic systems market.

• The combined proportion of the total market accounted for by China, Eastern Europe, South America and the rest of the world is forecast to increase from 15% to 25% over the forecast period.

• Powertrain is forecast to be the largest automotive electronics sector throughout the period to 2015, but driver assistance is forecast to have the highest growth.

• Support emerging display technologies with cost-optimised driver solutions

• Conform to the analog gauges' advanced requirements for indicator movement

• Provide truly scalable hardware and software platforms to enable design synergies and economies of scale across different carlines and regional requirements

The detailed customer analysis is shown in the appendix.

7.3.1.4. Economic climate analysis

The detailed analysis of the economy can be found in the appendix. The main findings are summarised below: Summary of the economic climate analysis

• Weak global economy and currency fluctuations constitute high risk for OEMs and automotive suppliers

• Emerging markets like China, India, Eastern Europe, South America, South Korea and South Africa present a number of opportunities for OEMs and automotive suppliers.

• Oil prices play a major role in vehicle demand and type.
7.4 Opportunities and threats

Based on the customer, competitor, technology and the economic climate analysis carried out earlier in the study, the risks and opportunities for automotive suppliers and OEMs are presented below:

<table>
<thead>
<tr>
<th>OPPORTUNITIES</th>
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</thead>
<tbody>
<tr>
<td><strong>Emerging Markets</strong></td>
</tr>
<tr>
<td>• Low operating costs</td>
</tr>
<tr>
<td>• Supportive government policies</td>
</tr>
<tr>
<td>• Providing outsourcing opportunities</td>
</tr>
<tr>
<td>• Opportunity to globalize</td>
</tr>
<tr>
<td>• Attractive markets for OEMs and Automotive Suppliers</td>
</tr>
<tr>
<td><strong>Low Threat of Potential Entrants</strong></td>
</tr>
<tr>
<td>• High required investment</td>
</tr>
<tr>
<td>• Necessity of long-term relationships with OEMs</td>
</tr>
<tr>
<td>• Necessity of automotive know-how</td>
</tr>
<tr>
<td><strong>Low Bargaining Power of Sub-Suppliers</strong></td>
</tr>
<tr>
<td>• High amount of suppliers</td>
</tr>
<tr>
<td>• Low differentiation of supplied products</td>
</tr>
<tr>
<td><strong>R&amp;D shifts from OEMs to Suppliers</strong></td>
</tr>
<tr>
<td>• Development of high quality and innovative products</td>
</tr>
<tr>
<td>• Cost cutting with the help of R&amp;D</td>
</tr>
<tr>
<td>• Development and production cooperation with OEMs</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>THREATS</th>
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</thead>
<tbody>
<tr>
<td><strong>High Intensity of Competitive Rivalry</strong></td>
</tr>
<tr>
<td>• High number of competitors</td>
</tr>
<tr>
<td>• High diversity of competitors in terms of products</td>
</tr>
<tr>
<td>• High exit barriers</td>
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<tr>
<td>• Nontransparent market conditions</td>
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<tr>
<td><strong>High Strength of Competitors</strong></td>
</tr>
<tr>
<td>• Tough competition between suppliers</td>
</tr>
<tr>
<td>• High fixed costs</td>
</tr>
<tr>
<td><strong>High Bargaining Power of Customers</strong></td>
</tr>
<tr>
<td>• Limited amounts of customers</td>
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<tr>
<td>• High amount of suppliers</td>
</tr>
<tr>
<td>• High information availability</td>
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<tr>
<td><strong>Global Economic Crisis</strong></td>
</tr>
<tr>
<td>• Decreasing car demand</td>
</tr>
<tr>
<td>• Low profit margins</td>
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<tr>
<td>• Negative ambiance and unpredictable future for OEMs and Automotive Suppliers</td>
</tr>
<tr>
<td><strong>High Oil Prices</strong></td>
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<tr>
<td>• Decreasing car demand</td>
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<tr>
<td>• Increasing costs</td>
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<tr>
<td>• High competition between OEMs</td>
</tr>
<tr>
<td>• Low profit margins</td>
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<tr>
<td><strong>Dollar Fluctuations</strong></td>
</tr>
<tr>
<td>• Cost disadvantages for exporter countries in Europe (undervalued Dollar)</td>
</tr>
<tr>
<td>• Its negative effect on the oil prices</td>
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<tr>
<td>• Imponderable currency exchange</td>
</tr>
<tr>
<td><strong>Technological Risks</strong></td>
</tr>
<tr>
<td>• Requiring mounting space and wiring routes</td>
</tr>
<tr>
<td>• High R&amp;D Costs</td>
</tr>
</tbody>
</table>

Table 7.1 Opportunities and threats
Source: Own elaboration
7.5 Internal analysis

7.5.1. Preparation for internal analysis

7.5.1.1. Definition of KSFs

To start with the case study of internal analysis, it is mandatory to define the KSFs for the company initially. KSFs are of critical importance in order to consistently achieve high productivity. There are at least two broad categories of KSFs that are common to virtually all organisations: business processes and human processes. Both are crucial for building great companies.

Financial perspective

The first KSFs that will be focused on are taken from the financial perspective category. The financial performance of any given business is a major indicator of a company's competitiveness. Company positioning in relation to two major topics, profitability and financial power, will be reviewed. Profitability as a KSF is an important indicator for overall competitiveness. The KPIs of ROS, ROE, and ROCE will be used to evaluate position of the company in greater detail. Financial power as a KSF indicates the ability of a company to withstand the threats or/and to benefit the opportunities presented by the environment. The KPIs used to measure financial power are the indebtedness ratio, the CAPEX to revenue ratio, and credit ratings. These demonstrate the company's the ability to withstand the treats or/and benefit from the environmental opportunities.

Market/customer perspective

The market/customer perspective is another category used for classifying KSFs. A balanced customer portfolio is a key success factor defined under the market/customer perspective. The KPIs the balanced customer portfolio are market share/operating profit and customer portfolio. Market share/operating profit allows for the ranking of competitors according to the effect of the market share on operating profit as defined by the PIMS study (Buzzell and Gale 1987). Customer portfolio provides the basis under which to compare the number and power of the customers each competitors have.

In order to analyse the fulfilment of customer requirements, a qualitative approach is applied. A questionnaire has been filled out by experts to evaluate a competitor's
performance regarding offered price, technology, quality, image and brand name, response time and relationship with customers.

Cost management perspective

Efficient cost management is an important factor for the overall success of the companies operating within the automotive supplier industry. Therefore, the analysis is based on the KSFs from the cost perspective that are very useful to ensure the competitive advantages identifying with efficient cost management. Establishing a separate cost management group provides opportunities if important factors like the economy of scale effect, the workforce efficiency and the export of activities to low-cost countries are explored in detail against an automotive supplier's competitiveness.

Technology perspective

The KSFs included in the technology perspective grouping are reduced to four in order to avoid unnecessary redundancy. These are considered to be the only aspects of the technological perspective which have the greatest significance in terms of a firm's competitiveness.

The KSFs that are selected for the application in the internal analysis as well as corresponding to them KPI are provided in the figure at the below.

The globalisation perspective

The globalization perspective was established as a new dimension for the classification of KSFs. Formerly, it was contained within the market/customer perspective category. The classification of the factors that indicate globalisation in a new group is necessary in order to clearly distinguish the perspective from the internalisation of operations.

In next chapter, the description for each KSFs and KPIs will be provided. It will also be explained why each indicator is useful for the purposes of competitive analysing and what the possible internal processes reflected by them are.
### Performance Topic

<table>
<thead>
<tr>
<th>KSFs</th>
<th>KPIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Profitability</td>
<td>ROS</td>
</tr>
<tr>
<td></td>
<td>ROE</td>
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<tr>
<td></td>
<td>ROCE</td>
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<tr>
<td>Financial Power</td>
<td>Indebtedness Ratio</td>
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<td></td>
<td>CAPEX to revenue ratio</td>
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<tr>
<td></td>
<td>Credit Ratings</td>
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</table>

### Market/Customer Perspective

<table>
<thead>
<tr>
<th>Balanced Customer Portfolio</th>
<th>Market share</th>
</tr>
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<tbody>
<tr>
<td>Fulfillment of Customer Requirements</td>
<td>Price</td>
</tr>
<tr>
<td></td>
<td>Technology</td>
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<tr>
<td></td>
<td>Quality</td>
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<td></td>
<td>Image and Brandname</td>
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<td></td>
<td>Response Time</td>
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<td></td>
<td>Relationship</td>
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</table>

### Cost Management Perspective

<table>
<thead>
<tr>
<th>Low Cost Countries Production</th>
<th>Economy of scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workforce Efficiency</td>
<td>Turnover to work force</td>
</tr>
<tr>
<td></td>
<td>Operating profit to work force</td>
</tr>
</tbody>
</table>

### Technology Perspective

<table>
<thead>
<tr>
<th>R&amp;D Competence</th>
<th>Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technological Portfolio</td>
<td>R&amp;D expense to turnover</td>
</tr>
</tbody>
</table>

### Globalization

| International Presence                   | Close to the Customer       |

---

Figure 7.3 KSFs to be used in the analyzing process

Source: Own development
7.5.1.2. Description of the KSFs

**KSFs for the financial perspective**

Effective finance and investment management is a prerequisite for achieving the success factors of financial power and growth potential. Achieving financial power guarantees that company be able to invest in new technologies and meet the risks and challenges of the environment. It also indicates whether the company has enough internal resources to finance its investment activities or whether it will need to borrow. When the company is able to ensure its financial resources, this means that the company has the potential to grow.

**KSF - financial profitability**

**Operating profit margin ROS**

ROS is calculated by dividing the pre-tax operating income by turnover. It represents a firm's operating profit margin.

\[
ROS = \frac{\text{Operating Income}}{\text{Sales Revenue}}
\]

According to Buzzell and Gale (1987), the ROS is normally higher:

- In rapidly growing markets
- In industries in which the export/import rate is more than one
- When products are standardised as opposed to custom-ordered
- When customers buy in relatively small quantities

The distribution of ROS, as presented in the PIMS study, is presented below.
Figure 7.4 ROS distribution  
Source: Buzzell and Gale (1987)

Thompson and Strickland (1996) define the operating profit margin as a result of the division of EBIT to total sales. Operating profit could be viewed as an indicator of the company's profitability of its current operations. In this calculation, the interest charges from the capital structure have not been included.

*Importance for analyzing*

According to Buzzell and Gale (1987), ROS is a well-known indicator for profitability, and it is also used to evaluate the impact of the strategies applied on outcomes. Therefore, ROS is an extremely important indicator for the analysis.

**ROE**

Thompson and Strickland (1996) define the return on equity (ROE) as a measure of the rate of return on the stockholder investment in the enterprise. It is calculated as a division of net income to the total stockholders' equity.

\[
\text{ROE} = \frac{\text{Net income}}{\text{Total stockholders equity}}
\]

Ross and Westerfield's (2003) calculation for ROE is presented below:
Return on equity generally reveals how much profit a company generates over and above the shareholders’ equity. It is calculated as the ratio of net income to equity. Equity represents the owner’s capital in the company. It also refers to total assets minus total liabilities. In some cases it also refered to as shareholders’ equity or net worth or book value. It can be applied as an indicator of the size of the business and measure of financial stability. According to ICLUB (2006), the five-year average ROE for auto parts and equipment is 29.3.

**Importance for analyzing**

Mard et al (2004) claim that ROE is an essential indicator because it is used for monitoring the value of the company and exploring whether the value is increasing. ROE is indicator for company’s profitability on sales, the effectiveness of its assets and the extent of debt financing.

Simons (2000) describes ROE as a useful indicator for competitive analysis, because it allows for a comparison of the company’s performance with competitors and with its investors expectations. High rates of ROE result in higher share prices and an increased willingness of the shareholders to commit additional financial resources to the firm in order to support the growth of the firm. Conversely, low values of ROE result in the opposite effect.

**ROCE**

Return of the Capital Employed (ROCE) is calculated by dividing the EBIT by the difference of total assets and current liabilities.

\[
\text{ROCE} = \frac{\text{Pretax operating profit}}{\text{Capital employed}} = \frac{\text{EBIT}}{\text{Total assets} - \text{Current liabilities}}
\]

ROCE can be also calculated by using the following formula as stated by Simons (2000):
ROCE = \frac{\text{Net Income}}{\text{Sales Capital Employed}} \times \frac{\text{Sales}}{\text{Capital Employed}}

Detailed analysis of ROCE provides an important additional information about the effective utilisation of the capital and assets.

**Importance for analyzing**

The ROCE ratio measures the efficiency of the business by using the capital invested to generate a profit. ROCE is the indicator used to determine how good the company's utilization of the assets is. The higher the ratio, the more efficient the company. Consequently, the ROCE ratio can be used to analyse the company's efficiency.

**ROI**

The Return on Investments (ROI) ratio is the measure of the profit output of the business as a percentage of the financial investment inputs (Simons 2000). The ROI ratio is not used in the case study for financial analysis but as is the best indicator of a company's profitability, a short description is provided below:

Return on investments (ROI) is calculated as the profit earned from investment divided by the amount invested. ROI is usually used to choose a possible investment opportunity. The investor picks the opportunity that provides a higher ROI. ROI can be used to analyse what makes the investment successful by comparing it with other investments. Distribution of ROI found in the PIMS study is shown below.
Key success factor - financial power

The KPIs for financial power are the indebtedness ratio, the CAPEX to revenue ratio and credit ratings.

Indebtedness ratio

Mard et al (2004) describe the indebtedness ratio as the division of total equity by total assets.

\[
\text{Indebtedness Ratio} = \frac{\text{Equity}}{\text{Total Assets}}
\]

This ratio measures the total amount of assets funded by all sources of equity capital. It can also be computed as one minus the total debt to total assets ratio. In addition, the indebtedness ratio is the reciprocal value of so-called equity multiplier (Ross et al, 2003). The equity multiplier is the coefficient and if it is multiplied with the total equity it will result in the calculation of the total assets. The indebtedness ratio shows what percentage of the company has been financed through bank loans. High indebtedness ratio can indicate that company does not use the maximum available financial sources. If the ratio is low that leads to high credit risk. For example, if the indebtedness ratio has a descending trend and/or is too low, then the bank will not grant additional loans.

Importance for analyzing

Indebtedness ratio is a part of leverage ratios, indicating borrowing capacity (Mard et al 2004). Leverage ratios provide: “an indication of the company’s ability to sustain itself in the face of economic downturns or to borrow funds to support growth and capital projects. Leverage ratios also measure the exposure of the creditors relative to shareholders of a given company. Consequently, they provide valuable insight into the relative risk of the company’s stock as an investment.” (Mard et al 2004: p.99).

It can be concluded that the indebtedness ratio can be used in competitive analysis as an indicator of a firm’s financial power and stability.
CFOA

Cash flow is not used as a KPI because it is compared with the company's investment activities and therefore it is provided for a short description. Cash flow is the difference between the cash inflows and outflows. It is useful for calculating a company's liquid position. For the purpose of the analysis, it is appropriate that the total cash flow is separated in different streams. To the total cash flow, the cash flows from investment, operating and financial activities are included.

Cash flow from investment activities show how much the company has received or lost from its investing activities. Cash flow form financial activities show the money that the company took in and paid out in order to finance its activities. This includes the dividend payments; revenues from selling of new stock, expenses realised to acquire stocks or bonds, any money it borrowed and any money used to repay what previously was borrowed.

The operating cash flow is the cash generated from a firm's normal business activities. This is the KPI used for further operating in the analysis. It was chosen because it shows to what extent the company is able to generate enough cash in order to finance it investments. It is appropriate that CFOA is shown together with amount of the investments. Adding the depreciation to the EBIT and subtracting from the resulting value the taxes can calculate it.

CAPEX to revenue ratio

According to Investopedia (2006), the capital expenditure (CAPEX) to revenue ratio show what percentage of revenues is used by the company to increase its asset basis. For example, the funds used by a company to acquire or upgrade physical assets such as property, industrial buildings or equipment. This type of outlay is made by companies in order to maintain or increase the scope of their operation. The amount of capital expenditures a company is likely to have depends on the industry it occupies.

Importance for analyzing

The CAPEX to revenues ratio shows how a company invests in its future. The higher the ratios, the more aggressive the company is in its investment activities. Comparison of changes in CAPEX over a certain period provides evidence of how
persistent a company is in its investment activities. Furthermore, the CAPEX ratio can be seen as an indicator of a company's strategic intentions.

Credit ratings

Mard et al (2000) describes credit ratings as a reflection of the outside-world view of the company's ability to obtain credit from suppliers and lenders. Difficulties with a company's credit history, capital structure or profitability can result in a decrease of the company's opportunities to obtain credit.

Investopedia.com (2006) states that credit ratings can be long- and short-term and can be assigned to debt obligations as well as securities, loans and preferred stock. Long-term credit ratings are good indicators of a country's investment climate and a company's ability to serve its debt responsibilities. According too Investopedia (2006), credit ratings are assigned by credit rating agencies. The three most highly-regarded agencies are Fitch, Moody's, and Standard and Poor's (S&P's).

The ratings lie on a spectrum ranging between highest credit quality on one end and default or "junk" on the other. Long-term credit ratings are denoted with a letter: a triple A (AAA) is the highest credit quality, and C or D (depending on the agency issuing the rating) is the lowest or junk quality. Thus, for Fitch "AAA" rating signifies the highest investment grade and means that there is very low credit risk. "AA" represents very high credit quality; "A" means high credit quality, and "BBB" is good credit quality.

Ratings that fall under "BBB" are considered to be speculative or junk. Thus for Moody's, a Ba2 would be a speculative grade rating while for S&P's, a "D" denotes default of junk bond status.

Table 7.2 presents an overview of the different ratings symbols that Moody's, S&P and Fitch use:
### Bond Rating Agencies

<table>
<thead>
<tr>
<th>Agency</th>
<th>Grade</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moody's</td>
<td>Standard &amp; Poor's</td>
<td>Fitch</td>
</tr>
<tr>
<td>Aaa</td>
<td>AAA</td>
<td>AAA</td>
</tr>
<tr>
<td>Aa</td>
<td>AA</td>
<td>AA</td>
</tr>
<tr>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Baa</td>
<td>BBB</td>
<td>BBB</td>
</tr>
<tr>
<td>Ba, B</td>
<td>BB, B</td>
<td>BB, B</td>
</tr>
<tr>
<td>Caa/Ca/C</td>
<td>CCC/CC/C</td>
<td>CCC/CC/C</td>
</tr>
<tr>
<td>C</td>
<td>D</td>
<td>D</td>
</tr>
</tbody>
</table>

Table 7.2 Credit ratings of different agencies  

**Importance for analyzing**

The credit ratings provide with overall impression of the company’s financial position. They are complimentary indicator for financial stability that, together with indebtedness and CAPEX to revenue ratios, indicates how attractive each of the companies for potential investors is.

**KSFs - market and customer perspective**

The KSFs used for analyzing in the market and customer perspective are the balanced customer portfolio and the fulfillment of customer requirements. Each of the KSFs are decomposed to KPIs, which are described in the following section.

**KSF - balanced customer portfolio**

**Market share**

Market share is KPI with the complimentary function for providing an assessment of the balanced customer portfolio. In order to better explain the role of market share additionally have been explained terms relative market share and operating profit. Furthermore have been explained defined by PIMS study relationship between market share and profitability.
According to Buzzell and Gale (1987), the absolute market share compares a business unit's sales to the sales of its served market. It can be expressed as a company's sales revenue (from that market) divided by the total sales revenue available in that market. It can also be expressed as a company's unit sales volume (in a market) divided by the total volume of units sold in that market.

**Relative market share**

According to Kotler (2003), relative market share represents the percentage of the sales of the following companies compared with best in class. Compared with absolute market share it is an indicator of profitability per unit.

**Operating profit**

Operating profit or operating loss in the case it is with negative sign is used to depict the company's result from ongoing operations. It is the profit of the company a direct result from the core activities of the enterprise. It is calculated by subtraction of the sale and operating costs from the turnover. It is important to underline that during the following analysis operating profit must not be confused with EBIT. This indicator together with EBIT is useful for determination structure of the earnings.

**Market share/Operating profit**

According to interdependency find in the PIMS study, the market share is an indicator of a company's profitability. Therefore, the opportunity to analyse the level of profitability and market share to the competitors is an important option for defining to what extent this is relevant to each of the competitors.

The PIMS study identified the existence of a strong positive relationship between market share and profitability (Buzzell and Gale 1987). This is illustrated in Figure 7.5.
According to Buzzell and Gale (1987), the strong positive relationship between ROI and market share can be explained by at least four possible reasons:

- Economies of scale
- Risk aversion by customers
- Market power
- A common underlying factor

*Importance for analyzing*

Analysis of customer portfolio provides an accurate assessment of the current competitive position, the segment it serves and the existing relationships with each of the compared automotive suppliers.

**KSF - fulfillment of customer requirements**

The satisfaction of a customer’s requirement and a company’s relationship with its customers is appercepted as the company’s ability to produce highly technological product; to have good relationship and effective communications with the customers, to be flexible and to have achieved high quality certification level. The KPI used for
measuring a customer's satisfaction levels are price, technology, quality, image and brand name, response time and relationship.

Price

The price level is considered to be of particular importance when choosing an automotive supplier. The products produced by automotive suppliers are different in their characteristics and therefore the price required can be at different level in relation to the quality and the specific features of the product. According to Grunig and Kuhn (2002), when price is the only difference between the products delivered by different suppliers, the ability to offer a lower price can be from significant importance for company's competitiveness. Furthermore, the effect lower price has depends on price sensitivity of the industry. The greater the price sensitivity, the lower the required price differentiation ensuring a company's competitiveness. The ability to propose a lower price depends on the efficiency of the company's cost management. In addition, the competitiveness based on price strategy requires the existence of customers who are able to purchase large amounts of a single product. Small order quantity usually requires higher prices.

Importance for analyzing

The price level is especially useful for attestation of competitive position when comparing suppliers delivering the same product (according to OEMs specifications). The company that is able to offer the lowest price for the same product with similar characteristics has the better competitive position. Another use of the price within the analysis is related with the quantity of the order. A company which is able to deliver lower quantities at the same price is considered to have placed themselves in the better competitive position. However, the price level is a useful indicator for a company's overall competitive position only when it is used in combination with analyzing the efficiency of the cost management. Accepting lower prices can result in a lowering of the profit margin which, therefore, threatens the overall competitiveness fn the company in the medium- and long-term.
Technology

Sachsenmeier and Schottenloher (2003) and Becker (2006) explained the tendency for transfer of development activities from OEMs to suppliers. Therefore technological competence of automotive supplier will determine its ability to develop the component or module with desired by OEM quality and capability. Becker (2006) describes the importance of technology for the competitiveness in the automotive industry. According to author, technological capability will give a company an opportunity to withdraw from high-pressure price competition and win an additional technological margin.

Importance for analyzing

Technological leadership will guarantee a better competitive position by ensuring that the supplier will be viewed as a reliable partner in the R&D process, and will be able to develop the product and meet the deadlines stated by the customer. In addition, high technological competence allows suppliers to propose products with higher profit margin. Simultaneously, the existence of technology competence itself does not guarantee success as it can be achieved by high development costs, which are difficult to be covered due to shorter product life cycles (Becker 2006). Therefore, for the final evaluation, it must be considered that to what extent does the existing technology find a practical use in the product development process and in securing higher profit margins.

Quality

Buzzell and Gale (1987) provided following description of quality: "In the long run, the most important single factor affecting a business unit’s performance is the quality of its products and services, relative those of competitors" (Buzzell and Gale 1987: p.7).

The direct relationship between quality, profitability and relative market share is illustrated on the figure below:
Kotler (2003) states that product and service quality, customer satisfaction and company profitability are strongly related. Higher quality results in higher levels of customer satisfaction. This supports higher prices and, sometimes, lower costs.

Importance for analyzing

The ability to offer a product with higher quality forms significant importance for a company’s overall competitiveness. In addition, consistent high quality is of significant importance in terms of customer’s retention. Therefore, quality is a useful KPI for fulfilling a customer’s requirements.

Image and brand name

Becker (2006) described image and brand name as an important measure for the future competitiveness of a company. Furthermore, image and brand name are influential in terms of customer retention. In addition, high customer satisfaction levels can lead to the winning of new clients. Good performance of company’s products in the past is an important persuasive instrument that can be used for advertising. Consequently, it must be mentioned that it takes a long period of persistent good performance in order to establish a favorable company’s image. At the same time, it is very easy for a good reputation to be lost because of flaws in the development and performance of a company’s products.
Importance for analyzing

Good image and brand name make it easier for an automotive supplier company to be awarded a new contract for delivery. Therefore, it is a good indicator of customer satisfaction. However, it can be delivered from a company's technological competence and quality of its product. Therefore its influence can be considered more important in the short-term than from a long-term perspective.

Response time


Response time is especially important for achieving customer satisfaction. Often, the inability to reach the right individual at the firm and/or to have access to updated information results in loss of sales opportunity. Therefore, response time is an element of efficient communication with the customer.

Importance for analyzing

Response time can be considered as an indicator for internal organization of the firm and quality of its sales personal. Consequently, it is a good measurement of a company's ability to fulfil its customer requirements.

Relationship

Kotler (2003) believes that often good selling and negotiation skills are not only key for closing a specific sale, but also for building long-term supplier-customer relationship. Therefore, the salespeople that work closely with key customers must make the necessary effort to establish long-lasting relationships.

Kotler (2003) explains that when a relationship management program is properly implemented, the organisation will start to manage its customers in the same way that it manages its products.

Importance for analyzing

The existence of a good relationship with customers will make it easier for a company to win nominations for ensuring delivery from existing clients. Tradition, in
some cases, a good relationship with the customer can be considered the most important factor when deciding who will be awarded a new contract to supply a particular automotive component. Therefore, the company with a good customer relationship management system has the better competitive position. At the same time, it must be clarified that for a supplier, it is possible to have good relation with one and completely different relationship with other customers. As a result, the existence of good relationship must used for analyzing of all suppliers only regarding one particular client.

**KSF - cost management perspective**

According to Sachsenmeier and Schottenloher (2003), automotive suppliers must deal with ever decreasing prices combined with increases in production costs, especially in terms of development costs.

Consequently, Becker (2006) defines cost management as an essential task for every automotive supplier in order to remain competitive. Figure 7.7 shows the opportunities for cost management optimization (Becker 2006).


The two main components of efficient cost management are increases in productivity and the reduction of the labor costs. Both perspectives are used for analyzing by investigation of economy of scale effect and respectively location and workforce efficiency.

**KSF - Location – low-cost countries production**

From the perspective of cost management, this paper will consider the effect of cost reduction by exporting production activities to low-cost countries. Becker (2006)
states that in relation with type of the supplier and characteristics of produced components each of the suppliers has different profitability limit per geographical region up to which export of activities makes sense. Figure 7.8 shows the high-, middle- and low cost countries.

Figure 7.9 High, low and ultra low cost countries
Source: Own development, based on Company F internal information

Importance for analyzing

The existence of production facilities in low-cost countries will guarantee a company’s ability to achieve price competition. Therefore, analyzing companies in relation to the number of production facilities in the three cost zones is an important assessment in terms of their cost management competitiveness.

KSF - economies of scale

Becker (2006) links economies of scale with so-called volume strategies. According to the author in manufacture of complex standard components only these suppliers will be able to remain competitive, which are able to fully use economies of scale realized as a result of mass production. The size of the business plays a significant part in determining a company’s ability to achieve economies of scale. Furthermore, Becker explains the process of concentration in the automotive market as a result of striving of the companies of the branch to achieve higher market share allowing them to unit costs digression. According to Becker (2006), economies of scale can be
realised through increasing market share, new sales markets, and mergers and acquisitions (see figure below).

![Figure 7.10 Prerequisites for economy of scale](source: Becker (2006) p.189)

**Importance for analyzing**

The ability of the company to realise economy of scale is a guarantee for automotive supplier’s ability to sustain the OEMs constant pressure for price reduction. Furthermore, companies realising economies of scale are able to lower the price of their products and still realise profit margin higher than one realised by smaller competitors with same price level. Consequently, it is appropriate that analyzing regarding economies of scale is done simultaneously with an analysis of the financial profitability.

**KSF - workforce efficiency**

Work force efficiency is a factor for success related to the efficient cost management. The level of labour cost is one of the determinants for workforce efficiency. As can be seen in Figure 7.9, labour cost are important lever for efficient cost management. Lowering the labour cost can be achieved by exporting production activities to low-cost countries as previously mentioned.

According to Buzzell and Gale (1987), work force productivity is directly related to profitability. The KPIs used for measuring workforce efficiency are turnover to workforce and operating profit to workforce.
Figure 7.11 The effect of the Investment /Sales and Productivity to the ROI
Source: Buzzell and Gale (1987)

Turnover to workforce


\[
\text{Turnover per employee} = \frac{\text{Turnover}}{\text{Full-time equivalent employees}}
\]

The higher the revenue, the higher the profit that can be realised per employee.

Operating profit to workforce

Operating profit to work force is calculated by the following formula:

\[
\text{Operating profit per employee} = \frac{\text{Operating profit}}{\text{Full-time equivalent employees}}
\]

It is considered a better indicator of workforce efficiency than turnover to workforce, because it concerns the distribution of operating profit.

Workforce efficiency - Importance for analyzing
Operating profit to workforce as well as turnover to workforce are a measurement of an employee's efficiency. They are measurement for quality of the company organization and are a pre-requisite for retaining the future competitive position.

**KSFs - technology perspective**

The benchmarking in technological perspective will provide with information for know-how of each of the competitors and their position concerning used technology as well as their management of the development process.

**KSF - R&D competence**

The analysis of the technological perspective will provide the information from the know-how of each of the competitors and their position concerning the daily grind used technology as well as their management of the development process.

**KSF - R&D competence**

According to Becker (2006), R&D can be defined as: "...the generating of new scientific-technological knowledge and its combination with already existing knowledge to gain new knowledge, which at least in the long-term may serve the enterprise as a basis for innovations. Development is the transformation of demands of the market in connection with new scientific technological knowledge, gained from research, into marketable products and processes (Becker 2006:p.150)."

R&D competence means to what extent the analysed company has the resources to do R&D.

*Importance for analyzing*

R&D competence is an indicator of a company's ability to be innovative. Furthermore, R&D competence provides evidence of a company's ability to develop products and modules according to the customer specification. Therefore, conducting a R&D competence analysis will show to what degree the company is prepared for new technological challenges and how reliable a partner in development process it is perceived by its customers to be.

**KSF - technological portfolio**
The technology portfolio includes the technologies available for the company. These are the technologies being developed or used in production in a result of company’s R&D management.

**Innovation**

Innovation is the ability to develop new technology in-house.

*Importance for analyzing*

According to Becker (2006), innovations are decisive factor for gaining an advantage. The author further states that only by constant innovation can a company secure a technological lead in highly competitive markets such as automotive suppliers. Innovation can also secure a position of technological leadership, which from its side, will allow a company to withdraw from high-pressure price competition and benefit from so called pioneer profits. The ability to acquire innovation leadership is especially important in conditions of continuous concentration process among automotive suppliers.

**R&D expense to turnover**

R&D expense to the turnover (sales) ratio is also known as R&D intensity.

\[
\text{R&D expense} \over \text{Turnover}
\]

According to Becker (2006), effectiveness of the investments is very difficult to quantify. Therefore, R&D expense to turnover is a useful measurement showing which proportion of trading result the company reinvests in R&D.

*Importance for analyzing*

The ratio shows what the amount of resources invested in R&D is. In a technology intense industry such as automotive one, the R&D expenses are progressively increasing. Therefore, it can be considered an indirect indicator of technological capabilities. Even if a high rate of R&D spending does not directly result in a
company becoming technologically superior to its competition, it at least reveals the company intentions to strengthen its technological capabilities.

**KSFs - Globalisation**

According to Becker (2006), the term of globalisation has gain popularity among many industries and is often mentioned in the automotive industry. The author continues by stating that in the modern world only those companies which are present in all markets in the world are successful. Some of the intentions of globalization of operations are dispersion of cyclical sales, diversification of the market and currency risks. More recently, as in the case of automotive supplier industry, the internationalization is a result of the efforts to be close to the customers. The KSFs used for measuring globalization are international presence and close to the customer.

**KSF - international presence**

Becker (2006) describes that there is an ongoing shift of production to so-called new growth regions of the world economy. According to author, the process of migration is intensified by:

- Increased competition induced cost pressure for OEMs in their home markets
- Increases in the location advantages of low-wage countries, caused by globalisation and modern logistics and communication techniques
- Attractive basic economic conditions such as cheap wages, lower taxes and fewer legal regulations in low-cost countries.

The above factors are the major drivers of the globalisation process for OEMs. At the same time, the necessity to supply them at all production locations worldwide requires that their suppliers also are internationally present. The result is that many suppliers have followed their customers and they have built, and continue to build, additional production capacities abroad. The possible options for expansion of production capacities are through takeovers, joint ventures and a company’s own investment in plant and equipment.

The measurements of international presence used for the analysis are:

- Number of plants per market
- Number of joint ventures per market
Number of R&D offices per market

Number of sales offices and headquarters per market

Importance for analyzing

Comparing the numbers of production sites and offices that each customer has per market provides an insight into the international presence of each of them. Consequently, the better internationally presented the company is, the higher is its possibility to receive nominations for supplier from OEMs. Additionally, it can be judged which are the possible future suppliers of OEMs per market.

KSF - close to the customer

Becker (2006) described the process of the so-called passive globalisation of some of the middle-sized suppliers. It results from the fact that during the process of their own globalization, the manufacturers are demanding the global presence of their direct business partners. This includes the building of a supplier's production capacities within reach of the OEM's own plants.

The analysis for close to customer is the positioning of the plants of different suppliers compared with ones of their current or prospective customers.

Importance for analyzing

The proximity to the plants of customer leads to undisputable logistics benefits. Furthermore, some of OEMs have require the component producer to be globally present in order to be nominated a supplier. The closer the supplier's plant is to the client's, the better the supplier's competitive position.

7.5.2. Case study – internal analysis

Within this case study, the position of the company F in each of the KSFs is valued, and brought to the evaluation table. The outcome of this analysis shows the single performance of the company F in the KSF's.

7.5.2.1. Management summary - internal analysis

The results from the KSF analysis for company F are pointed out in Figure 7.11.

The chosen value range, which is used to point out the performance of company F within the KSFs, goes from "worst in class" (6) up to "best in class" (1).
The results of the estimation through the KSF shows that Company F’s financial profitability and financial power is below the competition’s. In contrast to the financial situation of the company, the balanced customer portfolio stands out with a ranking of above the competition. Unfortunately, the KSF which relates to the fulfilment of customer requirements performs less than expected with a “below market average” rate. The expectations for the locations of Company F are spotted in the analysis as above the competition. The economies of scale, as well as Company’s F R&D competence meets the market average. The efficiency of the workforce did not reach the marked average and is rated one step behind with a “below market average”. The rating of the KSF technological portfolio comes to the same result as for the international presence and the estimation how close the company is to the customer. For all three factors the analysis places Company F below the market average.

To use the information’s from the internal analyse in a more efficient way, the results are prepared for the following evaluation of strengths and weaknesses.
7.5.2.2. Financial Perspective

As mentioned in the beginning of chapter 1, a closer analysis of the KSFs will begin with the financial perspectives. In the figure below, the KSFs concerning financial profitability and financial power are split into their KPIs.

Figure 7.13 Financial perspective
Source: Own development

The ranking concerning financial ratios is undertaken using the formula:

\[ \text{Total Rank} = [2005 \times 0.1 + 2006 \times 0.2 + 2007 \times 0.3 + 2008 \times 0.4] \]

Financial profitability

The following illustrations show the different ranking of Company F, in competition with the KPIs from other companies.
Figure 7.14 Analysis: Return on sales
Source: Company F internal data

Figure 7.15 Analysis: Return on Equity
Source: Company F internal data
The results from the analysis are summarised in Figure 7.16. As it can be seen, Company F is ranked as below the competition with regards to financial profitability. The best in class is Company E, the worst is Company B.

Figure 7.17 Analysis: Financial Profitability
Source: Company F internal data

Financial power

The analysis concerning financial power is shown in the next Figures.
Figure 7.18 Indebtedness ratio
Source: Company F internal data

Figure 7.19 Credit Ratings, long- and short-term
Source: Company F internal data
Figure 7.20 CAPEX
Source: Company F internal data
Figure 7.20 provides a summary of the results from the analysis relating to financial power. Again, Company F is ranked as below the competition. The market leaders are Company A and Company C, and the worst in class is Company B.

<table>
<thead>
<tr>
<th></th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
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</thead>
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<tr>
<td>Indebtedness Ratio</td>
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<tr>
<td>CAPEX</td>
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<tr>
<td>Credit Ratings</td>
<td></td>
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<tr>
<td>Financial Power</td>
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</tbody>
</table>

Figure 7.21 Financial perspective
Source: Company F internal data

7.5.2.3. Market/customer perspective

The KSFs and KPIs used in the analysis for the market/customer perspective are presented in the figure below.
Balanced customer portfolio

The KSF relating to balanced customer portfolio is measured by the customer portfolio, market share, and the combined effect of market share/operating profit KPIs.

The competitors cannot be ranked in relation to the customer portfolio. Therefore, the portfolio of each competitor, which are shown in the illustration, will only be used to provide additional support for the final grade concerning the balanced customer portfolio. The same case is given by the market share comparison, presented in Figure 7.24. The final grade, presented in Figure 7.25, largely reflects the market share ranking and is based on expert opinion.

Figure 7.23 Analysis: Customer portfolio (Sales Europe in Mio Euros, instrument cluster)
Source: Company F internal data
Figure 7.24 Analysis: Customer portfolio (Sales Europe in Mio Euros, instrument cluster)  
Source: Company F internal data
**Fulfilment of customer requirements**

Concerning the fulfilment of a customer requirements is presented in Table 7.6. The grading is based on the expert’s opinion of Company F. With pale yellow the market companies are marked, including the current supplier panel of Daimler.
Table 7.2 Analysis: Fulfillment of customer requirements
Source: Company F internal data

The final results are that the best in fulfillment of customer requirements are Company A and Company C; the worst are Company B and Company E. Company F has a below average performance.

Figure 7.27 Analysis: Market and customer perspective
Source: Company F internal data

7.5.2.4. Cost management perspective

In the analysis relating to the cost management perspective, the KSFs concerning location, economy of scale and workforce efficiency are used. The structure of the analysis is presented in the figure.
The analysis, in relation with production location, is shown in the table. After the calculation of the final grade, the results are weighted to put them into the right order. The weighting ranges are the following: low-cost countries-67%; middle-cost countries-22%; high cost countries-11%.

These grades are in relation with assumed labor costs of 2 euro; 20 euro and 40 euro per hour respectively.

<table>
<thead>
<tr>
<th>Production Location, Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company</strong></td>
</tr>
<tr>
<td>A</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>D</td>
</tr>
<tr>
<td>E</td>
</tr>
<tr>
<td>F</td>
</tr>
</tbody>
</table>

Table 7.3 Analysis: Production location
Source: Company F internal data

The table below provides a comparison in relation with the realised scale effect. Company A is considered to be the best in class and all the other companies are compared with it.
### Scale Effects 2007 Europe

<table>
<thead>
<tr>
<th>Company</th>
<th>Ranking</th>
<th>Production Volumes (cluster units)</th>
<th>Production Volumes (per plant)</th>
<th>Market Share (cluster sales)</th>
<th>Relative Market Share (cluster sales)</th>
<th>Economy of Scale Effect * (cluster sales)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>5.700.000</td>
<td>2.000.000</td>
<td>30%</td>
<td>1,00</td>
<td>0%</td>
</tr>
<tr>
<td>B</td>
<td>4</td>
<td>2.500.000</td>
<td>800.000</td>
<td>13%</td>
<td>0,43</td>
<td>+25%</td>
</tr>
<tr>
<td>C</td>
<td>5</td>
<td>1.000.000</td>
<td>700.000</td>
<td>10%</td>
<td>0,33</td>
<td>+30%</td>
</tr>
<tr>
<td>D</td>
<td>2</td>
<td>3.900.000</td>
<td>1.500.000</td>
<td>18%</td>
<td>0,60</td>
<td>+10%</td>
</tr>
<tr>
<td>E</td>
<td>6</td>
<td>200.000</td>
<td>200.000</td>
<td>1%</td>
<td>0,03</td>
<td>+100%</td>
</tr>
<tr>
<td>F</td>
<td>3</td>
<td>3.200.000</td>
<td>1.300.000</td>
<td>16%</td>
<td>0,53</td>
<td>+15%</td>
</tr>
</tbody>
</table>

**Ranking explanation:** Ranked by Economy of Scale Effect

* based on PIMS study (doubling production volumes leads to 20-30% cost savings)

**Table 7.4 Analysis: Scale Effect**

**Source:** Company F internal data

The ranking concerning the economies of scale effect has been carried out with the results from the PIMS study, according to the assumption that a doubling of production volumes leads to 20-30% cost savings.

The table presents the analysis for workforce efficiency using the KPI of turnover to workforce and operating profit to workforce. The ranking is done using the formula:

\[
\text{Total Rank} = 0,1 \times [2006 \text{ RTO/WF} \times 0,15 + 2007 \text{ RTO/WF} \times 0,35 + 2008 \text{ RTO/WF} \times 0,5] + 0,9 \times [2006 \text{ ROP/WF} \times 0,15 + 2007 \text{ ROP/WF} \times 0,35 + 2008 \text{ ROP/WF} \times 0,5]
\]

For measuring workforce efficiency, a preference is given to the operating profit and the results from later years.
### Work Force Efficiency

<table>
<thead>
<tr>
<th>Company</th>
<th>Ranking</th>
<th>Turnover (Mio. €)</th>
<th>Work Force (Tsd. t)</th>
<th>Work Force Efficiency (Tsd. t)</th>
<th>Operating Profit (Mio. €)</th>
<th>OP / Work Force (Tsd. t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>8,375,0</td>
<td>9,901,0</td>
<td>9,610,0</td>
<td>50,800</td>
<td>190,8</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>13,928,9</td>
<td>14,715,2</td>
<td>13,389,4</td>
<td>49,575</td>
<td>209,6</td>
</tr>
<tr>
<td>C</td>
<td>3</td>
<td>23,616,0</td>
<td>25,265,0</td>
<td>26,392,0</td>
<td>157,942</td>
<td>169,4</td>
</tr>
<tr>
<td>D</td>
<td>3</td>
<td>16,986,3</td>
<td>19,405,0</td>
<td>21,673,7</td>
<td>149,192</td>
<td>167,1</td>
</tr>
<tr>
<td>E</td>
<td>3</td>
<td>937,8</td>
<td>996,3</td>
<td>1,181,8</td>
<td>9,634</td>
<td>103,4</td>
</tr>
<tr>
<td>F</td>
<td>4</td>
<td>3,206,0</td>
<td>3,795,0</td>
<td>4,033,0</td>
<td>18,979</td>
<td>24,213</td>
</tr>
</tbody>
</table>

Notes: for Automotive Division
Ranking Explanation:
Total Rank = 0,1 x [2003 Rank x 0,15 + 2004 Rank x 0,35 + 2005 Rank x 0,5] + 0,9 x [2003 Rank x 0,15 + 2004 Rank x 0,35 + 2005 Rank x 0,5]

### Table 7.5 Analysis: Work Force Efficiency

Source: Company F internal data

The final results from undertaking an analysis from a cost management perspective are summarized in the table below. Company A achieves a ‘best in class’ ranking. Company B and Company E achieve the lowest ranking while Company F performs close to the market average.

![Figure 7.29 Cost management perspective](Source: Company F internal data)

#### 7.5.2.5. Technology Perspective

Figure presents the structure of analyzing the Technological Perspective and its single fields.
R&D competence

The availability of the advanced technology in a company is presented below. Based on expert opinions, the areas of competence for each analyzed company are graded. The method for ranking in this case is done in the same way as in the case with fulfillment of customer requirements. The technical experts of company F are asked to rank R&D competence primarily for the own company and secondarily for its competitors. The scale reaches from 1 to 5 where 1 stands for the highest and 5 for the lowest grade. The final analysis is provided below. Company A is ranked best in the class; B worst and Company F performs in line with the market average.

<table>
<thead>
<tr>
<th>Company</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranking</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Development methodology</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>State of the art development tools</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Platform design</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Testing and validation tools and methodologies</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Availability of skilled resources</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Innovation</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Understanding of customer product and methodology</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Panel of sub-suppliers</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Quality level</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Achieved certification level</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Used components</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Project documentation</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Presentation in front of customers</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 7.6 Analysis: R&D Competence

Source: Company F internal data
Technological Portfolio

The technological portfolio is measured by the KPIs of innovation and R&D compared to turnover. The comparison concerning the available technology is shown below. PROD stands for technology used in production and DEV stands for technology in the process of development.

<table>
<thead>
<tr>
<th>Company</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranking</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Electroluminescent foil</td>
<td>PROD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PROD</td>
</tr>
<tr>
<td>Head-Up display</td>
<td>PROD</td>
<td>PROD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reconfigurable cluster</td>
<td>PROD</td>
<td>PROD</td>
<td>PROD</td>
<td>PROD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Movable gauges</td>
<td>-</td>
<td>PROD</td>
<td></td>
<td>PROD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFT tachometer simulation</td>
<td>PROD</td>
<td>-</td>
<td>PROD</td>
<td>DEV</td>
<td>DEV</td>
<td></td>
</tr>
<tr>
<td>Prism mirror</td>
<td>-</td>
<td></td>
<td>PROD</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>3-D dial design in-house</td>
<td>PROD</td>
<td>-</td>
<td></td>
<td></td>
<td>PROD</td>
<td></td>
</tr>
<tr>
<td>Night vision display</td>
<td>PROD</td>
<td>-</td>
<td>PROD</td>
<td>PROD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optics mirror</td>
<td>-</td>
<td>-</td>
<td>PROD</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Ring pointer needle</td>
<td>PROD</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hi-Density Applique</td>
<td>-</td>
<td>PROD</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 7.7 Analysis: Availability of advanced Technology
Source: Company F internal data

The following figure shows the comparison of the R&D spending to turnover.
Figure 7.32 Analysis: R&D to turnover
Source: Company F internal data

Again, the ranking is carried out using the same formula as in the case with financial ratios.

Total Rank = [2005 R x 0.1 + 2006 R x 0.2 + 2007 R x 0.3 + 2008 R x 0.4]

The summary of the analysis, concerning the Technological portfolio, is shown in the figure below. Company A and Company C realize the best in class ranking; Company E achieves a worst in class ranking while Company F is ranked below or around market average ranking.

Figure 7.33 Analysis: Technology perspective
Source: Company F internal data
7.5.2.6. Globalisation

The structure of the analysis concerning globalisation is presented in Figure 7.44. The analysis for international presence is demonstrated in Table 7.12. The close to customer analysis is carried out by estimating the distance between the customers' and the suppliers' plants. The distribution between the supplier and customer plants is presented in Appendix D.

![Figure 7.34 Analysis: Globalisation](image)

Source: Company F internal data

<table>
<thead>
<tr>
<th>Ranking</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUROPE</td>
<td>6</td>
<td>1</td>
<td>6</td>
<td>14</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>NAFTA</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>MERCOSUR</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>JAPAN</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>RUSSIA</td>
<td>++</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>ASEAN</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>CHINA</td>
<td>++</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>INDIA</td>
<td>++</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Legend: ▲ = Sales Office, + = Joint Venture / Cooperation / Minority interest, ++ = WFOE (Wholly Foreign Own Enterprise) / Plants

Table 7.8 Analysis: International presence
Source: Company F internal data

The summary of the analysis, from a globalisation perspective, is presented in Figure 7.45. The best is Company A, the worst is Company C, and Company F is ranked just below market average.
7.6 Strengths and weaknesses

Based on the internal analysis done inside the Company F, the strengths and weaknesses of Company F are presented below:

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balanced customer portfolio</td>
<td>Low financial profitability and power</td>
</tr>
<tr>
<td>Location</td>
<td>Not able to fulfill the customer requirements</td>
</tr>
<tr>
<td>In relation with production location, Company F has plants mostly in low-cost and middle-cost countries. This issue makes the company competitive.</td>
<td>Regarding the internal analysis, it is found out that Company F’s financial profitability and financial power are below the competition’s.</td>
</tr>
<tr>
<td>Low work force efficiency</td>
<td>Based on the expert’s opinion of Company F, the company has a below market average performance regarding fulfillment of customer requirements.</td>
</tr>
<tr>
<td>Deficiency of technological portfolio</td>
<td>After the analysis using the KPIs of turnover to workforce and operating profit to workforce, it is observed that Company F has a low workforce efficiency and below the competition.</td>
</tr>
<tr>
<td>Not have a global presence</td>
<td>According to key performance indicators, innovation and R&amp;D compared to turnover which are measured in internal analysis, Company F is ranked at last comparing with the competitors.</td>
</tr>
</tbody>
</table>

Table 7.9 Strengths and Weaknesses
Source: Own elaboration
7.7 Strategic Formulation

Besides examining the present state of the automotive supplier market, the research illuminates the future and indicates how the market environment is likely to change. Hence, based on the case study, the strategic recommendations for Company F are explained below:

**Competitive Pressure:** Company F's management is striving to meet growing competitive pressures and the resulting price/margin dilemma. According to the case study, the competition in the European automotive supplier market is so contentious. Furthermore, Company F has a weaker technological portfolio and is not an innovation-driven company. A clearer picture of what the management might do as an internal challenge in order to become a supplier to European OEMs is listed below:

- Improving product and service quality
- Developing innovative and high-tech products
- Keeping up with customers
- Adding or improving customer service

**Globalisation of markets and competition:** By the pervasiveness of information technology and the massive improvement in international logistics, markets are becoming more global, and with the participation of international players, competition is increasing. Especially in automotive industry, the globalisation and penetration rates are higher. In that case, in order to stay competitive, Company F might consider the following suggestions:

- Invest in emerging markets
- Develop aggressiveness in the international markets
- Focus on quality and speed in production

**Fewer players:** Because of the negative effect of the economical crisis and the decreasing demand in the automotive sector, the bigger players who have more financial power will remain and some merger and acquisitions activity will occur in the market. According to the competitor analysis, competitors like Company D and Company E are planning to expand into the Europe market. Moreover, these companies have enough financial resources to undertake for a possible merger or
acquisition. In case Company F has an emergent financial problem, it would be an option to inosculate the powers with these companies.

**Changing customers and their requirements:** As a result of the economical circumstances, there are changes in customers and their requirements. The new trend is low segment cars. OEMs are trying hard to produce more affordable cars. Company F has to become interested in this issue and make some investments to support the OEMs with supplying low-priced products.

**Technological product portfolio:** Technological product portfolio interacts and greatly influences customer portfolio. Company F should continuously streamline its technological product portfolio to ensure that complementary products are in it in order to have a competitive advantage in future. The ability to develop and produce head-up-display might be one of the recommendations. Moreover, middle-line instrument cluster might be equipped with colour TFT display.

**Company image:** Needless to say, customer relationship and the fulfillment of a customer's requirements play an essential role in the industry. Image together with intensive lobbying are the most critical factors during negotiation phase with OEMs in order to receive the nomination on the most beneficial for the supplier conditions. As a result, Company F should seek to create reputation based on reliability. Company F should stick to its project time and quality all the time.

**Workforce efficiency:** As the slump in the economy continues to put pressure on companies throughout the world, workforce efficiency becomes more important. With regards to the internal analysis, Company F has a low workforce efficiency. To remain competitive, it's essential that Company F optimises the effectiveness of its workforce. In order to achieve workforce efficiency improvements, the processes inside the company should be modernised. Company F should create a productive and efficient environment throughout its plants. In addition, workforce management might be applied. Therefore, methods like training, scheduling and motivating employees should be performed. As a result of all these recommendations, the overall operating cost of Company F will be reduced and the workforce efficiency will be increased.
8. **EVALUATION OF APPLICABILITY**

The main point of the case study was to test the practicability of the developed model in terms of producing reliable and practicable results for the usage of strategic planning. The applicability will be evaluated in the next chapter.

8.1 **Evaluation of external analysis**

Firstly, in order to evaluate the external analysis, the sources which are used for analysing the external factors are listed below. As a result, it will be possible to examine the reliability and practicability of the data concerning the external analysis.

<table>
<thead>
<tr>
<th>EXTERNAL ANALYSIS</th>
<th>SOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Competitor Analysis</td>
<td>X</td>
</tr>
<tr>
<td>Company A</td>
<td>X</td>
</tr>
<tr>
<td>Company B</td>
<td>X</td>
</tr>
<tr>
<td>Company C</td>
<td>X</td>
</tr>
<tr>
<td>Company D</td>
<td>X</td>
</tr>
<tr>
<td>Company E</td>
<td>X</td>
</tr>
<tr>
<td>Company F</td>
<td>X</td>
</tr>
<tr>
<td>2. Customer Analysis</td>
<td>X</td>
</tr>
<tr>
<td>BMW AG</td>
<td>X</td>
</tr>
<tr>
<td>Daimler AG</td>
<td>X</td>
</tr>
<tr>
<td>Volkswagen AG</td>
<td>X</td>
</tr>
<tr>
<td>Porsche AG</td>
<td>X</td>
</tr>
<tr>
<td>3. Technology Analysis</td>
<td>X</td>
</tr>
<tr>
<td>4. Economy Analysis</td>
<td>X</td>
</tr>
</tbody>
</table>

Table 8.1 Sources used for analyzing the external factors
Source: Own development

Based on the developed model, the first external factor analyzed are the competitors. In this step, the main competitors are analyzed in terms of structure, financial achievements, R&D investments, workforce, instrument clusters production, market
share, globalisation and corporation strategy. In order to do a reliable and practicable competitor analysis, first degree sources such as the company's annual and financial reports, company's presentations for investors and company official website, are used. These sources can be downloaded or ordered from the company websites. Additionally, internal data of Company F, which is reliable, is applied in required parts.

Since the developed model is tested through an automotive supplier that produces high tech products, especially instrument clusters, the attitudes of the customers, regarding needs, financial power, purchasing behaviors, and the supplier relationship with its customers, has become more important. In order to offer better solutions in line with the customer expectations, it is essential to use reliable and practicable sources. For that reason, sources published by the customers - which are annual report, interim report and official website - are applied and used as main sources. Additionally, recent years' market research reports of the research companies like Frost & Sullivan are used to analyze the supplier behavior of the customers. Again, internal data of Company F is used to fill in the required parts.

In the technology analysis, today's automotive electronics perspective is examined. During the technology analysis process, journals, articles and books are used as a source in order to define technologies and current advancements in the market. Moreover, the graphs taken from research reports are used to highlight the current and future technology perspective. Besides, Company F's internal data provides a reliable and practicable source to explain the instrument cluster technology.

The economy is an external factor that changes continuously. For that reason, in order to obtain up-to-date and reliable economic data, information from websites which are focused on economic progress worldwide, are used as a source. In the economy analysis step, essential economies like US and EU are researched. In addition, emerging markets inside China and Russia economies are analysed. Subsequently, changes in oil prices and currencies are checked. Furthermore, the effects of the weak global economy and uncertain fuel prices over European automotive industry are presented in order to provide insight into the market and to help develop future strategies. To analyse all these factors journals, articles and research reports are used as sources.
To evaluate the applicability of the external analysis in terms of reliable and practicable outcomes, the checklist, evaluation of applicability of the sources, is presented below:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy to obtain</td>
<td>X X X X X X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X X X X</td>
</tr>
<tr>
<td>Reliable</td>
<td>X X X X X X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X X X X</td>
</tr>
<tr>
<td>Up-to-date</td>
<td>X X X X X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X X X X</td>
</tr>
<tr>
<td>Comprehensible</td>
<td>X X X X X X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X X X X</td>
</tr>
<tr>
<td>Have an informative value</td>
<td>X X X X X X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X X X X</td>
</tr>
<tr>
<td>Easy to apply</td>
<td>X X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X X X X</td>
</tr>
</tbody>
</table>

Table 8.2 Evaluation of applicability of the sources
Source: Own development

The checklist shows that sources accomplish the circumstances of the practicability. For that reason, the external analysis is applicable. The outcomes are reliable and comprehensible.

In conclusion, it is confirmed that the external analysis is applicable after the evaluation of sources and the external factors analysed. It is crucial to see and identify the attractive opportunities in the market. In the SWOT analysis, opportunities and threats are clarified as outcomes of the analysis of the external factors. These are essential and helpful outcomes which maintain the company's competitive advantage.
8.2 Evaluation of internal analysis

The first part of evaluation concerns the practicability of the KSFs and their handling in the business analysis in general. First the availability of data for the analysis, according to each of the KSFs, was considered. The attestation is provided in Table 8.1.

The figure below shows, under each listed KSF, the corresponding KPI. From the checklist it becomes evident that there are no KSFs that are impaired by a lack of data and which endanger the final outcome. Most of the KSFs have sufficient data for an analysis and only the financial profitability and technological portfolio show some missing data from the analysis. Those two remaining factors take not the full range of the necessary data, but examination is still possible for significant results. The crosses in the overview chart show the existence of data for each company, and how it effects on the analysis in under the specific KSFs.

No data was collected regarding the indebtedness ratio of Company A and Company C. Bearing in mind that this analysis provides a foundation for strengths and weaknesses, this can influence the final outcome. There is also no data available for two of the companies concerning their R&D expense to a ratio of turnover. For the remaining KPIs there is missing data for one of the companies but it is still possible to make an adequate comparison.
The success factor relating to the balanced customer portfolio is an important KSF in the automotive supplier industry. With regards to undertaking a qualitative analysis, it provides the only means of assessing the company's position. The market share KPI is used only as a support for the final expert grade. The market share KPI is also used as an indicator for the size of the business.
The analysis for the fulfillment of a customer’s requirements is based on expert opinions. The comparison in this case concerns just one customer, DaimlerChrysler. There are two points that could be criticised by the analysis concerning this KSF. Firstly, only three of the analysed competitors are included in current customer’s panel for suppliers. Secondly, even if there is a grade for customer perception of Company E in Table 7.36, this company is generally not known in Europe and the given grade invites questions.

The analysis for R&D competence is done by expert opinion. Therefore, it is difficult to assess the real position of the indexed companies correctly. The subjective expert opinion is also the main point that could be criticized for the analysis of the KSF technological portfolio and its derivate KPI innovation.

In addition, there is no data for R&D expense in ratio to turnover regarding Company A and Company E. Therefore, the final rankings can be misleading.

In the end, this evaluation examines to what extent the analysis of the KSFs are, by providing a basis for adequate market analysis and for the development of Company F’s strategy concerning DaimlerChrysler.

Based on the analysis, the conclusion can be set up that the information for the company’s strengths and weaknesses, directly derived from the described analysis, is insufficient for an adequate SWOT analysis. Certainly it identifies some of the most important points regarding the company’s strengths and weaknesses.
9. SUMMARY

The result of the research project was the development of a strategic planning model for the automotive supplier industry with a full description of the strategy process and the contents of each step of the strategic process that was identified. The primary objective was to develop the model specifically for the automotive supplier industry, and in this respect the objective of the thesis has been achieved.

Whereas the comprehensive examination and critical acknowledgement of the various strategic concepts analyzed served as a basis, it was possible to develop a classification in analogy to Mintzberg (Mintzberg 1994) followed by a deeper examination in the fields of:

1. Prescriptive (deliberate) versus descriptive (emergent)
2. Capabilities (inside out) versus opportunities (outside in)
3. Analytical positioning

Empirical studies about the trade-offs highlighted further important findings i.e. the role of environmental dynamics.

The aim of the secondary research was to review a number of strategic planning theories in order to explore the important findings and apply the relevant hypothesis. This first part was successfully completed.

To gain an insight into what automotive supplier experts expect from a strategic planning model which is best suited to the requirements of the market, the next step was to conduct some primary research in the form of a questionnaire. The respondents were asked a series of in-depth questions about the methods and elements to be considered during the strategic analysis stage. Their answers provided the fundamental basis of the strategic planning model. The opinions of the industry experts thus deduced rendered a more detailed picture of the specific industry conditions relevant to automotive suppliers.
Out of the primary research, the following major findings were explored:

Finding 1: Three basic steps of a strategic planning model were identified.

Finding 2: The automotive supplier industry operates in a dynamic environment and companies operating in dynamic environments use deliberate, prescriptive planning practices but also include some emergent learning processes.

Finding 3: It was also discovered that there is a relationship between stable environments and the use of inside-out approaches, and between dynamic and turbulent environments and the use of outside-in approaches. Thus, companies in dynamic environments need to maintain a balance between both situations, matching internal strengths to external opportunities.

Finding 4: With regard to the external analysis process, the automotive supplier industry needs to focus on competitors, customers, technology, the economy, suppliers, potential entrants and substitutes.

Finding 5: It was found that KSFs are an important tool for use in the internal analysis process.

Finding 6: This was followed by the need undertake of a SWOT analysis.

Finding 7: Strategic formulation is the next step after SWOT analysis.

Finding 8: The last step is strategic implementation.

Through these findings, the importance of conducting further analysis on the KSF was clearly seen. This is especially important when one considers that the key factors for success vary among industries and that it is necessary to develop an industry-customized framework. Therefore, it was necessary to analyze the theoretical foundations of KSFs and to provide a customized framework for the automotive supplier industry. The framework consists of important KSF found for this industry which are: Financial, Management, Market and Customer and Innovation and Growth perspective.
After combining the primary and secondary research results to develop the strategic planning model best suited to the needs of the industry, the model was set up.

The next figure shows the process and the steps:

![Strategic Planning Model for Automotive Supplier](image)

Figure 9.1 Strategic planning model for the automotive supplier industry
Source: Own elaboration

The final chapter deals with the applicability of the model for the industry. This was carried out by a case study as a first verification of practicability which was successful completed.
10. REFLECTIVE DIARY

10.1 Learning the Basics

The DBA is a practitioner doctorate designed to make a significant contribution towards the enhancement of professional practice in the area of management. The degree has modules to be passed at the beginning in addition to original research which must be passed before proceeding to the primary research. My research was undertaken within the organisation I work for and addressed a specific problem.

The pre-study phase was a very important and essential period. Without it, it would have been quite impossible for me to have achieved the same result, the same progress and the same efficiency as regards the project which took me 4 years to complete. Besides this, I enjoyed meeting and talking to other DBA students during the weekend seminars where our professors explained the lessons. However, after each such seminar, there was intense homework waiting to be done.

The pre-study phase consists of attending several cohort seminars and each module of the programme has to be completed successfully before embarking on the next. As a research student I was actively encouraged to participate in these School seminars and to discuss my research with our professor and other students.

Without the well-defined and structured process of the first year, listening to our professors during the weekend seminars, receiving and studying the handouts, documentation and examples, I would for sure not have been able to follow up the details and contents of the major DBA topics consistently. This is because of the difficulty one may have with self-learning in topics quite difficult to understand.

The first module focused on Philosophical Underpinning for Research Methods. It consisted of two assignments. The first concentrated on explanation of how research design is influenced by the background assumptions based upon different paradigms and indications of what paradigm to bring to one's own DBA thesis and the strengths and weaknesses of it. The second assignment then dealt with explanation of the meaning of fifteen research concepts and providing an explanation of how an understanding of the concepts may help in the compilation of a DBA thesis.
The first module was followed by a seminar in Qualitative Research Methodology which enables students to understand and apply qualitative research methodology. The objective was to develop a research or consultancy proposal that sets out how students will address the issue within their workplace which led me to the following research project:

The determination and description of what the customers of my organisation have noticed about qualitative characteristics of our products, customer services, and quality with the objective of eventually coming to a conclusion as to why the customers are satisfied or, as the case may be, dissatisfied, and in general, how they perceive the whole company under qualitative aspects.

After analysis of results and cognitions of this research paper, it was possible to derive recommendations for the company in order to prepare the organisation to be fit for the future.

Thereafter, the next module focused on quantitative methods. My study in this area was conducted to measure the level of general satisfaction of employees at my organisation. The employees' level of general satisfaction was reviewed in the context of the time they were able to spend on their favourite outside activities and hobbies. Another objective of this study is to evaluate the level of employees' job satisfaction and their perception of leadership. The survey started with a literature review and was continued with a quantitative analysis based on interviews with the company's staff. A presentation of the data collected and the results of the analysis carried out with it are followed by the conclusions and recommendations together with an assessment of the methodology used.

After this module, I attended to the module of critical literature review. The objectives were to support students in developing their ability to engage critically as readers of management texts, research reports and proposals.

Within this module, I learnt, for example, to check for a systematic and considered approach, to examine my own bias and make it better, using clarity and logic in the structuring of the argument, and a proper use of language, using assumptions stated and showing clarity of interpretation.
The last module was the writing of the proposal with the objectives of understanding the requirements of a suitable research design, being able to understand the requirement of a DBA thesis and being able to write an acceptable DBA research proposal.

After having completed all the modules, I feel that I have grown in academic and profession because I am better able to review and read reports and I learnt several methods which would help me to undertake my research and which helped me in business life. It is important to stay critical and not to accept what is given. Besides this, exchanging approaches and ideas with other students was a fruitful experience too.

10.2 Starting the DBA Thesis

The research undertaken has to be rigorous to be worthy of a Doctorate and immediately relevant to the world of management through addressing real problems. It is a Practitioner Doctorate and served as motivation for me to start the DBA programme and starting is always difficult and exciting. This because of the huge amount of interesting information one has to deal with.

Reading and trying to understand were my primary occupations over several months at the beginning. Not to forget structuring, searching, choosing and verifying. Besides this active phase the passive has a similar importance value. Getting rest and distance to rethink what has been learnt is crucial too.

In this sense, it is quite important to distinguish what needs to be focused on and what is interesting but not essential. The key lies in the research question as the starting point of the whole project grounded by the proposal writing which describes the main first steps and contents.

In developing the research proposal, one has to be clear about the difference between research and consultancy. My proposal was developed around a research question, trying to address a topic which is new (not just to me or my organisation) and contributes to a body of knowledge.
The idea to concentrate and learn much more about strategy and to develop a strategic model was born a couple of years back. To combine it with a DBA programme was a win-win situation as, on the one hand, I could dive into the field of my favourite theoretical topic and, at the same time, learn how to do a research project. It goes without saying that the research question is crucial as it is the starting point for the whole project. For me it was very exciting to search for strategic books and to learn the perspective of the main thinkers.

Besides this, a strong influence about the chosen topic might come from one's own workplace and the industry one is working with. In particular, I recognized that the formulation of a strategy is of significant importance for guaranteeing overall business competitiveness and success. There are many different analytical techniques and strategic concepts that have addressed the issue of the determination of a strategic planning process and concept.

It was challenging for me to develop such a concept for the automotive supplier industry which is greatly influenced by the automotive industry and I found that no specific model exists. Suppliers have to bear multidimensional pressure from car manufacturers in several directions. In the first place, manufacturers present numerous conflicting requirements and have to deal with extreme environmental difficulties. Their customers, the automotive manufactures, have high negotiating power and often increase their pressure on suppliers to reduce costs, improve margins and enhance their competitive position. This becomes even more critical as the industry is currently facing a tremendous slowdown of the economy.

What may help to solve this dilemma is a business process that helps to formulate and implement strategies for reaching each supplier's goals - a strategy which helps suppliers to face their challenges and positions them in this difficult market. When speaking of such an approach, what comes to mind as a possible way is strategic planning - a business discipline that has been discussed by various authors in the last decades.

Working in this industry for many years, I wanted to examine if a specific strategy model could be developed which meets the market requirements and helps the suppliers to be successful.
10.3 Research and Writing

Looking back and comparing the completed thesis to what I wrote in my proposal, I must say that I necessarily added research chapters. I would estimate that less than 40% was defined at the beginning and some more important chapters had to be worked in, in order to fulfil the criteria of DBA research. The explanation lies in the fact that, during writing, knowledge grows and this is a kind of evidence and indicator of the learning process of the exercise.

The first step was to scrutinise how the research handles the development of knowledge; it was essential to outline the underlying research method and design.

Firstly, the research is based on theoretical research and aims to review existing strategic planning concepts in order to explore the important findings and relevant hypotheses.

While the former step was purely theoretical, an exploratory research of the automotive supplier industry analyzes the opinions of experts about the strategic approach taken in their companies and the strategic approach seen as optimal.

The execution of the primary research went quite well. Through electronic mailing all companies could be easily reached and after several weeks the responses had used their access to the online questionnaire which was well perceived as no major concern happened. The response quote and time was surprisingly good and efficient in order to exercise statistical analysis. Very interesting was the feedback of the industry experts which showed a difference in what the companies need as a strategic planning process to what is currently used. This gab is especially for me of high attention because I am planning to offer consultancy support in the area of strategy and management in the future.

Based on these two steps, a theoretical strategic model could be developed and tested through a case study within a defined an automotive supplier market segment. The final step foreseen was to discuss the findings and illustrate the possible limitations. Furthermore, the academic procedure of this research is measured by the results achieved and their applicability for other automotive suppliers.
Everyone has taken the longer road once in his life and recognized what kind of effort it may take compared to the fast track. Taking wrong paths in one’s own research could endanger the whole project. A good road for success is getting feedback and paying attention to convert the positive criticism of the supervisor into the best solution.

In this sense, I am very thankful for the support given to me by my supervisor. He guided me with questions throughout the difficult times — and not by providing solutions. It was challenging to have to answer the questions myself, but, at the same time, it was motivating too, finding the solutions by myself.

Another aspect was that my company would not accept me being less professional and showing less performance. So dealing with both a full working day and, on the other hand, leaving some hours free every day for course work and the thesis was not always easy.

Moreover, my wife and young daughter expect a relaxed and friendly father who has time to go on trips, play games, help and be a listener to their thoughts and problems. I would be lying if I said that I always meet their expectations and I would be lying if I said that they fully understand and support me with the tough times I have had with the double workload. From Monday to Friday, my wife shouldered the family business completely with the main parts of housekeeping and bringing up the children. This enabled me to study and I am very thankful that I could have a good work-life balance under these circumstances.

10.4 The final phase

The final phase was full of checking, verifying, rewriting and readjusting. For example it was quite unbelievable to me how many hours I spent to achieve and keep the required format. Linking the headline, graphs and figures to the contents and frequently checking the wording and meaning of the whole thesis is tremendously time consuming. I enjoyed setting up the strategic module and writing the summary. However, for me not the model and the summary were the final outcomes, but the findings along the complete research paper also represented the results of my research.
I learnt a good interpretation of knowledge, through the seminars and original research and a detailed understanding of techniques for research both grounded on the ability of a systematic acquisition and understanding of substantial body of knowledge. In addition, I learnt a systematic approach and to keep an effective way forward. This was even more important as my target was to finish the thesis within an overall period of 4 years.

Moreover, I learnt several for me, completely new strategic concepts and they were very interesting. I recognized that besides Porter’s view, there were different important concepts to be looked at.

But it was not only by working on my own research project that I learnt a lot. Working with students in my organization and being their supervisor helped me to directly transfer the knowledge of the modules into practice.

However, I enjoyed working out a primary study by sending out questionnaires. It was very exciting to get the feedback and analyse the responses.

I looked forward to receiving the books I ordered about strategy and read them with excitement and pleasure. Experiencing the theory about key success factors was a big satisfaction too.

There are several things which comes into my mind what I would do differently after completing the study. One major item concerns the approach to examine existing theoretical strategic concepts. A more narrow focus on concepts referring to strategic planning and in the same time do a deeper investigation into trade offs and the influence of environmental condition would have a higher benefit to management practice and to new topics which become more and more importance as high velocity seems to be a normal market behaviour nowadays.

Another topic lies into the possible relation of environment condition and the need for either more internal or more external analysis. Out of the responses a first relation could be detected that dynamic environment requires more attention into external analysis and so in addition a higher importance into opportunity based approach too.

So far nothing specific could be found in literature. This topic would be the second item for which I would wish doing a deeper analysis.
It goes without saying that one must have endurance, perseverance and a kind of idealism in order to manage the relatively long period of 4 years. Studying becomes a major priority. Writing the methodology part, doing the analysis for statistics and reading empirical studies was hard. However, overall I have had fun, otherwise I would have given up the project. Overall, I am very happy proud, satisfied and relieved to have finalized the thesis.
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APPENDIX A. QUESTIONNAIRE

Strategic Planning in Automotive Suppliers

University of Surrey

Survey 2008

Through a list published by the VDA (Verband der Automobilindustrie) a number of companies have been randomly chosen to participate in this research project, one of the chosen companies is yours and therefore this questionnaire has reached you.

This survey is being carried out to find out what are the tendencies in the automotive industry regarding strategic planning models. All the information contained in the questionnaire will be used for research purposes only and your identity will not be disclosed. Please answer the questions freely, to the best of your knowledge.

ALL THE INFORMATION PROVIDED WILL BE STRICTLY CONFIDENTIAL

The questionnaire is designed to take you between 10 – 15 minutes. Please answer all the question in the space and form provided.

Annual Sales: million Euro

Operations in

- Please Choose one -

Your position: - Choose a Position -

Time in the company: years

Environment: - Choose an Environment -

(External conditions surrounding the company in terms of change in demand, competitors, technology, regulations, etc)

1. According to theoretical concepts of strategy, there are two main currents of thought to strategy formulation. The prescriptive one favors a deliberate, rational, analytical, formal process. The descriptive one favors non-deliberate, adaptive, emergent, intuitive, non-rational, incremental, learning process. According to your knowledge and experience, which approach is used in your company?
2. How would you change the ratio to fit better the needs of your company?

3. Another trade-off discussed in strategic literature is the approach to strategy formulation. Traditionally there was an outside-in approach, which meant analyzing the competitive environment for strategy formulation. However during the last years there was increasing attention to Resource Based Models which focus on internal capabilities of the company to develop the own strategy. What approach is currently being used in your company?

4. In your opinion, what is the specific importance of each one?
5. According to several authors, the environment dynamism has an effect on the different approaches that should be taken in strategic planning. In your judgment what level of dynamism (change in demand, competitors, technology and regulation) is the automotive supplier industry currently undergoing?

- Stable (little change)
- Dynamic (continuous predictable change)
- Turbulent (discontinuous unpredictable change)

6. In your opinion, what level of dynamism will the automotive supplier industry face in the future (5 to 10 years)?

- Stable (little change)
- Dynamic (continuous predictable change)
- Turbulent (discontinuous unpredictable change)

7. How are the general basic steps of the process carried out within your company?

<table>
<thead>
<tr>
<th>Step</th>
<th>Perfectly</th>
<th>Acceptably</th>
<th>Poorly</th>
<th>Not done</th>
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</thead>
<tbody>
<tr>
<td>Strategic Analysis / Diagnose</td>
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<tr>
<td>(analysis of environment, company and competitors)</td>
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<tr>
<td>Strategy Formulation</td>
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<tr>
<td>(setting of goals and formulation of strategies)</td>
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<tr>
<td>Strategy Implementation</td>
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</table>
8. Based on your previous answer, what is in your opinion the specific importance level of each step?

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<thead>
<tr>
<th>Step</th>
<th>Vital</th>
<th>Important</th>
<th>Not Important</th>
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<td>Strategic Analysis / Diagnose</td>
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<td>Strategy Implementation</td>
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<tr>
<td>(strategies put into practice)</td>
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</table>

9. What other steps do you consider important?

10. For the first step in a generic model, namely strategic analysis, what are the elements that are considered in your company?

<table>
<thead>
<tr>
<th>Element</th>
<th>Often used</th>
<th>Rarely used</th>
<th>Not used</th>
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<tbody>
<tr>
<td>Internal Analysis (assessment of internal weaknesses and strengths)</td>
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<tr>
<td>External Analysis</td>
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<tr>
<td>(assessment of external conditions, threats and opportunities)</td>
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11. What is, in your opinion, the specific importance level of each step?

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<tr>
<th>Step</th>
<th>Vital</th>
<th>Important</th>
<th>Not Important</th>
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<td>Internal Analysis</td>
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<td>External Analysis</td>
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<tr>
<td>(assessment of external conditions, threats and opportunities)</td>
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</table>
12. What other elements do you consider important?

13. What factors does your Organization include during External Analysis?

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<tr>
<th>Factor</th>
<th>Often used</th>
<th>Rarely used</th>
<th>Not used</th>
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<tr>
<td>Competitors (companies in the same market segment)</td>
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<td>Suppliers (suppliers of the main raw materials)</td>
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<td>Substitutes (products that satisfy the same need)</td>
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<td>Customers</td>
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<td>Potential Entrants (Companies that may be competitors in the future)</td>
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<td>Market Opportunities (situations that could benefit the company)</td>
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<td>Government (political trends)</td>
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<tr>
<td>Legal Regulations (local and international regulations)</td>
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<tr>
<td>Society (habits, culture, demography)</td>
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<tr>
<td>Economy (economic situation and trends)</td>
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<td>Technology (technological level of development)</td>
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14. What is, in your opinion, the specific importance of these factors?

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<th>Factor</th>
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15. Which other factors do you consider important in the external analysis?
16. What kind of tools does your Company use to perform an Internal Analysis?

<table>
<thead>
<tr>
<th>Analysis of individual departments and functions</th>
<th>Often used</th>
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<tr>
<td>Analysis based on Value Chain</td>
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<tr>
<td>Analysis based on Key Success Factors</td>
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<tr>
<td>Analysis of Strengths and weaknesses</td>
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17. What is, in your opinion, the specific importance of them?

<table>
<thead>
<tr>
<th>Analysis of individual departments and functions</th>
<th>Vital</th>
<th>Important</th>
<th>Not Important</th>
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<tbody>
<tr>
<td>Analysis based on Core Competencies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analysis based on Value Chain</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Analysis of Strengths and weaknesses</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18. What other tools or frameworks do you consider important during the internal analysis?
19. Please feel free to share with us some final thoughts about strategic planning in the automotive supplier industry.

This is the end of the questionnaire. I hope you find completing the questionnaire enjoyable, and thank you for taking the time to help us. A summary of the results may be sent to you upon request.
### APPENDIX B. LIST OF COMPANIES

<table>
<thead>
<tr>
<th>Company according to VDA 1</th>
<th>Company according to VDA 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB Elektronik Sachsen</td>
<td>FERMA POLYMERSERVICE</td>
</tr>
<tr>
<td>ACR Automotive Components Reiter</td>
<td>Filzfabrik Fulda</td>
</tr>
<tr>
<td>AEROLIFT Autozubehör</td>
<td>Forbo Adhesives Deutschland</td>
</tr>
<tr>
<td>Alcan Aluminium Presswerke</td>
<td>Frankische Rohrwerke, Kirchner</td>
</tr>
<tr>
<td>Alcan Kapa</td>
<td>FUBA Automotive</td>
</tr>
<tr>
<td>Alcoa Automotive</td>
<td>FUBA PRINTED CIRCUITS</td>
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<tr>
<td>Alcoa Fastening Systems</td>
<td>GALVANOFORM</td>
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<td>Almeier Präzision AG</td>
<td>GEBRA Sicherheitsprodukte</td>
</tr>
<tr>
<td>Alulight International</td>
<td>Georgsmarienhütte</td>
</tr>
<tr>
<td>AMB-Components Hungary Bt</td>
<td>Gesipa Blindnietechnik</td>
</tr>
<tr>
<td>APAG Elektronik</td>
<td>GGB Germany</td>
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<tr>
<td>Apparatebau Kirchheim-Teck</td>
<td>Greiner Gummitechnik</td>
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<tr>
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<td>Greiner Perfoam - Hafen Enns-Wirtschnitz</td>
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<td>Grupo Antolin Deutschland</td>
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<tr>
<td>Wilhelm Becker</td>
<td>GTG Gummitechnik Wolfgang Bartelt</td>
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<tr>
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<td>Hamlin Electronics</td>
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<td>BENSELER Holding</td>
<td>C. Rob. Hammerstein</td>
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<td>Berning + Söhne</td>
<td>Dr. Haubitz</td>
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<tr>
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</tr>
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<td>Hellermann Tyton</td>
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<td>Friedrich Boysen</td>
<td>Hengst</td>
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<td>Hans Hepp Verbandstoff-Fabrik</td>
</tr>
<tr>
<td>BUFAB</td>
<td>HERA Herm. Rahmer</td>
</tr>
<tr>
<td>BVI Magnetprodukte</td>
<td>Honsel Umformtechnik</td>
</tr>
<tr>
<td>Carbo Tech Composites catem</td>
<td>hsf Hessische Schraubenfabrik Weite</td>
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<tr>
<td>CDP Bharat Forge</td>
<td>Hydro Aluminium</td>
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<tr>
<td>CNC-Metallproduktion</td>
<td>Intedis</td>
</tr>
<tr>
<td>Comtec Elektromech Componenten</td>
<td>Internet Neunkirchen</td>
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<td>Delphi Deutschland</td>
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<tr>
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<td>Karossenwerke</td>
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<td>EGGSTON Automotive Eggenburg</td>
<td>A + E Keller</td>
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<td>Elektrobit Automotive</td>
<td>Kemmerich</td>
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<td>KES</td>
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<td>Euromotive</td>
<td>KSB AG</td>
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<td>Eybl International</td>
<td>Kunststoffwerk Voerde Hueck &amp; Scha</td>
</tr>
<tr>
<td>Company Name</td>
<td>Company Name</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>--------------------------------------------------</td>
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<tr>
<td>Latzsch Kunststoffverarbeitung</td>
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</tr>
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<td>Schieffer</td>
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<tr>
<td>LEONI Kabel</td>
<td>Schlafhorst Electronics</td>
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<tr>
<td>Linde + Wiemann</td>
<td>SchmitzChassius</td>
</tr>
<tr>
<td>Wolfgang Loch</td>
<td>Schuh</td>
</tr>
<tr>
<td>Josef Lubig</td>
<td>A. Schulman</td>
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<td>Luk Friction</td>
<td>Bandstahl Schulte</td>
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<td>Wilhelm Schumacher Schraubenfabrik</td>
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<td>Magna Steyr</td>
<td>Schunk Sintermetalltechnik, Thale</td>
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<tr>
<td>Magnetfabrik Bonn</td>
<td>Semperit Reifen</td>
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<tr>
<td>MAGNET-SCHULZE</td>
<td>Senoplast Klepsch</td>
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<td>Martin Metallverarbeitung</td>
<td>SFS intec</td>
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<tr>
<td>Mayser</td>
<td>SFT Stanz- und Formtechnik</td>
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<tr>
<td>mbo Osswald</td>
<td>SICO D &amp; E Simon</td>
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<td>Meiser Präzisionsteile</td>
<td>Siemens Restraint Systems</td>
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<td>Melexis GmbH</td>
<td>Siemens, Siemens VDO</td>
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<td>Mesa Parts</td>
<td>Sitech Sitztechnik</td>
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<td>STARCON</td>
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<td>Neumayer Tekfor Holding</td>
<td>Steiner + Steiner</td>
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<td>Andreas Stihl Magnesium Druckguss</td>
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<td>STOP-CHOC Schwingungstechnik</td>
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<td>Styner+Bienz Form Tech</td>
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<td>Suspa Holding</td>
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<tr>
<td>Pankl Racing Systems</td>
<td>Synten &amp; lückenhaus Textil-Technik</td>
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<td>Paragon</td>
<td>Te Strake Surface Technology</td>
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<td>Paugger</td>
<td>TECHNOMATIK</td>
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<tr>
<td>Peiner Umformtechnik</td>
<td>Texas Instruments Deutschland</td>
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<tr>
<td>Joh. Pengg</td>
<td>Unicore / Business Line BrazeTec</td>
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<tr>
<td>PMT</td>
<td>Unison Einzel &amp; Komponentenfertigung</td>
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<td>polimoon b.v.</td>
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<tr>
<td>Polyamide High Performance- Polyanid</td>
<td>Velleuer</td>
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<td>Vöcklabrucker Metallgiesserei A. Dan</td>
</tr>
<tr>
<td>Polytec group</td>
<td>voestalpine Europlatinnen</td>
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<td>PWO Progress-Werk Oberkirch AG</td>
<td>WAYAND, Kunststoffverzeugnisse</td>
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<td>Weckerle Lackfabrik</td>
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<td>Rühl Puromer</td>
<td>Wehler Stanztechnik</td>
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<td>Hans Rüster</td>
<td>Fritz Winter Eisengießerei</td>
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<td>Wollsdorf Leder Schmidt</td>
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<td>ZenTec automotive</td>
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<td>ZF Lenksysteme</td>
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<td>Saxonian Umformtechnik</td>
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Appendix B. List of Companies
APPENDIX C. DATA TABLE OF RESPONSES

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Name</th>
<th>Email</th>
<th>Occupation</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/2023</td>
<td>10:00</td>
<td>John</td>
<td><a href="mailto:john@abc.com">john@abc.com</a></td>
<td>Engineer</td>
<td>Positive</td>
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<tr>
<td>1/2/2023</td>
<td>12:00</td>
<td>Jane</td>
<td><a href="mailto:jane@def.com">jane@def.com</a></td>
<td>Manager</td>
<td>Neutral</td>
</tr>
<tr>
<td>1/3/2023</td>
<td>14:00</td>
<td>Mark</td>
<td><a href="mailto:mark@ghi.com">mark@ghi.com</a></td>
<td>Student</td>
<td>Negative</td>
</tr>
<tr>
<td>1/4/2023</td>
<td>16:00</td>
<td>Lisa</td>
<td><a href="mailto:lisa@jkl.com">lisa@jkl.com</a></td>
<td>Intern</td>
<td>Positive</td>
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<tr>
<td>1/5/2023</td>
<td>18:00</td>
<td>Bob</td>
<td><a href="mailto:bob@mno.com">bob@mno.com</a></td>
<td>Accountant</td>
<td>Neutral</td>
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<tr>
<td>1/6/2023</td>
<td>20:00</td>
<td>Sue</td>
<td><a href="mailto:sue@pqr.com">sue@pqr.com</a></td>
<td>Driver</td>
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<tr>
<td>1/7/2023</td>
<td>22:00</td>
<td>Tom</td>
<td><a href="mailto:tom@rst.com">tom@rst.com</a></td>
<td>Chef</td>
<td>Positive</td>
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<tr>
<td>1/8/2023</td>
<td>02:00</td>
<td>Rick</td>
<td><a href="mailto:rick@stu.com">rick@stu.com</a></td>
<td>Waiter</td>
<td>Neutral</td>
</tr>
<tr>
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<td>04:00</td>
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<td>Driver</td>
<td>Positive</td>
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<td>1/10/2023</td>
<td>06:00</td>
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<td>Waitress</td>
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<td>1/11/2023</td>
<td>08:00</td>
<td>Rick</td>
<td><a href="mailto:rick@stu.com">rick@stu.com</a></td>
<td>Chef</td>
<td>Positive</td>
</tr>
<tr>
<td>1/12/2023</td>
<td>10:00</td>
<td>Bob</td>
<td><a href="mailto:bob@mno.com">bob@mno.com</a></td>
<td>Driver</td>
<td>Neutral</td>
</tr>
</tbody>
</table>
Based on Stat::Fit software, the responses to the questionnaire has analyzed. Furthermore, all the responses are independent data in accord with the software. The Histogram graph is enough to display the determined distribution of the responses which has been done by the Stat::Fit. The given results are shown at the below:

- Operations in

![Histogram of Operations Field](image1)

Graph A.1: Operations Field

- Your Position

![Histogram of Position in the Company](image2)

Graph A.2: Position in the Company
• Annual Sales

Graph A.3: Annual Sales of the Company

• Time in the Company

Graph A.4: Time in the Company

• **Question 2:** How would you change the ratio to fit better to needs of your company?
Graph A.5: Prescriptive-Descriptive Ratio from the Responder’s viewpoint

- **Question 4:** *In your opinion, what is the specific importance of each one?*

Graph A.6: Specific importance of Outside-in
Graph A.7: Specific importance of Inside-out

- **Question 5:** In your judgment, what level of dynamism is the automotive supplier industry currently undergoing?

Graph A.8: The Level of Environment Dynamism

- **Question 6:** In your opinion, what level of dynamism will the automotive supplier industry face in the future (5 to 10 years)?
Graph A.9: The Level of Environment Dynamism for the Future

- **Question 7**: How are the General Basic Steps of the process carried out within your company?

Graph A.10: Strategic Analysis/Diagnose
Graph A.11: Strategy Formulation

Graph A.12: Strategy Implementation

**Question 8:** Based on your previous answer, what is in your opinion the specific importance level of each step?
Graph A.13: Strategic Analysis/Diagnose

Graph A.14: Strategy Formulation

Graph A.15: Strategy Implementation
• **Question 10:** For the first step in a generic model, namely strategic analysis, what are the elements that are considered in your company?

Graph A.16: Internal Analysis

Graph A.17: External Analysis

• **Question 13:** What factors does your Organization include during External Analysis?
Graph A.18: Competitors

Graph A.19: Suppliers
Graph A.20: Substitutes

Graph A.21: Customers

Graph A.22: Potential Entrants
Graph A.23: Market Opportunities

Graph A.24: Government
Graph A.25: Legal Regulations

Graph A.26: Society

Graph A.27: Economy

• **Question 16**: What kind of tools does your Company use to perform an Internal Analysis?
Graph A.28: Analysis of individual departments and functions

Graph A.29: Analysis of based on Core Competencies

Graph A.30: Analysis based on Value Chain Factors
Graph A.31: Analysis based on Key Success Factors

Graph A.32: Analysis of Strengths and Weaknesses

- **Question 17:** What is, in your opinion, the specific importance of them?
Graph A.33: Analysis of individual departments and functions

Graph A.34: Analysis based on Core Competencies

Graph A.35: Analysis based on Value Chain Factors
Graph A.36: Analysis based on Key Success Factors

Graph A.37: Analysis of Strengths and Weaknesses
APPENDIX E. COMPETITOR ANALYSIS

Company A

Company A was found in Hanover in 1871 and is currently the fifth largest automotive supplier in the world and the second largest in Europe. Company A has 151,654 employees (at the end of 2007) working at nearly 200 locations in 36 countries (Company A Annual Report 2007). Most of the business units hold leading competitive positions in their respective markets.

Company A has added strength with the acquisition of Siemens VDO in 2007. This strategic move will make the Company A more powerful in Europe, North America and Asia, for sure. The structure of corporation after acquisition is presented in figure.

![Figure Structure of the Corporation](source: Company A Annual Report 2007)

**Instrument Cluster**

Company A sold 13.1 million instrument clusters in 2007. The company is number one in instrumentation unit. Sales of interior division increased in the first nine months of 2008 to €4,683 million, up 414.8% compared with the same period of 2007 (Financial Report September 30, 2008, Company A). This increase resulted from both organic growth and from changes in the scope of consolidation, especially from the acquisition of Siemens VDO.
The product range of Company A includes economical instruments for vehicles in the low-price segment, complex instrument clusters with high definition color displays for the premium segment, and modern head-up displays that includes functions to improve night vision.

Company A’s European customers for cockpits and instrument panels include Audi, BMW, Daimler, Ford, Opel, PSA Peugeot Citroen, Seat, Skoda and Volkswagen.

Company A produces more than four million instrument clusters annually at its plant in Babenhausen, Germany. Located in the heart of Germany, Babenhausen facility employs 2,600 people and is the central hub of a worldwide network of instrument cluster production that extends as far as Australia. Company A’s all plants in which are produced or which activities are related to production of instrument clusters are shown in table.

<table>
<thead>
<tr>
<th>Country</th>
<th>Plant</th>
<th>Workforce</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Heidelberg Heights</td>
<td>500</td>
<td>70% cluster related</td>
</tr>
<tr>
<td>Brazil</td>
<td>Guarulhos</td>
<td>1,500</td>
<td>70% cluster related</td>
</tr>
<tr>
<td>China</td>
<td>Vilhu</td>
<td>610</td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Brandys</td>
<td>1,000</td>
<td>60% cluster related</td>
</tr>
<tr>
<td>Germany</td>
<td>Babenhausen</td>
<td>2,600</td>
<td>99% cluster related</td>
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<tr>
<td>Germany</td>
<td>Karben</td>
<td>1,660</td>
<td>80% cluster related</td>
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<tr>
<td>Germany</td>
<td>Regensburg</td>
<td>5,000</td>
<td>10% cluster related</td>
</tr>
<tr>
<td>India</td>
<td>Bangalore</td>
<td>500</td>
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<tr>
<td>India</td>
<td>Pune</td>
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<tr>
<td>Rep. of Korea (South)</td>
<td>Chongwon</td>
<td>713</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>Perei/Penang</td>
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<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>Guadalajara</td>
<td>600</td>
<td>60% cluster related</td>
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<tr>
<td>Russia</td>
<td>Chistopol</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>Rubi</td>
<td>600</td>
<td>60% cluster related</td>
</tr>
<tr>
<td>USA</td>
<td>Huntsville</td>
<td>1,200</td>
<td>80% cluster related</td>
</tr>
</tbody>
</table>

Table Company A plants producing instrument clusters
Source: Company F internal information

There are two categories for clusters of Company A – cluster commercial vehicles and cluster passenger cars.

Cluster commercial vehicles
The Generic Cluster concept enables commercial vehicle manufacturers to benefit from an instrument cluster that can be easily adapted to suit different equipment levels and vehicle classes. Synergies between different vehicles series can be realized without the need for major investment. A secondary cluster is the perfect complement to a Generic Cluster. Located within the driver’s field of vision, it fulfils multiple functions, from displaying navigation guidance instructions to onboard computer data and video from up to three camera inputs.

![Generic and Secondary Clusters]

*Source: Company F internal information*

**Cluster passenger cars**

This kind of cluster trends towards digital systems that can display a wide range of information, as applied on the Mercedes E-Class. A ring pointer moves the speedometer needle around the dial from the outside. This gives the driver a clear view of the information displayed in the center of the instrument. Another trend is the use of TFT display with high resolution. On the luxurious Audi A8, a large TFT display was fitted as a new feature, supplementing the conventional instrument cluster and providing essential information in full color.

![Mercedes E-Class and Audi A8 Instrument Clusters]

*Source: Company F internal information*
Company B

Company B is a global supplier of automotive systems, modules and components to global vehicle manufacturers and the automotive aftermarket. Headquartered in Van Buren Township, Michigan, with regional headquarters in Kerpen, Germany and Shanghai, China, a workforce of over 35,000 employees and a network of manufacturing sites, technical centres, sales offices and joint ventures located in every major region of the world.

The Company was incorporated in Delaware in January 2000 as a wholly-owned subsidiary of Ford Motor Company. Subsequently, Ford transferred the assets and liabilities comprising its automotive components and systems business to company B. The Company B separated from Ford on June 28, 2000 when all of the Company's common stock was distributed by Ford to its shareholders.

Company B has been listed on the New York Stock Exchange since June 2000. It is traded under the stock symbol VC.

Structurally company B consists of two divisions: automotive and glass. The glass operations accounted for about 3% of the company's net sales for company's net sales for the last three consecutive years, while the automotive division segment was approximately 97%. Electronic share is 34% of sales of the total sales. The structure and product portfolio of company B are illustrated in figure.

![Figure The Structure of Company B](image-url)
Strategy and cooperation

Company B’s mission stated as “to increase shareholder value by delivering systems solutions that help our customers exceed their goals, are safe and environmentally responsible, and distinguish company B as the supplier, employer and community citizen of choice” (Vallance 2002, p.3).

Company B is willing to maintain Ford business and to continue organic non-Ford business growth, focusing on vehicle interiors, electronics, and climate controls. According to Michael Johnson, CEO, company B is reorganised into three global product teams:

- Electronics headquarters in Shanghai;
- Interiors in Paris;
- Climate headquarters in Michigan.

Strategic focus will be made on Asia, while maintain the market in Europe, NAFTA and MERCOSUR.

The strategically important regions for company B’s instrument clusters business line are North America and Asia. However, Ford as well as French car manufactures remains core customers in Europe.
Operative results and market share

The company had loses for the last seven consecutive years.

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2006</th>
<th>2005</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Sales (Mio. $)</td>
<td>11.266</td>
<td>11.253</td>
<td>16.750</td>
<td>17.374</td>
</tr>
<tr>
<td>Net Loss (Mio. $)</td>
<td>372</td>
<td>163</td>
<td>270</td>
<td>1.536</td>
</tr>
<tr>
<td>Return on sales (%)</td>
<td>-3,31%</td>
<td>-0,14%</td>
<td>-1,61%</td>
<td>-8,84%</td>
</tr>
</tbody>
</table>

Table Company B: Operative results
Source: own table based on Company B’s annual report 2007

In spite of quite big world market share, the Company B is highly dependent on Ford. Ford is currently undergoing a restructuring plan and further decreases in Ford's vehicle production volume would adversely affect the Company B's results. Moreover, Ford has a reputation of a customer, which is known for its enormous price pressure, and with which it is extremely hard to make any profit.

Employee's potential and R&D competence

Competitor B's R&D competence might be ranked as one of the highest in the global market of instrument clusters. The following technologies are available to competitor B:

- Head-up display;
- Reconfigurable cluster;
- Movable gauges;
- Hi-density Appliqué.

Movable gauges as well as Hi-density Appliqué are not required by the European OEMs. However, these technologies might provide competitive advantage in Asian instrument cluster market.

Globalisation
Company B is a global automotive supplier with strong presence almost in every continent. Company B’s sales structure looks as following:

- NAFTA – 24%;
- Europe – 42%;
- Asia – 29%;
- Rest – 5% (Automotive News Europe 2007b, p46).

More than 170 technical, manufacturing, sales and service facilities of company B are located in 26 countries. However, only 17 instrument cluster related plants are running.

**Company C**

Company C is a leading global supplier of automotive and industrial technology and of consumer goods and building technology. In 2007, total sales of the Company C Group came to 46.3 billion euros. 75 percent of which were generated outside Germany. The number of Company C associates rose by 9974 to 271,265 in 2007.

The company originated as the "Workshop for Precision Mechanics and Electrical Engineering" founded in 1886 by Robert Company C (1861 – 1942). Only a few years later, its first sales offices were opened in London and Paris. Today, the Company C Group comprises more than 280 subsidiaries, of which just about 250 are located outside Germany. With subsidiaries and affiliated companies, Company C is present in more than 50 countries. The company manufactures its products at 228 locations worldwide, 228 of which are outside Germany.

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales revenue*</td>
<td>43,684</td>
<td>46,320</td>
</tr>
<tr>
<td>Associates 1)</td>
<td>261,291</td>
<td>271,265</td>
</tr>
<tr>
<td>located in Germany</td>
<td>110,480</td>
<td>112,300</td>
</tr>
<tr>
<td>located outside Germany</td>
<td>150,811</td>
<td>158,965</td>
</tr>
<tr>
<td>Capital expenditure*</td>
<td>2,670</td>
<td>2,634</td>
</tr>
<tr>
<td>Research and development cost*</td>
<td>3,348</td>
<td>3,583</td>
</tr>
<tr>
<td>Profit before tax*</td>
<td>3,081</td>
<td>3,801</td>
</tr>
<tr>
<td>Profit after tax*</td>
<td>2,170</td>
<td>2,850</td>
</tr>
</tbody>
</table>

*Currency figures in millions of euros

Figure Key data of the Company C Group
Company C is known all over the world and people associate quality, reliability, innovation and financial strength with it. The company is divided into 3 Business Sectors:

- Automotive Technology
- Industrial Technology
- Consumer Goods and Building Technology

The structure of the Company C Group and the distribution of the sales by business sector can be seen on Figure.

**Figure Structure of the Company C Group**

Source: Robert Company C GmbH Company Presentation, 05/08/2008

**Corporate Strategy**

Company C is currently the largest automobile component supplier worldwide. Besides that, its business outcomes in other two areas are also satisfying. All these achievements should own to its long term development strategy.

Instead of growing with very high speed, it has been developing stably and constantly throughout years, with an average rate of 7.9%.

Company C Group strategy is established around following important points:

- Established international presence pays
- Broad business portfolio
- Opening up new growth areas
Innovations: a key competitive advantage
Consistent efforts to improve quality
Global purchasing activities expanded
“House of Orientation” points the way
High environmental and social standards

The target of Company C is to be a major player and furthermore the world market leader in all of the company’s business sectors. This target is based on the maintenance of innovation abilities, which was also set as one of the corporate strategies. In order to keep this innovative competence, Company C had invested much resource continuously in the R&D area. Its average R&D expense rate during the past 5 years is as high as 7.4% of total revenue.

As an unlimited liability company, Company C is free from the observation of investors and financial analyzers. Most of its profit stays within the corporate, which financially assure its R&D investment and acquisitions for the purpose of development. The stable financial position of the company ensures its opportunity to enlarge its business through acquisitions.

Another Company C special feature is its diversity and integrity. Taking automotive business as major, it is also engaged in the industry technique, consumer goods & building technique. Although confronting strong competition and weak market demand, they are still important because they help to diversify its business by acting in the fields other than the automotive industry. Integrity stands for a series of values that courage the team spirit, social responsibility, environmental awareness and so
that cultivate Company C enterprise culture. Some of the benefits cannot be measured concretely with numbers.

**Instrument Cluster**

Concerning instrument cluster the company is investing in use of new technologies like extensive use of TFT displays, speedometer and tachometer simulation, integration of night vision display and navigation system and providing of information in native for the driver language. These innovative features make instrument clusters produced by company a desired supplier for upper class and luxury vehicles. Company C’s plants in which are produced or which activities are related to production of instrument clusters are shown in Table.

<table>
<thead>
<tr>
<th>Country</th>
<th>Plant</th>
<th>Workforce</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hungary</td>
<td>Hatvan</td>
<td>6280</td>
<td>100% cluster related</td>
</tr>
<tr>
<td>Spain</td>
<td>Madrid</td>
<td>7950</td>
<td>80% cluster related</td>
</tr>
<tr>
<td>Japan</td>
<td>Kariya City</td>
<td>8130</td>
<td>50% cluster related</td>
</tr>
<tr>
<td>Germany</td>
<td>Hildesheim</td>
<td>5240</td>
<td>20% cluster related</td>
</tr>
<tr>
<td>Germany</td>
<td>Reutlingen</td>
<td>840</td>
<td>20% cluster related</td>
</tr>
<tr>
<td>Germany</td>
<td>Leonberg</td>
<td>810</td>
<td>20% cluster related</td>
</tr>
</tbody>
</table>

Table Company C plants producing instrument clusters
*Source: Company F internal information*

High quality of the instrument clusters developed by the company makes it a desired supplier for luxury vehicles as BMW, Mercedes-Benz S-class, Maybach, Bentley and Porsche Cayenne and VW Phaeton. The company is desired partner also because it is able to respond quickly to constantly increasing demand for development of more sophisticated products from OEMs producers of luxury vehicles. Company's focus on high-line and luxury segment gives company an opportunity to realize higher profit margin than its competitors. Company C produces around 1.2 million clusters worldwide. In Europe clusters are produced just under 1 million. Instrument cluster sales in Europe are shown hereunder.
VW 15.275.000 €
AUDI 23.119.000 €
BMW 3.927.000 €
Porsche 10.354.000 €
Mercedes-Benz / Smart 120.946.000 €

Sum 174 mio. €

Figure Instrument Cluster Sales in Europe
Source: Company F internal information

Market share of Company C regarding instrument cluster worldwide is provided on Figure.

Figure Market share of Company C regarding instrument clusters
Source: Company F internal information

Company C’s strategy concerning instrument cluster is to concentrate its effort towards becoming supplier of instrument cluster for high-line and luxury vehicles. In order to be competitive company relies on:

- High level of innovation potential based on high R&D spending
- Available highly efficient and experienced work force
- Efficient quality management
- Existing of own standardized production system;
- Traditionally good relations with strategic clients
- Close to the customers on all geographical markets
Ownership structure ensuring that company cannot be acquired
Sufficient financial resources to grow through acquisitions
Sufficient financial resources to establish new development and production facilities in emerging markets

**Company D**

Company D is a US-based global leader in automotive experience, building efficiency and power solutions. According to company official website, www.johnsoncontrols.com, it has 136,000 employees in more than 1,000 locations serving customers in 125 countries and it achieved US$ 32 billion in net sales in 2006. It has three business lines: Building Efficiency, Power Solutions, and Automotive Experience. This last one represents 57% of company's sales, it includes interior systems, and it is competing in the instrument cluster segment. Out of the total sales of the company, 40% come from US, 40% from Europe and 20% from the rest of the world. Its main customers are GM (11% of sales), Daimler (11%), and Ford (10%), and it is also a major supplier to Toyota through wholly owned facilities and unconsolidated joint ventures.

Currently they have 5 facilities manufacturing Instrument Clusters, Germany, France, Brazil and Argentina. Their main customers for Instrument Clusters are PSA and Renault, with small participations in Daimler, BMW and Honda. The revenue coming from Instrument Cluster business is estimated between 250 and 290 million Euros in Europe. The company offers instrument panel design, engineering and manufacturing around the globe. Company D has also presented its version of programmable cluster with night vision technology ready to enter the luxury vehicle market in 2010. (Retrieved September 15th, 2008 from Company D Official Website)

The distribution of sales per segment and market is provided on Figure.
Financial Position

Company enjoys a stable financial position based on continuous growth of the company for last thirty years. Company credit ratings from three best recognized rating agencies are provided below.

<table>
<thead>
<tr>
<th>Credit Agency</th>
<th>Fitch</th>
<th>S&amp;P</th>
<th>Moody's</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Ranking</td>
<td>A</td>
<td>A</td>
<td>Baa1</td>
</tr>
</tbody>
</table>

Table Company D credit ratings


As a result, company has enough resources for:

- Capital expenditures
- New technology
- Acquisitions / joint ventures

Instrument Cluster

The fundamental aim of Company D is to grow with its existing customers in the instrument cluster market. The company accomplishes to grow its market share and use innovation to improve its market position. Besides that company aims to exceed customer expectations.

The main customers regarding instrument cluster are shown on Figure.
<table>
<thead>
<tr>
<th>Country</th>
<th>Plant</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>Remchingen</td>
<td>100% cluster related</td>
</tr>
<tr>
<td>France</td>
<td>La Ferte Bernard</td>
<td>100% cluster related</td>
</tr>
<tr>
<td>USA</td>
<td>Northwood (OH)</td>
<td>100% cluster related</td>
</tr>
<tr>
<td>Mexico</td>
<td>Ramos Arizpe</td>
<td>80% cluster related</td>
</tr>
<tr>
<td>Brazil</td>
<td>Gravatai</td>
<td>20% cluster related</td>
</tr>
<tr>
<td>China</td>
<td>Changchun</td>
<td>20% cluster related</td>
</tr>
</tbody>
</table>

Table Company D-Instrument clusters plants
Source: Company F internal information

On the other hand, Jonson Controls technological competence concerning cluster development is presented in Table.
Corporate Strategy

Based on the Company D Strategic Outlook Report (2008), the short-term goals of management are to lead technical solutions and create a customer oriented organization. In long-term, the management is planning to get through global reach by leading cost and quality worldwide. In other words, company's strategy is to gain competitive advantage by leading cost and quality performance in the market.

In addition, future expected sales of company's Interior business are shown on Figure. In parallel with the corporate strategy, Company D expects growing sales and achievement for the next years.

---

**Table Company D-Instrument clusters development**

<table>
<thead>
<tr>
<th>Available Technology</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Electroluminescent foil</td>
<td></td>
</tr>
<tr>
<td>Head-Up display</td>
<td></td>
</tr>
<tr>
<td>Reconfigurable cluster</td>
<td>PROD</td>
</tr>
<tr>
<td>Movable gauges</td>
<td></td>
</tr>
<tr>
<td>TFT tachometer simulation</td>
<td>DEV</td>
</tr>
<tr>
<td>Prism mirror</td>
<td>PROD</td>
</tr>
<tr>
<td>3-D dial design in-house</td>
<td></td>
</tr>
<tr>
<td>Night vision display</td>
<td>PROD</td>
</tr>
<tr>
<td>Optics mirror</td>
<td>PROD</td>
</tr>
<tr>
<td>Ring pointer needle</td>
<td></td>
</tr>
<tr>
<td>Hi-Density Applique</td>
<td></td>
</tr>
</tbody>
</table>

Source: Company F internal information

---

Figure Future Expected Sales of Interior

Source: Company D Strategic Outlook Presentation 10/14/2008, p.38
Company E is a Japan-based manufacturing company with annual sales of US$1.6 billion (2006). It has 9,744 employees and 22 subsidiaries located mainly in Asia and US. It has three main segments: Instrument Cluster, Consumer-use Products, LCD products and others. Almost 64% of its sales come from the Instruments segment and 60% is generated in Japan, especially through Honda which is the largest shareholder. This company has six Instrument Cluster related manufacturing sites located mainly in Asia (Japan, Thailand, Taiwan, India and China), and one in UK. Sales coming from the Instrument Cluster business are estimated to range from 10 to 15 million Euros in Europe, being BMW the main customer through the Mini which is produced in UK. This facility was established in 1988 and currently has 350 employees producing close to 1 million instruments per year. A characteristic offering from this company is the OLED (organic light emitting diode) resulting from a Joint Venture with the Japanese OPTREX. (Retrieved September 22th, 2008 from Company E official website)

The product portfolio of the company can be showed as the following items.

- Instruments for cars and light truck
- Instruments for motorcycles
- Instruments for agricultural machinery
- Instruments for construction machinery
- Instruments for boats
- Elementary particle of liquid crystal display
- Hybrid IC
- Remote control for air conditioning
- Automatic food wrapping equipment
- Liquid food packaging systems

Company E is leader in motorcycle meters, also producing instrument panels and gauges for automobiles and other vehicles. It is the fourth largest supplier of instrument gauges for automobiles in Japan and has an 8% share of the global market. Roughly 20% of its group sales are generated by Honda, which is the largest shareholder with a 6.6% stake. Automotive related sales generate around 40% of group sales.
Overseas expansion has paid off handsomely for Company E, primarily in Asia, where profitability exceeds that in many other areas by some margin. This growth appears set to continue with the market in China an obvious target. The company has also done well to expand its customer base in its automotive business outside of Honda and continued efforts to attract new carmakers, particularly in Europe, will be positive in the long-term. Although the automotive business is not the company's core competency, the in-house technological know-how and continued ability to develop cutting-edge products will underpin and perhaps advance its already strong market share. It should also help drive solid profit growth in the long-term.

According to the company official website, overseas sales generate 36% of Company E’s Group sales. The largest contributor is the Americas region, with 17%, which includes Brazil, Canada and the US. The second largest is Asia, with 11%, which is also the fastest growing region for Company E. The Asia region includes China, Indonesia and Thailand. Europe makes up 8% of Group sales and consists of Italy, Germany, the Netherlands and the UK. The company has 20 consolidated subsidiaries, of which 13 are active in the meters business and nine are based overseas, two in the UK and China (one in Hong Kong) and one each in Brazil, Indonesia, the Netherlands, Thailand and the US. Company E supplies a range of carmakers with instrument panels, such as BMW, Daihatsu, Daimler, Fiat, Honda, Mazda, Mitsubishi Motor, Subaru and Suzuki.

The following table shows the financial achievements from 2002 to 2007. The number in () means the ratio to sales. As it can be seen from the table, the sales and the profit rates have a positive increasing rate orderly. In that case, the table is a record of company’s successful financial achievements.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>1,116(100)</td>
<td>1,324(100)</td>
<td>1,390(100)</td>
<td>1,477(100)</td>
<td>1,752(100)</td>
<td>1,931(100)</td>
</tr>
<tr>
<td>Sales Profit</td>
<td>40 (3.6)</td>
<td>73 (5.6)</td>
<td>92 (6.7)</td>
<td>127 (8.6)</td>
<td>162 (9.3)</td>
<td>197 (10.2)</td>
</tr>
<tr>
<td>Current Profit</td>
<td>48 (4.3)</td>
<td>66 (5.0)</td>
<td>84 (6.1)</td>
<td>137 (9.2)</td>
<td>179 (10.2)</td>
<td>207 (10.7)</td>
</tr>
<tr>
<td>Profit Per Period</td>
<td>19 (1.8)</td>
<td>29 (2.2)</td>
<td>49 (3.5)</td>
<td>72 (4.9)</td>
<td>93 (5.3)</td>
<td>118 (6.11)</td>
</tr>
<tr>
<td>Profit Per Period Per</td>
<td>34.6 Yen</td>
<td>48.8 Yen</td>
<td>85.6 Yen</td>
<td>128.3 Yen</td>
<td>152.1 Yen</td>
<td>198.7 Yen</td>
</tr>
</tbody>
</table>
Table Consolidated corporation’s financial achievements (in 100 million YEN if not noted)
Source: Own elaboration based on Company E annual reports 2002-07

Corporate Strategy

Depending on the Asian Supplier Report (2007), the goal of Company E’s management plan is to obtain a global automotive market share of 15% and motorcycle market share of 40% for its meters. It wants to create a global supplier system, which has Japan in the centre, linked with the Asian, European and US markets. To this effect, the company has established a sales and operational headquarters in each of the regions: Hong Kong Company E for Asia, Company E (Europe) in the Netherlands and NS International in the US. These regional headquartered are anchored with other local operations as well as operations in Japan, which includes a technical centre, six manufacturing facilities – of which six produce meters, nine sales offices and the company headquarters.

Increasing production in Asia, especially China, is a priority for Company E to decrease its costs, as well as be able to supply its customers in local markets. Coupled with cost effective products, thanks to its production bases in Asia, Company E is placing emphasis on its “zero defect” goal. To this effect, the company has placed strict production and quality guidelines at all its overseas plants.

Company F

The description bellow is based on Company F internal data. The analyzed company in this research is the Electronic Systems division of Company F holding a subsidiary of FIAT group. FIAT is a major industrial Group that has been active in the automotive field for over hundred years. It designs, manufactures and sells automobiles, trucks, tractors, agricultural and construction machinery, engines, automotive components and production systems located in 50 countries, also commercial activities with customers over 190 countries, with 178 plants, 185,000 employees and 114 R&D centers (Fiat Group 2007 Sustainability Report, 2008). The place of the company within organization structure of FIAT is shown below.
According to the company official website, Company F is an international company that design and produce hi-tech systems and components for the automotive sector, headquartered in Milan, Italy. The company was founded in 1919. With a turnover of 5 billion Euros in 2007, they increased their revenue 11.7% compared to 2006. Their operating income is 209 million Euros. Company F has 27,962 employees, 46 production sites, 9 Research & Design Centers and 27 Application Centers in 16 countries.

**Products**

Company F designs and produces leading-edge automotive components for lighting systems, engine control units, suspensions and shock absorbers, exhaust systems and motorsports. It is also active in the distribution of spare parts in the independent market. The products produced by Company F Electronic Systems are shown hereunder.
Figure Products produced by Company F Electronics Systems division.
Source: Company F, internal information

The Key Data

Company F closed fiscal year 2007 with revenues of 5 billion Euros, 12.2% more than in 2006. The key data of the company is summarized at the table.

<table>
<thead>
<tr>
<th>Sales</th>
<th>5.0 billion €</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>27,962</td>
</tr>
<tr>
<td>R&amp;D (of sales)</td>
<td>4.5%</td>
</tr>
<tr>
<td>Investments (of sales)</td>
<td>4.3%</td>
</tr>
<tr>
<td>Production sites</td>
<td>46</td>
</tr>
<tr>
<td>R&amp;D Centers</td>
<td>9</td>
</tr>
<tr>
<td>Application Centers</td>
<td>27</td>
</tr>
</tbody>
</table>

Table Company key data
Source: Own elaboration based on Company F Key Financial Data 2007, p.10

Divisions within company holding as well as the structure of revenues for 2007 have been presented hereunder:

- Lighting: 32.8 % of the total revenues
- Suspension Systems: 24.1 % of the total revenues
Power train-Engine Control: 19.3 % of the total revenues
Electronic Systems: 11.3 % of the total revenues
Exhaust Systems: 12.5 % of the total revenues

The structure of the sales per product group for 2007 is presented below.

Figure Structure of sales
Source: Company F Annual Report 2007, p.8

The overall bad competitive and financial position is a result from the fact that the company have been sold by FIAT in 2001. The investment groups that have bought the company demonstrated to not have interest of development of the business and instead were seeking fast profit. In a result the company financial position as well as its image was damaged. FIAT bought the company back in 2003. Company turnover, operating profit and return on sales are shown in table.

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover (Mio. €)</td>
<td>3.288</td>
<td>3.206</td>
<td>3.795</td>
<td>4.033</td>
<td>4.455</td>
<td>5.000</td>
</tr>
<tr>
<td>Operating Profit (Mio. €)</td>
<td>-16,50</td>
<td>32,40</td>
<td>148</td>
<td>127</td>
<td>175</td>
<td>209</td>
</tr>
<tr>
<td>Return on sales (%)</td>
<td>-0,49%</td>
<td>1,00%</td>
<td>3,90%</td>
<td>3,15%</td>
<td>3,93%</td>
<td>4,18%</td>
</tr>
</tbody>
</table>

Table Operative results
Source: Own elaboration based on Company F Annual Reports 2002-2007

Globalization

The presence of the company worldwide is shown hereunder. It is evident that the company does not cover important markets of India and Russia. Furthermore, the company has relatively weak presence on North America and South Africa market.
Figure Company Presence
Source: Company F internal information
APPENDIX F. CUSTOMER ANALYSIS

BMW Group

Bayerische Motoren Werke (BMW) is one of Europe’s top automakers, involved in the development, manufacture and sale of cars and motorcycles. These vehicles are sold through company-owned branches, independent dealers, subsidiaries and importers. BMW is a multi-brand carmaker concentrating exclusively on the premium segments of the worldwide automobile and motorcycle markets. The Munich-based company has three automotive brands: BMW, MINI and Rolls-Royce Motor Cars. The company manufactures its models at 23 sites in 12 countries on four continents and sells through 34 sales subsidiaries. In addition to automotive production the company’s activities comprise, development, production and marketing of motorcycles, as well as the provision of financial services for private and business customers. The company employs about 106,000 people worldwide (see Figure). BMW Group’s activities worldwide are co-coordinated from its headquarters in Munich. The company’s research and development centers include: the FIZ centre, BMW Technik and BMW Car IT, Munich; Designworks in Newbury Park, California; and BMW Motoren in Steyr, Austria.

The Key data regarding BMW AG is presented in the following Figure.

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenues (million euro)</th>
<th>Net Profit (million euro)</th>
<th>Workforce (at the end of the year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008 (1 Jan-30 Sept.)</td>
<td>40,425</td>
<td>1,292</td>
<td>-</td>
</tr>
<tr>
<td>2007</td>
<td>56,018</td>
<td>3,134</td>
<td>107,539</td>
</tr>
<tr>
<td>2006</td>
<td>49,999</td>
<td>2,874</td>
<td>106,575</td>
</tr>
<tr>
<td>2005</td>
<td>46,656</td>
<td>2,239</td>
<td>105,598</td>
</tr>
</tbody>
</table>

Table BMW Group Key Data

Source: Own elaboration based on BMW Group Annual Report 2007 and Quarterly Report September, 2008

With the three brands, BMW, MINI and Rolls-Royce Motor Cars, the BMW Group has its sights set firmly on the premium sector of the international automobile market. The BMW Group is one of the ten largest car manufacturers in the world. The mission
statement up to the year 2020 is clearly defined: The BMW Group is the world's leading provider of premium products and premium services for individual mobility. Despite unsuitable economic environment in the first 9 months of 2008, BMW Group's automotive deliveries have increased 1.7% comparing to the last period in 2007. China, once again, is the fastest growing market with 26%. The company will continue its investments there. On the other hand, in the BMW's largest single market USA the deliveries have decreased -4.8%. Anyway, BMW remains the most successful premium car brand in the world.

<table>
<thead>
<tr>
<th>Deliveries of automobiles in units</th>
<th>2008 1 Jan. - 30 Sept.</th>
<th>2007 1 Jan. - 30 Sept.</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>674,248</td>
<td>651,550</td>
<td>3.5%</td>
</tr>
<tr>
<td>thereof Germany</td>
<td>212,501</td>
<td>202,211</td>
<td>5.1%</td>
</tr>
<tr>
<td>North America</td>
<td>257,847</td>
<td>269,491</td>
<td>-4.3%</td>
</tr>
<tr>
<td>thereof USA</td>
<td>236,595</td>
<td>248,489</td>
<td>-4.6%</td>
</tr>
<tr>
<td>Asia</td>
<td>125,613</td>
<td>114,815</td>
<td>9.4%</td>
</tr>
<tr>
<td>thereof Japan</td>
<td>36,897</td>
<td>46,080</td>
<td>-15.0%</td>
</tr>
<tr>
<td>thereof Chinese markets</td>
<td>54,557</td>
<td>43,285</td>
<td>25.0%</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>56,254</td>
<td>58,993</td>
<td>-4.6%</td>
</tr>
<tr>
<td>BMW Group</td>
<td>1,113,972</td>
<td>1,094,849</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

Table Deliveries to the customers

Source: BMW Group Quarterly Report, September 2008

BMW applies "Production follows the market" strategy. In order to create opportunities, BMW opens new facilities to engage in market with long-term growth potential. Moreover, BMW Group demonstrates its existing facilities with high efficiency. In figure, the worldwide facilities and the volumes are presented.
All in all, with the A2 rating of Moody’s and the A rating of S&P respectively in long term, the rating agencies certify BMW AG a sound solvency for debt with a maturity of more than one year. In addition BMW AG has credit rating of Prime-1, the best short term rating from Moody’s and A-1 in short term from S&P (retrieved on December 10th, 2008 from: http://www.bmwgroup.com/e/nav/index.html).

Supplier Relationship

Based on the information in the research of Frost & Sullivan (2006), BMW Annual Report (2007) and also Company F internal sources, the relationship with the suppliers and the primary drivers for supplier selection can be concluded as follows.

- The supplier is expected to offer a good business case with stable design and compliance with respect to quality and productivity standards.
- BMW expects its module suppliers to develop n-Tier management as a core competence, since the company would like to involve the Tier-1 and Tier-2 suppliers depending upon the overall risk situation or criticality of parts and components sourced.
- The primary drivers for supplier selection are listed hereunder.
  - Quality
  - Project management capabilities
Daimler AG

Daimler is a leading manufacturer of superior passenger cars, sport-utility vehicles, sport tourers, minivans and pickup trucks. Additionally company is the world's largest manufacturer of commercial vehicles. Daimler has production facilities in total of 20 countries around the globe. The group have sold 2,088,973 million vehicles and realized revenues of 99,399 billion in the year 2007. In 2007 company employed more than 272,382 people worldwide (Daimler Group Annual Report 2007). It is headquartered in Stuttgart, Germany.

Key data regarding vehicle sales is presented hereunder.

<table>
<thead>
<tr>
<th>Year</th>
<th>Mercedes Benz Cars</th>
<th>Daimler Trucks</th>
<th>Vans, Buses, Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>1,293,184</td>
<td>467,667</td>
<td>328,122</td>
</tr>
<tr>
<td>2006</td>
<td>1,251,797</td>
<td>516,087</td>
<td>305,001</td>
</tr>
<tr>
<td>2005</td>
<td>1,216,838</td>
<td>509,299</td>
<td>315,567</td>
</tr>
<tr>
<td>2007</td>
<td>52,430</td>
<td>28,466</td>
<td>14,123</td>
</tr>
<tr>
<td>2006</td>
<td>51,410</td>
<td>31,789</td>
<td>13,151</td>
</tr>
<tr>
<td>2005</td>
<td>47,831</td>
<td>29,922</td>
<td>14,267</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue (million euros)</th>
<th>Return on Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>9.1%</td>
<td>7.5%</td>
</tr>
<tr>
<td>2006</td>
<td>3.5%</td>
<td>5.8%</td>
</tr>
<tr>
<td>2005</td>
<td>-1.6%</td>
<td>5.2%</td>
</tr>
</tbody>
</table>

Table Key Figures per divisions
Source: Own elaboration based on Daimler Group Annual Reports between 2005-07
Vehicles produced by Mercedes-Benz Car division are presented on Figure.

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-/B-Class</td>
<td>22%</td>
</tr>
<tr>
<td>C-/CLK-/SLK-Class</td>
<td>30%</td>
</tr>
<tr>
<td>E-/CLS-Class</td>
<td>18%</td>
</tr>
<tr>
<td>S-/CL-/SL-Class/SLR/Maybach</td>
<td>8%</td>
</tr>
<tr>
<td>M-/R-/GL-/G-Class</td>
<td>14%</td>
</tr>
<tr>
<td>smart</td>
<td>8%</td>
</tr>
</tbody>
</table>

Figure Mercedes-Benz cars unit sales structure
*Source: Daimler Group Annual Report 2007*

The structure of the Mercedes-Benz Car Division (and of the light commercial vehicles) product portfolio and changes in it during the time can be seen hereunder. It is evident that the tendency for Daimler is to broaden the spectrum of produced vehicles.

Mercedes-Benz cars increased its unit sales to 1,293,200 (+3%) passenger cars in 2007 (http://www.daimler.com/ir/keyfigures/leq, retrieved on 09.12.2008). Thus, the market position in the premium market segment is strengthened in worldwide. Also, Mercedes-Benz is the market leader in the luxury segment.
The Mercedes-Benz Vans division achieved record sales of 289,100 units in 2007 (+13%). The new Sprinter was quite successful (+17%) with Vito/ Viano models (+6%) in 2007 (Daimler Group Annual Report 2007). Hence, in this segment, the company further extended the leading market position.

### Market share

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2006</th>
<th>Change in % points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mercedes-Benz Cars</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western Europe</td>
<td>4.6</td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td>the rest of Germany</td>
<td>10.3</td>
<td>9.8</td>
<td>+0.5</td>
</tr>
<tr>
<td>United States</td>
<td>1.6</td>
<td>1.5</td>
<td>+0.1</td>
</tr>
<tr>
<td>Japan</td>
<td>1.0</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td><strong>Mercedes-Benz Vans</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium and heavy vans</td>
<td>16.4</td>
<td>16.0</td>
<td>+0.4</td>
</tr>
<tr>
<td>Western Europe</td>
<td>26.1</td>
<td>25.8</td>
<td>+0.3</td>
</tr>
<tr>
<td>the rest of Germany</td>
<td>55.4</td>
<td>52.2</td>
<td>+3.2</td>
</tr>
</tbody>
</table>

Table Divisions Market Share

Source: Daimler Group Annual Report 2007, p.42

All in all, Daimler Group has credit rating of A3 positive outlook from Moody’s and A- from Fitch in long term. The market capitalization of VW group is about 67.4 billion euros (Daimler Group Annual Report 2007).

### Supplier Relationship

Based on the information in the research of Frost & Sullivan (2006), Daimler Annual Report (2007) and also Company F’s internal sources, the relationship with the suppliers and the primary drivers for supplier selection can be concluded as follows.

- Daimler uses quality, systems cost, technology and supply parameters to evaluate their suppliers.
- Technology and Engineering competence combined with innovation capabilities are important considerations for potential suppliers to Daimler Group.
Daimler uses the External Balanced Scorecard (EBSC) to evaluate supplier performance and this is then used for suppliers to improve their performance relative to the competition.

Daimler has the industry benchmark pricing and its own quality standards. The company communicates these expectations to the suppliers.

The primary drivers for the supplier selection are cost, innovation and the engineering competence of the supplier.

Concerning instrument cluster business, to be able to become a supplier, the supplier must fulfill these requirements:

- To have plants as close as possible to the Daimler production sites
- To have a global presence
- To provide price transparency
- To meet the deadlines
- To have a product quality in the range of ppm, 0-Km, field:<400 ppm

Additional requirement can be the pressure of carmakers for price reduction by around 5% per annum. The attractiveness of Mercedes Car Group as seen by automotive suppliers is shown on Figure.

Figure Daimler attractiveness compared with that of the other OEMs
Source: Company F internal information
**Porsche AG**

Porsche AG is a German car manufacturer headquartered in Stuttgart, Germany. It is formerly known as DR. ING. H.C.F. Porsche AG. The Group's principal activities are the development, manufacture and marketing of sports cars, related accessories and spare parts. The Group also provides product related financial and insurance services. The cars are marketed under Porsche, Boxter, Carrera GT, Cayenne and various other names. The Group has operations in Europe, North America and rest of the World. Porsche AG is majority owned by the Porsche and Piëch families. More than half of the preference shares are held by institutional investors such as investment funds, banks and insurance companies.

![Shareholder Structure](http://www.porsche-se.com/pho/en/investorrelations/shareholderstructure (released date: 21.08.2008))

The Porsche Automobile Holding SE is responsible for the stock of the operating subsidiary, Dr. Ing. h.c. F. Porsche AG, and for the investments in Volkswagen AG. With the new structure, Porsche ensures that the autonomy and independence of the traditional Stuttgart-based company remain fully protected. This is the main purpose of separating holding and operating activities. At the same time, the holding also represents a single company responsible for the management of stock.
The company continues to pursue its goal of maintaining the balance between supply and demand. It thus constantly analyzes market developments and, if there are significant changes, production quotas for individual markets are swapped or manufacturing is adjusted. This prevents warehouse stocks reaching critical levels and therefore dispenses with the need for discounts. In the figure, the production and deliveries are shown together to clarify the previous statement.

Despite the clear slowdown in the world economy, Porsche generates record sales. The company increased its sales 1.2 percent to 98,652 vehicles in 2007. This achievement is mostly related with the success of the markets in China, Russia and the Middle East. In addition, new Cayenne models assisted the record sales
extremely. The key figures, related with the company sales, production and workforce, are shown hereunder:

<table>
<thead>
<tr>
<th></th>
<th>Turnover</th>
<th>Sales (new cars)</th>
<th>Regions</th>
<th>Production</th>
<th>Workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Billion Euros</td>
<td>units</td>
<td>units</td>
<td>units</td>
<td>units</td>
</tr>
<tr>
<td>2007/08 (Aug – May)</td>
<td>8.02</td>
<td>62,025</td>
<td>87,104</td>
<td>12,116</td>
<td></td>
</tr>
<tr>
<td>2006/07 (Aug – May)</td>
<td>5.95</td>
<td>70,540</td>
<td>63,815</td>
<td>11,571</td>
<td></td>
</tr>
<tr>
<td>Change In percent</td>
<td>+ 3.7</td>
<td>+ 2.1</td>
<td>+ 4.0</td>
<td>+ 4.7</td>
<td></td>
</tr>
</tbody>
</table>

Sales (new cars):
- 911: 62,025 (2007/08) vs. 70,540 (2006/07)
- Boxster/Cayman: 18,140 (2007/08) vs. 22,806 (2006/07)
- Cayenne: 37,256 (2007/08) vs. 28,436 (2006/07)
- RS Spyder: 4 (2007/08) vs. 11 (2006/07)

Regions:
- Germany: 10,448 (2007/08) vs. 11,030 (2006/07)
- North America: 26,207 (2007/08) vs. 27,682 (2006/07)
- Rest of the World: 43,310 (2007/08) vs. 40,628 (2006/07)

Production:
- 911: 87,104 (2007/08) vs. 63,815 (2006/07)
- Boxster/Cayman: 27,065 (2007/08) vs. 30,461 (2006/07)
- Cayenne: 18,910 (2007/08) vs. 23,251 (2006/07)
- RS Spyder: 36,868 (2007/08) vs. 29,030 (2006/07)

Workforce:
- 12,116 (May 31, 2007) vs. 11,571 (July 31, 2006)

Figure Porsche AG in Figures
Source: Porsche SE Annual Report 2007/08, p.16

Supplier Relationship

Porsche AG works closely with its suppliers on product development and series production. With the guidance of company’s previous annual reports and corporate site, it is possible to define the supplier relationship as follows:

- An indepth analysis and assessment of the suppliers’ technical competence and financial viability is undertaken by Porsche before they are selected and classified.
- Porsche records and monitors its suppliers’ credit ratings to safeguard against supplier insolvencies and the related interruptions in supply.
- Porsche counters the risk of excessive series unit prices by examining and agreeing on cost cutting measures for the series product together with the supplier in the development phase.
- Porsche has these key expectations from its suppliers:
  - On time delivery
  - Quality
  - Continuously improvement
Volkswagen AG

Headquartered in Wolfsburg, Germany the Volkswagen Group is one of the world’s leading automobile manufacturers and the largest carmaker in Europe. Selling more than 6 million vehicles annually Volkswagen group by volume is in top five of motor vehicle manufacturers. VW market shares by continent and worldwide are presented in figure.

![World car markets and deliveries to customers](image)

Figure VW Market share
Source: Volkswagen AG interim report January-September 2008, p.6

Structurally the VW group comprises two business divisions: automotive and financial services. The group’s passenger car business is divided into two brand groups: the Audi and Volkswagen brands. The Audi brand group comprises the Audi, SEAT and Lamborghini brands. The Volkswagen brand group is made up of the Volkswagen Passenger Cars, Skoda, Bentley and Bugatti brands.

<table>
<thead>
<tr>
<th>Division/Segment</th>
<th>Automotive Division</th>
<th>Financial Services Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Line</td>
<td>Volkswagen brand group</td>
<td>Audi brand group</td>
</tr>
<tr>
<td>Product Line/Business Field</td>
<td>VW Passenger Cars</td>
<td>Audi</td>
</tr>
<tr>
<td>Skoda</td>
<td>SEAT</td>
<td></td>
</tr>
<tr>
<td>Bentley</td>
<td>Lamborghini</td>
<td></td>
</tr>
<tr>
<td>Bugatti</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure The structure of VW Group
Source: Volkswagen AG interim report January-June 2008, p.16
The company’s product range extends from the low-consumption 3-liter per 100km vehicles to luxury class vehicles. The group’s commercial vehicle products are the responsibility of the commercial vehicles brand. In addition, the company has a 34% stake in Scania, a Sweden-based truck manufacturer.

Despite the fact that VW brand group vehicle production exceeds Audi’s, profit contribution is comparable. As in others companies in the industry, the contribution of financial services to the group’s profit is high. Special items represent the financial outcomes of ongoing restructuring process.

Table Key figures by brand and business lines
Source: VW Group Annual Report 2007, p.79

According to VW AG 2005 annual report, Volkswagen aimed to achieve the target of pre-tax profit of €5.1 billion in 2007 and to cover at least the cost of its capital. Proudly, the company has achieved the target and the profit margin of VW group remains high comparing with cost of capital in 2007. Volkswagen automotive division value contribution is depicted below.

Figure Volkswagen value contribution: automotive division

Europe remains the most important market for VW, where more than 70% of sales and almost 100% of profit are generated.

<table>
<thead>
<tr>
<th></th>
<th>Vehicle sales(^1)</th>
<th>Sales revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2008</td>
<td>2007</td>
</tr>
<tr>
<td>Europe / Remaining markets</td>
<td>2,825</td>
<td>2,786</td>
</tr>
<tr>
<td>North America</td>
<td>392</td>
<td>374</td>
</tr>
<tr>
<td>South America / South Africa</td>
<td>739</td>
<td>624</td>
</tr>
<tr>
<td>Asia-Pacific(^b)</td>
<td>909</td>
<td>790</td>
</tr>
<tr>
<td>Volkswagen Group(^2)</td>
<td>4,856</td>
<td>4,574</td>
</tr>
</tbody>
</table>

Figure VW Sales by region
Source: Volkswagen AG interim report January-September 2008, p.20

The VW Group operates 44 production plants in eleven European countries and a further seven countries in the Americas, Asia and Africa. The plants and production volumes of VW are presented in Europe hereunder. The Volkswagen group sells its vehicles in more than 150 countries.
Supplier Relationship

Based on the information in the research of Frost & Sullivan (2006), VW Group Annual Report (2007) and also Company F internal sources, the relationship with the suppliers and the primary drivers for supplier selection can be concluded as follows:

- VW group is making a change in its purchasing strategy and trying to improve supplier relations by emphasizing early and close partnerships with key system suppliers.
- The company aims to leverage supplier capabilities in product development and using supplier ideas for cost savings
- The VW has initiated a process aimed at forging long-term cooperation with key suppliers through three key methods:
  - Material cost reduction
  - Quality improvements of parts
  - Innovation
- Financial stability of the supplier and transparency in relationship are key elements to the group in evaluating its suppliers.

Figure VW, SEAT and Skoda Plants and volumes in Europe
Source: Company F internal information
- VW Group expects its key suppliers to find technical innovations that can be brought into production quickly.

- Audi like most European luxury brands would like to work with suppliers who have an innovation and product technology leadership.

Figure Supplier Selection Criteria for VW Group

APPENDIX G. TECHNOLOGY ANALYSIS

As global concern over the future of the environment translates into new strict regulations regarding car emissions, manufacturers are now being forced to develop more efficient technologies in order to meet these requirements. They are also under increasing pressure to develop new models based on alternative sources of energy (Smith and Miller, 2005; Mader and Gerth, 2004). Needless to say, the customer must be able to afford these new energy-efficient and environmentally-responsible vehicles. Customer demand increases every year in the automotive industry. This, in turn, forces companies to focus more on technology. From the consumer point of view, manufacturers must incorporate the latest technologies into their models in order to satisfy their hedonistic desires, while simultaneously improving the safety features without unduly raising the purchase price beyond the anticipated value.

Just a few years ago, a car that could show the consumer its location on a digital map, take over the controls if the driver began to skid, or automatically maintain a set distance from the vehicle in front of it, might have seemed like a glimpse from some far-flung future highway. But these functions are becoming increasingly commonplace in today's vehicles (Bunzel and Judaschke, 2004).

One of the big differences in the automotive electronics business is that electronics used to exist only in luxury cars. Today, a significant amount of electronic devices can be found in even mid-range cars. Consumers are now demanding options such as voice control, navigation, climate control and various multimedia functions (Winkler-Helmdach, 2005). In today's cars, each vehicle contains 20 microprocessors on average (Winters, Mielenz and Hellestrand, 2004). When one considers that over 66 million vehicles are produced annually worldwide, the importance of the electronics business can be better understood. Original equipment manufacturers (OEMs) are seeking more reliability from their suppliers with regards to their safety systems. These systems are expected to work under all conditions, all of the time, because of their warranty promises and the strict safety legislations that are currently in place.
Automotive Electronics

As a result of the increased use of automotive electronics in modern vehicles, everything from braking to steering is controlled by an electronic system. Electronics in the automotive domain has been growing rapidly. The electronics inside a car now accounts for over 20% of a vehicle's costs and this is projected to double to 40% by 2010 (Medea+, 2005).

Electronics are increasingly enhancing an automotive vehicle's efficiency, performance, safety and convenience. In Germany, which is considered to be the heart of the European automotive industry, the industry grew strongly by 25.3% in 2003 and reached a market volume of US$7.13 billion. This represents an increase of 19.3% in 2004 (Larses, 2003). This growth is mainly due to the development of data transmission systems and security-based applications.

The emerging applications of automotive electronics are driving assistance systems, navigation, safety, multimedia/infotainment, human-to-machine interfaces, power trains, energy management and development tool systems (Winkler-Helmdach, 2005). According to the study undertaken by Kallenbach (2005), today's perspective of automotive electronics is based on three main topics: safe, clean and economical.

Figure Today's Perspective in Automotive Electronics
Source: Kallenbach, 2005
Moreover, Kallenbach argues that the parts of software and hardware in the vehicle value structure will increase. Furthermore, the proportion of suppliers in value-added automotive engineering will increase with a compound average growth rate (CAGR) of more than 4% (Sanderson 2005, p.8). This provides good prospects for suppliers on a long-term basis.

Based on IMS' OEM Electronics System Report (2007):

- The total world market for OEM automotive electronic systems (as defined) is forecast to increase from $129 billion in 2006 to $161 billion in 2015 (CAGR of 2.5%).
- North America is forecast to continue to be the largest automotive electronic systems marketplace over the period to 2015.
- The combined proportion of the total market accounted for by China, Eastern Europe, South America and the rest of the world is forecast to increase from 15% to 25% over the forecast period.
- Powertrain is forecast to be the largest automotive electronics sector throughout the period to 2015, but driver assistance is forecast to have the highest growth.

**Instrument cluster**

An automotive instrument cluster system is the brain behind the car's dashboard, powering all analog gauges, displays, LED warning lights and sound signals. Its primary function is to communicate with external data sources and to control the data output devices. With the number of data sources on the rise and the increasing use of in-vehicle connectivity, instrument clusters provide limited gateway functionality.

While it's only a small component of the car, the instrument cluster is something all drivers look at every few seconds, every time they drive a vehicle. The look and feel of the automotive dashboard design drives the hardware and software requirements for instrument cluster systems. According to www.freescale.com, an instrument cluster must:

- Support emerging display technologies with cost-optimized driver solutions
- Conform to the analog gauges' advanced requirements for indicator movement
- Provide truly scalable hardware and software platforms to enable design synergies and economies of scale across different car lines and regional requirements

The figure below shows some instrument cluster examples and the relationship between the vehicle's electronic architecture and the demanding display technology.

![Figure Example of instrument clusters](source: Company F internal information)

Being a complex electrical-mechanical device instrument, clusters were divided by OEMs into three classes according to their functionality, design and complexity: low-line (LL), middle-line (ML) and high-line (HL). Technologically, instrument clusters remain one of the most complicated and highly technologically-driven modules in the car. The structure of an instrument cluster is presented in Appendix B.
Today, all countries, industries and companies are battling with the economic downturn. Companies in automotive industry have been especially affected by the economic crisis. The author will use the IFO Business-Cycle Clock, which is a precision instrument, in order to analyze the world's economic phases. There are four different economic activity schemes in the Business Clock: upturn, boom, downturn and recession. For analysts, the Business Clock is an important monitoring tool that should be relied on.

According to the IFO Business-Cycle Clock, which was published in the IFO World Economic Survey (2008), the financial crisis, which is confirmed to be the reason for the global crisis, begun in the summer of 2007. It is believed to have been caused by the crisis in the US mortgage industry. In the autumn of 2007, the economic climate index entered into the cooling-down area of the Business Clock and it fell further in the first half of 2008. In the third quarter of 2008, the economic climate index entered into the cyclical trough area, as the assessments of the present economic situation slipped below the satisfactory mark, on a global average. The survey claims that there will be a global economic recession in the first half of 2009.
Current economic conditions of the USA, Europe, Russia and China

In the USA, the inflation rate was at a 17-year high of 5.6% in June 2008, while personal incomes slipped 1.6% from last month, August 2008 (CNNmoney.com). This data suggests that people in the US have less money to spend. Moreover, they are spending more on less. In addition, the unemployment rate rose to 6.1% in September 2008 (CNNmoney.com). Most Wall Street analysts believe that the American dream is very close to its end. According to www.stockanalyst.com, the main reasons of the economic crisis are Congress, the US Treasury and the Federal Housing Authority.

In Europe, the eurozone economy shrunk for the first time since the launch of the single currency in 1999, and it is now feared to be in recession. According to the European Union Economic Report (February 2008), despite the turmoil in the international financial markets, the gross domestic product (GDP) in the eurozone area grew by 2.7% and in the EU27 by 2.9% in 2007. The economic outlook in Europe is deemed, however, to be affected by shrinking credit availability, soaring food and oil prices and the volatile economic performance of the US in the short-term. Taking into account the negative impact of the financial market turmoil in the summer of 2007, the European Commission has revised its forecasts for 2008 and 2009 downwards. Growth in the eurozone and in the EU27 is expected to slow to 2.2% and 2.4% respectively in 2008, and to 2.1% and 2.4% in 2009.

In 2007, the American (+2.2%) and Japanese (+2.1%) economies grew more slowly than the European Union's (EU). These economies are likely to be even less dynamic in 2008 (US 1.7%, Japan 1.9%) but are expected to rebound in 2009 (US 2.6%, Japan 2.3%).
China has become one of the world’s fastest-growing economies since the initiation of its economic reforms in 1979. From 1979 to 2007, China’s real GDP grew at an average annual rate of 9.8%. Real GDP grew 11.4% in 2007 and that was the fastest annual growth since 1994 (China’s Economic Conditions, May 2008).

According to Morrison (CRS Report for Congress, May 2008), trade and foreign investment continues to play a major role in China’s booming economy. From 2004 to 2007, the value of China’s total trade merchandise nearly doubled. In 2007, China’s exports (at $1,218 billion) exceeded US exports ($1,162 billion) for the first time. China’s imports were $956 billion and its trade surplus was $262 billion - a historic high. Well over half of China’s trade is conducted by foreign firms operating in China. The combination of large trade surpluses, foreign direct investment flows and large-scale purchases of foreign currency have helped make China the world’s largest holder of foreign exchange reserves at $1.5 trillion at the end 2007.

<table>
<thead>
<tr>
<th>China Key Indicators</th>
<th>2007</th>
<th>2008*</th>
<th>2009*</th>
<th>2010*</th>
<th>2011*</th>
<th>2012*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP Growth (%)</td>
<td>11.9</td>
<td>9.8</td>
<td>9.0</td>
<td>9.2</td>
<td>9.0</td>
<td>8.6</td>
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</tbody>
</table>
Russia's short-term economic growth has run above its long-term trend, despite the weak global conditions. In 2007, the economy grew by 8.1% on the heels of high oil prices, robust domestic demand and strong macroeconomic fundamentals. Preliminary data shows even faster real growth in GDP, at 8.5% for the first quarter of 2008, and an industrial production growth of 6.2%. However, inflation is on the rise, productive capacity is strained - capacity use is up from 69% in 2001 to 81% in March 2008 - and unemployment is at its lowest level since 1994 (6.1% at the end of 2007). In addition, infrastructure constraints are tightening, and real wage increases are greater than the productivity gains. This suggests that the economy is overheating and that aggregate demand is outpacing Russia's long-term productive capacity. The new government's key policy challenges are reducing inflation and tackling the remaining structural reforms (World Bank Russian Economic Report, June 2008).

**Oil prices**

Thinning global inventories, the weakening US dollar, and supply concerns have coalesced to drive oil prices to record highs of $147 a barrel on 11 July 2008. Elevated oil prices have had a profound impact on the global economy, bringing economic prosperity to some nations while depleting disposable incomes in others. The rise in oil has accelerated segmentation shifts in the automotive industry and brought energy policy to the forefront of national and regional agendas.

What is the reason for unstable oil prices? According to www.wikiinvest.com, there are many reasons that affect the oil price:

- Increasing demand (Price ↑)
- Supply shocks like production cuts, weather, terrorist attacks, transportation bottlenecks (Price ↑)
- The decreasing value of the US dollar (Price ↑)

<table>
<thead>
<tr>
<th>(av)</th>
<th>4.8</th>
<th>6.5</th>
<th>4.3</th>
<th>4.0</th>
<th>4.2</th>
<th>4.1</th>
</tr>
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<tbody>
<tr>
<td>Consumer Price Inflation (%)</td>
<td></td>
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</tr>
</tbody>
</table>

Table China's key indicators

Source: www.economist.com
• Speculations (Price ↑)

The chart below shows the movement in oil prices and also provides the reasons for the movement from 1970 to present.

![Crude oil prices 1970-2008](source: http://news.bbc.co.uk, accessed on September 17th, 2008)

**Currencies**

Weakness dollar reach of 1.60 against the euro and 95 against the Japanese yen. Interest rate cuts by the Federal Reserve have turned the US dollar into the second-lowest yielding currency in the developed world. Since then, the dollar has recovered (Lien and Schlossberg, 2008).

According to experts from the IFO World Economy Survey (IFO WES), the euro is overvalued right now. On the other hand, the US dollar continues to be undervalued. The British pound and the Japanese yen are not far away from their fair value. According to IFO WES, a strengthening of the US dollar is expected particularly in Western Europe, Latin America (with the exception of Peru) and Africa. In Eastern Europe, Oceania, the Near East and Canada, US dollar parity will remain almost unchanged.

In the first and second quarters of 2008 the eurozone economy continued to compete and grow, despite having to battle with the twin obstacles of a slowing North American market and the ever-rising exchange rate, which created massive cost disadvantages for the export-driven region.
The boom in the eurozone region was led by the export sector, most notably in Germany, as gains in efficiency, coupled with strong demand from emerging markets, helped producers in the metal, electronics and the car industries create more jobs at the start of the year than at any other time in the past four decades (Lien and Schlossberg, 2008).

![EVALUATION OF CURRENCIES](image)

Figure Evaluation of currencies
Source: IFO World Economic Survey, August 2008

The effects of a weak global economy and uncertain fuel prices on the European automotive industry

Based on Speer and Ciferri’s research, published in the Auto News Europe journal (September 15, 2008, p.3), the effects of a weak global economy and uncertain fuel prices on the European automotive industry are summarized below:

- The weak global economy and uncertain fuel prices caused a 16.4% fall in European new car sales in August.
- The European market was down 4.4% in the first eight months of 2008 compared with the same time period in 2007.
- European new car sales fell 6.1% to 13.89 million units in 2008 and are expected to fall a further 4.5% to 13.27 million units in 2009.
- New car sales in the five major European markets were down in August. In the first eight months of 2007 only France and Germany displayed unit-sales growth.
In August | In the first 8 months
--- | ---
Spain | -41,3 | -21,1
Italy | -26,4 | -12,4
UK | -18,6 | -3,8
France | -7,1 | 2,9
Germany | -10,4 | 1,7

Table New car sales in the European Market
Source: Automotive News Data Center, 2008

European OEMs feel pessimism and nervousness for the future:
- “Europe won’t see a stellar performance,” Sergio Marchionne, Fiat Group chief executive officer (CEO).
- “The economic feelers we have extended predict critical times ahead,” Martin Winterkorn, VW Group CEO.
- “There aren’t any positive signs at the moment,” Carl-Peter Forster, GM Europe President.

On the other hand, according to the www.wikiinvest.com (visited on October 24th, 2008), OEMs will be affected from high oil prices because of the reasons listed below:

- Car companies that are heavily dependent on the sales of sport utility vehicles for their profits, such as General Motors (GM) and Ford, will see fewer sales as consumers tend to reduce their purchases of gas-guzzlers when oil prices are high.
- Hybrid car manufacturers like Toyota, Honda, GM, Ford, and Nissan benefit from higher oil prices because high oil prices lead to higher gas prices, causing consumers to seek out ways to reduce the amount of gasoline they consume. Auto makers that have announced plans to produce electric cars will also benefit,
especially if oil prices continue to rise over the next few years. These companies include Daimler, Renault, Toyota, GM and Mitsubishi.

Risks and Opportunities

Based on the economy analysis above, for OEMs and suppliers, there are risks like oil prices, the weak global economy and dollar fluctuations. On the other hand, there are opportunities from emerging markets.

Oil prices play a major role in the automotive industry. Fuel helps a car to run. When oil prices rise, the demand for cars decreases. Then, it clearly concerns the auto industry because the companies are competing with each other to meet the new demands of the more fuel-efficient consumer at an affordable price. There is no doubt that this affects the profit margin of companies within the industry. Moreover, increasing oil prices also affects the type of vehicles which are demanded by the customer and the ways that those vehicles are designed.

A weak global economy and dollar fluctuations are the factors that constitute risk for OEMs and automotive suppliers. These factors can lead to a reduction in car sales. Furthermore, the rising exchange rate (the overvalued euro and the undervalued dollar) creates massive cost disadvantages for exporter countries in Europe.

Fast rising emerging markets like China, India, Eastern Europe, South America, South Korea and South Africa are aided by low operating costs and supportive government policies, resulting in lower prices for vehicles. Lower operating costs in emerging markets makes investing in these regions a very attractive business proposition. This situation provides an opportunity for OEMs. Furthermore, emerging markets also provide outsourcing opportunities, untapped markets and the opportunity to globalize.