



Creating sustainable Competitive Advantage

via applying design thinking to
management problems

Complex market structures, corporate culture and the ability to innovation in global markets (especially in the automotive industry)

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Abstract

Future perspectives for globally operating organisations in Europe look gloomy. Especially companies with their headquarters in "Old Europe" have to face tremendous pressure due to global competition. High wages and location specific costs slow down the competitiveness of these organizations. The automotive industry however still seems to be a star in this global market. It is suggested that the implications of the highly complicated processes in this industry - with costly project specific and mostly international operations – for the ability to compete- are tremendously underestimated. Various insolvencies of big international OEMs and suppliers prove this fact.

Nevertheless some companies with European headquarters-in even more price-sensitive markets (e.g. the chemical industry) but also some in the automotive industry-are doing rather well. Why is that so? Michael Porter once stated: "A company can outperform its rivals only if it establishes a difference that it can preserve". It is suggested that such companies establish this difference by creating a unique and specific inspiring "Company Culture" and identity- on a local as well as on a global level- that promotes creativity and innovation throughout all its ranks.

To investigate the issues of complexity, Corporate Culture and innovation in European companies, an automotive supplier based in Germany was chosen as a case study. An analysis of this company was carried out- put together in numerous interviews with a "Significant" cross section of company personnel. The results were compared with published research findings in relevant literature. In addition the complexity of the automotive industry is outlined in detail to demonstrate the correlation of culture, organisation, structure and success. Some results of this study were applied directly as improvements in the case study company. This paper therefore discusses "Creating competitive sustainable advantage" not only from a theoretical point of view. In fact novel solutions for this company were generated and successfully implemented.

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1. Executive summary *Creating sustainable competitive advantage*

Success and sustainability in competitive markets

In today's industries the generation of profit is based on the profound belief that the ability to handle technology and know-how are the key factors to success in competitive markets. From the authors point of view however - a manager in the automotive industry in Germany - and as a consequence of globalisation technology and product quality merely provide a basic first entrance to specific markets. They are rarely seen these days as unique selling points, even for sophisticated products. Today products can be developed and manufactured - no matter in which country - and it is this that raises the question of which really are the key factors for sustainable success for globally networking companies?

The goal of this paper is to find the reasons responsible today for sustainable competitive advantage in the market place itself and especially for successful and globally networking European companies. This means that in the end the goal is to create a sustainable competitive advantage for these companies and this in even more global and highly complex and competitive market structures. Many factors influence the competitiveness of companies and their products. These can for example be financial aspects, complexity, supply chain management, quality, education of the employees, engineering capacity, networking or corporate culture. Further factors can be marketing, a product strategy, sensitivity to weak signals (Ansoff, 1976) and the ability to be innovative on all company levels. Due to the highly differentiated infrastructure in Europe the competitive advantage and position of global companies is assumed to be extremely good, but high wages, complex structures and a multitude of different social values all add to the cost of production and often foster a company's decision to move production facilities to Eastern Europe or even Asia (Heiniger/Straubhaar/Rentsch/Flückiger/Held, 2004). Furthermore highly differentiated and expensive social systems and strong labor forces immobilize decision-making and therefore slow down the construction of a company's future strategic goals. Nowadays however, competitive markets require high levels of flexibility and the ability to respond immediately to market requirements. They even force companies and their staff to think years ahead to design a bright future for their products, their subsidiaries and their people (Hamel/Prahalad, 1995).

The author's tools to understand the various difficulties are first of all a detailed description of the market complexity. In doing so and by analyzing successful European companies the author's assumption is that - by making employees aware of all the complexities inside the company one fosters the understanding of values and company assets and also emphasizes the importance of communication. This helps to trigger Corporate Culture on a local as well as on a global level.

This is assumed to lead everyone to a holistic view of that company and this ultimately turns it into an innovative and continuously learning system. Only learning companies, which are highly innovative, can achieve a sustainable competitive advantage. To understand the described factors influencing the sustainable competitive advantage the author studied and analyzed a European company, the HP Pelzer Group, an automotive first Tier supplier - and the employer of the author. The analysis is based on Michael Porters Five forces Model (Porter, 1985): new entrants, suppliers, substitutes, buyers and competitors, which assists in understanding today's and future coherences between the ways in which companies deal with and respond to their targets and their employees as forced on them by the global markets.

An important goal of this paper is to create new strategies for sustainable competitive advantage in general and specifically for the HP Pelzer Group. Further preferred literature in this context is describing here innovation (v. Stamm, 2005) and Corporate Culture (Rosengarten/Stürmer, 2004) as well as strategy (Liebl, 2000). Further goals are:

- to start a prototype transformation process for a better competitiveness in the market
- to develop a novel strategic approach for improving the business model and the ability to innovate and communicate
- and maybe to find a "sixth force" responsible for success

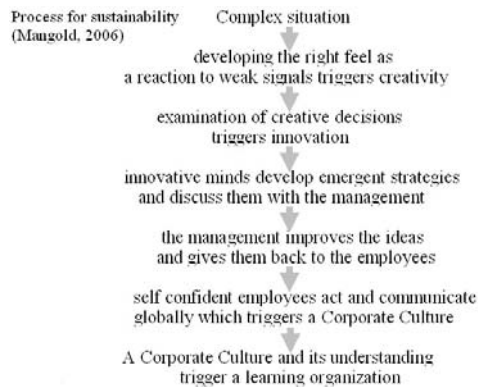
To cope with this complex analysis and the development of a planned and sustainable approach "systematic lateral thinking is applied as a new tool". The author acquired it as a student of Industrial Design and connects it here with his experience as a manager in the automotive industry. In a way management itself is seen here as a design process (v. Stamm, Liebl, 2006). Especially the connection of these two contradictory fields allows a new view on complex problems in global markets and at best is likely to produce a superior solution for sustainable competitive advantage.

The case study HP Pelzer Group – a personal full service supplier

The HP Pelzer Group is a family owned global automotive supplier with 30 locations in 14 countries and a turnover of €592 Mio. in 2005. With its favorable market position the company is the third largest international acoustic integrator worldwide. With a strong understanding of values that money can't buy including a young management team, special managerial behavior and an international spirit the company serves car manufacturers worldwide as a specialist for automotive acoustic systems and trim parts from the very beginning of a project until the end of production. With a reinvestment into R&D of approximately 5 % profit per annum highly skilled, technology driven, fast and flexible individuals with certain know-how of cultural differences develop and implement custom made acoustic solutions. These are based on a standardized product toolkit system and applied in five R&D-centers on three continents. This means local technologies in global systems. The intense vertical integration of foam-, fiber-, heavy-layer-, foil- and carpet products guaranties a superior portfolio for the very special demands of each OEM. An outstanding unique selling point of the HP Pelzer Group is the company's commitment to immediate action in order to find the fastest, best and most precise solution for a customer. Moreover, the company is a strong brand, associated with high quality engineering and well known for producing high tech solutions for societies of tomorrow and a future orientated market concerned with noise reduction, wellness and relaxation. Furthermore consequent supply chain management guaranties attractive product prices compared to quality and performance. In the end the choice of the most suitable technology for each category of the HP Pelzer Group (which is engine compartment, interior compartment, luggage compartment and exterior) provides the OEM with light and cost effective parts. Mr. Dipl.- Ing. Helmut Pelzer, founder and owner of the HP Pelzer Group, sums up „Whenever you need professional assistance on a high level to make your car model a superior choice in acoustics and trim, you should work with us. No matter what problems you have we will find the personal solution for you and we will make it happen“

The papers subject and challenge

Complexity, corporate culture and innovation as the key topics of the paper are examined and shown for the HP Pelzer Group and the B2B-business in the automotive industry in a detailed way, producing a deep understanding for the interdependencies. As the automotive market creates one of the most complex systems of industrial relations “Corporate Culture” is seen as a key factor for success. (Rosengarten/Stürmer, 2004). The Graph explains the assumptions:



The term innovation is nowadays today on a level of merely price attractive fancy products but should affect not only products but also the way in which companies deal with their employees (v. Stamm, 2005). A comparison to the B2C- widens the view and emphasizes the outcomes seen before. To find out how sustainability can be achieved in that context in a further way Porters 5 forces are being analyzed on behalf of the HP Pelzer Group and the automotive industry:

new entrants - are few in a highly differentiated market (complexity good in this situation)

suppliers - a huge variety of suppliers and the in-house production of semi-finished goods guarantee a good position (complexity good in this situation)

substitutes - complex products are difficult to copy (production innovations make easy copying impossible)

buyers - are very rare in a difficult and price sensitive market segment (as a sustainable supply chain is required the market is unattractive for buyers)

competitors - are the most dangerous force (corporate culture is the differentiation for success)

Porter's five forces explain in a clear way that competitors are the biggest danger at the example of the HP Pelzer Group. To fight this danger Corporate Culture could be a unique solution as the process and the research findings showed. Further scientific results lead to two propositions that have already been invented at the HP Pelzer Group and already show good results. Furthermore they explain in general how to foster sustainable competitive advantage for European midsized companies in global markets

The special situation of the author

It has to be mentioned that the author's position at the HP Pelzer Group is head of Marketing & Design and that most of the developments and approaches discussed here have been improved in the company while writing this paper. This means that new thoughts derived from the paper have influenced the management of the HP Pelzer Group from Oct. 2005 onwards and likewise, new developments inside the company have influenced the content of this paper. It all started with an innovation audit held with 17 employees and the Board of directors on the basis of the Innovation Audit developed by Bettina v. Stamm. The outcome of this audit motivated the author to undertake a Storylistening (Rughase, 2000) with about 30 employees in the effort to find out about the needs of the company in Nov. 2005. On this basis and a research methodology that described the needs of the company from an external and an internal view step by step two approaches have been developed.

The approach 1 builds a global company culture on the basis of the tool storylistening (Copyright Dr. Olaf Rughase) - It is to identify and define for example the visions and needs of the people working for the HP Pelzer Group. In a standardized process people are asked specific questions to make them talk about their needs and problems. The answers of different people can then be looked at in terms of quantitative and qualitative accumulations. In the case of the HP Pelzer Group, people from various countries and different departments like sales, research and development, tooling, IT, logistics, purchase and controlling were interviewed and asked what they really thought was missing in the company. A colorful amount of opinions was collected in November and December 2005 (Bopp/Mangold, 2005) By analyzing these interviews, which lasted for about 1 and a half hours (Voigt, 2003), and by interviewing a certain amount of people from the company (about 30 international persons), a cognitive map of visions and needs was created, which showed a clear tendency. People were emphasizing a lack of personality in the company. In former days the owner, Helmut Pelzer managed to bring different interests and ideas together by using himself as a kind of catalyst for the identity of the company. But as the system grew bigger and bigger today what is really missing is a commonly understood target for the employees, where to go and how. In the end they asked for a corporate design and a corporate identity to identify themselves with the basic ideas and the motivation of the company. The outcome was a complete corporate identity manual, which is talking about corporate design, brand identity and Corporate Culture. The manual has been delivered to all departments worldwide to optimise the communication process internally and externally. As a first consequence the members of the HP Pelzer Group sales team are now attending special sales meetings to learn how to communicate the spirit of the company to the customers in a correct and clear way. The training is being held both nationally and internationally in order to optimize the transformation process between the company's internal and external environment. These new efforts of the sales teams showed very soon a need for a reliable written vision of the company and its goals. In addition planned movements in industrial markets need to be communicated in a more detailed way.

So the approach 2 has been developed to assure a continuous improvement process for the entire organization with a revolving strategic planning process. The system developed by Protransfer/Basel and the management team of the HP Pelzer Group from 12/2005 to 5/2006 is separated in three basic steps.

- As a first step the corporate strategy takes into consideration the development of the entire company and the market for the next 15 years and more. It gives a rough direction and a guideline where to go in the future.
- As a second step the portfolio planning focuses on the situation of the company in the next 5 years. In a systematic approach in the portfolio assessment the company is being analyzed in a very detailed manner. In the portfolio development, all important facts and to do's are written down and are being decided in the portfolio decision by the Board of Directors.
- As a third step the base planning finally describes the tasks for the next three years and already sets precise financial targets, where to go and what to do when.

This process is being replayed every year on the basis of technical, customer and footprint specific improvements. These improvements are focused like a functional strategy (Haussmann, 1995). Departments that are involved in the strategic planning process are marketing, controlling, sales, research and development, tooling and corporate development.

These two propositions build together a controlling-, guiding-, organizing-, and communicating system which accelerates in the end the speed of the international company- communication and innovation. It is leading to a form of simultaneous engineering and it fosters the basic understanding of the company's values which slowly leads to a national and later on to a global corporate culture.

The combination of approach 1 & 2 - Strategy building and Corporate Culture

Reduced "Time to market" and a fast distribution of know-how and company values already show the first financial results within the HP Pelzer Group. A new invented technology, the microperforation of aluminum foils, has successfully been applied to various OEM platforms globally and is generating remarkable profits. Furthermore the two approaches combined lead to changes in the structure of the HP Pelzer Group's Management with the company now having a flexible BU-matrix organization. Large companies like BASF or Whirlpool also proof that the combination of innovation, a strategic planning, a well designed management process and in the end a strong corporate culture lead the way to sustainable competitive advantage. To prove these assumptions the organization is separated in the three dimensions global, regional and local. To find out the results from a scientific organizational point of view (Stark, 2006) the company is divided now in four separate layers. On each layer the company's status today is being described.

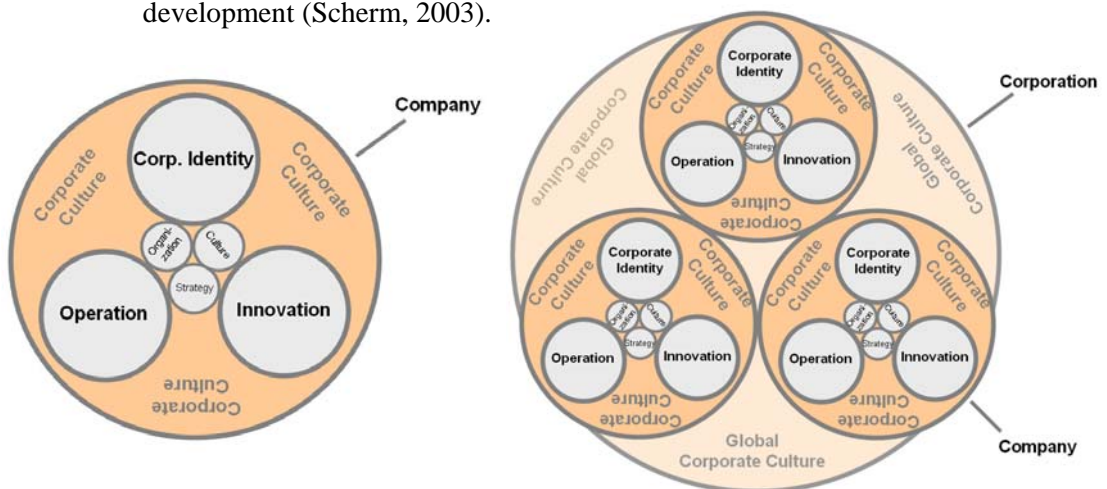
Global layer -> The employees and actors know the vision of the company and have the commitment (Ghemawat, 1991) to make this vision and identity stronger for the stakeholders, the customers and themselves. Feedbacks from the magazines and from the customers are being collected and weighted.

Organization as a layer -> Worldwide actions like Kaizen and monitoring of new ideas and superior work flows are being communicated via the company owned communication systems and are weighted.

Team layer -> The corporate identity and corporate culture like "we are one company" is being augmented, as collective actions have usually a higher output and happen faster than singular action. An award is being set up for the global team of the month and the meetings of departments are being used for know how transfer.

Individual layer -> Employees take responsibility for what they are doing. The responsibility for budget and special classes for improvement inside the company help the employees to understand how to learn every day. The implementation of a science server opens up a new dimension of professionalized personal development (Scherer, 2003).

Global CIO- system (Mangold, 2006)



Conclusion

Since companies' basic economic motivation is to maximise return on investment, shareholder value (Rappaport, 1997) and to secure a strong future market position, various strategies in the past 30 years described the topics and items responsible for the accumulation of wealth in industrialized markets and societies. As globalization opens up a new chapter of competitiveness in these markets the new force to fight price attractive products from semi industrialized countries will today be Corporate Culture as it ensures that, even in global companies, employees are working towards common goals, no matter where in this world.

The new strategic approach (valid only for the B2B Business) "*Sustainable Competitive Advantage is originated through a balance between organizational, strategy and culture. This balance fosters fast operation, a strong corporate identity and innovation and results in Corporate Culture. The Corporate Culture triggers on an international level a Global Corporate Culture which gives the company a unique, strong and lasting global presence.*" (Mangold, 2006)

Transferability and limitations

As Corporate Culture is a very personal thing it can not be transferred from one company to another. Therefore it is a unique treasure of an organization no matter what size or nationality. But as it seems to be extremely difficult to develop a corporate culture for a very small group of people a minimum of 50 to 100 persons should be required from the authors view to really live the thing.

Lessons learned

Despite expensive social systems and strong labor forces European companies have strategic advantages in building up a strong Corporate Culture which helps to overcome the immobility these companies face in global markets although they have a superior technological and an innovative spirit. The economically powerful System of the European Union is an impressive example of successful networking capabilities which –in that case- is exercised by the European countries. (Heiniger/Straubhaar/Rentsch/Flückiger/Held, 2004) It proves that sustainable competitive advantage through Corporate Culture and the ability to innovation should be easily realized.

By the author M. Mangold

The outcome of this paper was triggered by my intention as a student of the first class of the Zollverein School of Management & Design in Essen to maybe help creating a new discipline which may be called designmanagement or corporate responsibility management or corporate strategy building (Bruder/Maier, 2006) or whatever. In any way my effort was to combine the world of facts with the world of feelings and emotions and to maybe make them measurable via numbers to help building up new structures for people and the global society to make life easier and give companies the advantage for sustainable profits. For further questions or remarks please contact me via m.mangold@martinmangold.com.