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Entrepreneurship as a tool for increased organic growth in large, established companies

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Sammanfattning

Uppsatsens titel: Entreprenörskap som ett verktyg för att uppnå ökad organisk tillväxt i stora etablerade företag.

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Nyckelord: Entreprenöriell orientering, Organisk tillväxt, Corporate Entrepreneurship, Kontingensteori, Trelleborg.

Syfte: Att undersöka den Entreprenöriella Orienteringen i ett stort, etablerat företag som vill öka den organiska tillväxten. Om nödvändigt, justera EO-modellen så att den passar i den specifika kontingensen. Ge råd om hur ett stort, etablerat företag kan öka den Entreprenöriella Orienteringen.

Metod: En fallstudie på Trelleborg AB genomfördes med hjälp av semi-strukturerade intervjuer med respondenter från olika organisationsnivåer. Vi har också studerat en stor mängd artiklar.

Teoretiska perspektiv: Kontingensteorin har tjänat som övergripande synsätt genom hela studien och den Entreprenöriella Orienteringen, såsom definierad av Lumpkin och Dess (1996) utgjorde den teoretiska grunden. Modellen innehåller följande fem dimensioner: Autonomitet, Innovationsförmåga, Risktagande, Proaktivitet och Konkurrerande Aggressivitet.

Empiri: Divisionen Materials and Technical Composites inom Trelleborgkoncernen valdes som fallstudieobjekt. Sju medarbetare på olika hierarkiska nivåer, från VD till maskinoperatörer, intervjuades.

Resultat: De faktorer som ett stort, etablerat företag måste ta i beaktande för att öka sitt entreprenörskap skiljer sig åt jämfört med ett litet företag. Därför har EO-modellen anpassats genom att exkludera dimensionen Proaktivitet och addera dimensionen Kommunikation. Anledningen är att Proaktivitet inte är någon givande strategi i den specifika kontingensen, och företaget bör hellre prioritera Konkurrerande Aggressivitet. Kommunikation är ytterst viktigt för att få ut så mycket som möjligt av övriga dimensioner. En tillfredsställande kommunikation är svårare att uppnå i ett stort företag än i ett litet. De fem dimensionerna i den anpassade modellen är: Autonomitet, Innovationsförmåga, Risktagande, Konkurrerande Aggressivitet och Kommunikation.

Abstract

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Key words: Entrepreneurial Orientation, Organic growth, Corporate Entrepreneurship, Contingency theory, Trelleborg.

Purpose: Investigate the Entrepreneurial Orientation in a large, established company that wants to increase organic growth. If necessary, adjust the EO-model to fit into this particular contingency. Give advice on how a large, established company can improve its Entrepreneurial Orientation.

Methodology: A case study of Trelleborg AB was conducted through semi-structured interviews on different hierarchical levels. We have also studied a large amount of articles.

Theoretical perspectives: The contingency theory was used as a comprehensive approach throughout the study and the Entrepreneurial Orientation as defined by Lumpkin and Dess (1996) constituted the theoretical base. The model contains the following five dimensions: Autonomy, Innovativeness, Risk-taking, Proactiveness and Competitive Aggressiveness.

Empirical foundation: The division Materials and Technical Composites in the Trelleborg Group was chosen as case study object. Seven employees at different hierarchical levels, ranging from CEO to Machine Operators were interviewed.

Conclusions: Compared to a small company, a large established company must take other factors under consideration when striving to become entrepreneurial. Hence, the EO-model has been adjusted by excluding the dimension Proactiveness and adding the dimension Communication. The reasons are that in the specific contingency, Proactiveness is no fruitful strategy and the company should rather prioritize Competitive Aggressiveness. Communication is vital in order to get the most out of the other dimensions, and a satisfactory Communication is harder to achieve in a large company than in a small. In the new, adjusted model the dimensions are: Autonomy, Innovativeness, Risk-taking, Competitive Aggressiveness and Communication.

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1. Introduction

In this chapter, a background to entrepreneurship in general leads to the specific research area of the Entrepreneurial Orientation. A problem discussion concerning the Entrepreneurial Orientation then shows the way to the purpose and research questions of this study. This is followed by a short presentation of the case company Trelleborg AB and a list of definitions. The chapter ends with a figure showing the further disposition of the thesis.

1.1 Background

As good as every day we hear about entrepreneurs in the public debate. Entrepreneurship seems to have had a huge impact on Swedish industry throughout the years. Many of the finest and largest Swedish companies today were founded by typical entrepreneurs, such as IKEA by Ingvar Kamprad, Tetra Pak by Ruben Rausing or H&M by Erling Persson. The previous CEO of H&M, Stefan Persson, said the following about entrepreneurship in the business magazine *Veckans Affärer*: “The space for intrapreneurship, that is being an entrepreneur within the company, is very important for us and it creates a good spirit” (*Veckans Affärer*, 020218).

Entrepreneurship is no new area of research. Traditionally, entrepreneurship has been part of the field of economics, but today it is studied extensively within the area of business research as well. The first researcher to coin the term entrepreneurship was Cantillon in the 18th century, when he defined the entrepreneur as a risk-taker. Other definitions throughout the years and some of their most well-known advocates are “the entrepreneur as capitalist” (Smith, Ricardo, Marshall), “the entrepreneur as innovator” (Schumpeter, Dahmén), “the entrepreneur as opportunity seeker” (Kirzner) and “the entrepreneur as coordinator of scarce resources” (Casson) (Landström, 2005).

Still today there are many different definitions of entrepreneurship in the scholar literature. A narrow view defines entrepreneurship as starting a new company whereas a broader view defines it as pursuing opportunities (Stevenson & Jarillo, 1990). Landström (2005) argues that entrepreneurship does not necessarily include actions that are innovative and break existing patterns and adds that:

“[...] entrepreneurship also includes growth in existing businesses. Growth can indeed be seen as a continuing entrepreneurship where business opportunities are being discovered, organized and exploited within an existing business context.”
(Landström, 2005, p 20)

Entrepreneurship is a very positively loaded term associated with new ways of thinking, wealth creation and ground breaking practices. The professor of entrepreneurship at Lund University School of Economics and Management (hereafter called EHL), Hans Landström, introduced us to the area of corporate entrepreneurship, i.e. entrepreneurship within existing organizations. The terms corporate entrepreneurship and intrapreneurship are often used interchangeably, but one distinction that can be made is that corporate entrepreneurship concerns large organizations while intrapreneurship emphasizes all sizes (Antoncic & Hisrich, 2003). Whereas management and business courses within the academic world generally deal with managing existing resources and procedures, focusing on the organization's core competencies, corporate entrepreneurship balances on the boarder, exploring new behaviors as well. Combined with the ongoing debate about entrepreneurship in the daily press, corporate entrepreneurship therefore caught our interest.

Even though a lot of research has been conducted in the field of entrepreneurship, the picture is scattered and there is generally no cumulative body of shared knowledge (Davidsson & Wiklund, 2000). However, one area shows a greater homogeneity regarding for example the use of definitions and measurement scales. This area is called Entrepreneurial Orientation (EO) and is to date something of a standard in the field of entrepreneurship (Rauch et al., 2005). The model of EO is easily accessible and well developed in the literature, which makes it straightforward to work with.

1.2 Previous research on Entrepreneurial Orientation

EO refers to a firm's strategic orientation and its processes when it comes to decision making activities and practices. EO is not the same as entrepreneurship. Whereas entrepreneurship refers to *what* a firm does, EO refers to the processes and hence *how* the firm acts in order to be entrepreneurial (Lumpkin & Dess, 1996). The questions *what* and *why* regards economics and psychology/sociology respectively, while the question *how* regards the field of management since it focuses on understanding and, hopefully, improving managerial practice (Stevenson & Jarillo, 1990).

One of the first researchers to develop and conceptualize the EO was Danny Miller (1983). His definition of an EO-firm as one that “engages in product-market innovation, undertakes somewhat risky ventures, and is first to come up with ‘proactive’ innovations, beating competitors to the punch” has been used intensively in the scholar literature. Miller defined the three dimensions of EO as being Innovativeness, Risk-taking and Proactiveness. *Innovativeness* refers to how firms engage in, and support, new ideas and to their willingness to do things differently than the current state of the art. *Risk-taking* often implies taking on heavy debt or large resource commitments to be able to capture opportunities. *Proactiveness* means seeking new opportunities and a proactive firm is often a leader who tries to influence the environment and create demand.

Lumpkin and Dess (1996) suggest another two dimensions to be added to create an EO, namely Autonomy and Competitive Aggressiveness. *Autonomy* means the possibility of an individual or a team to independently work with an idea and bring it to completion. It also suggests that individuals in lower levels of the organization have the freedom to act independently. *Competitive Aggressiveness* has to do with how the company relates to competitors and responds to, rather than influences, environment and demand. Lumpkin and Dess’s five-dimensional approach to EO has won popularity and is today widely used. It is designed as follows and is explained in detail in chapter 3.

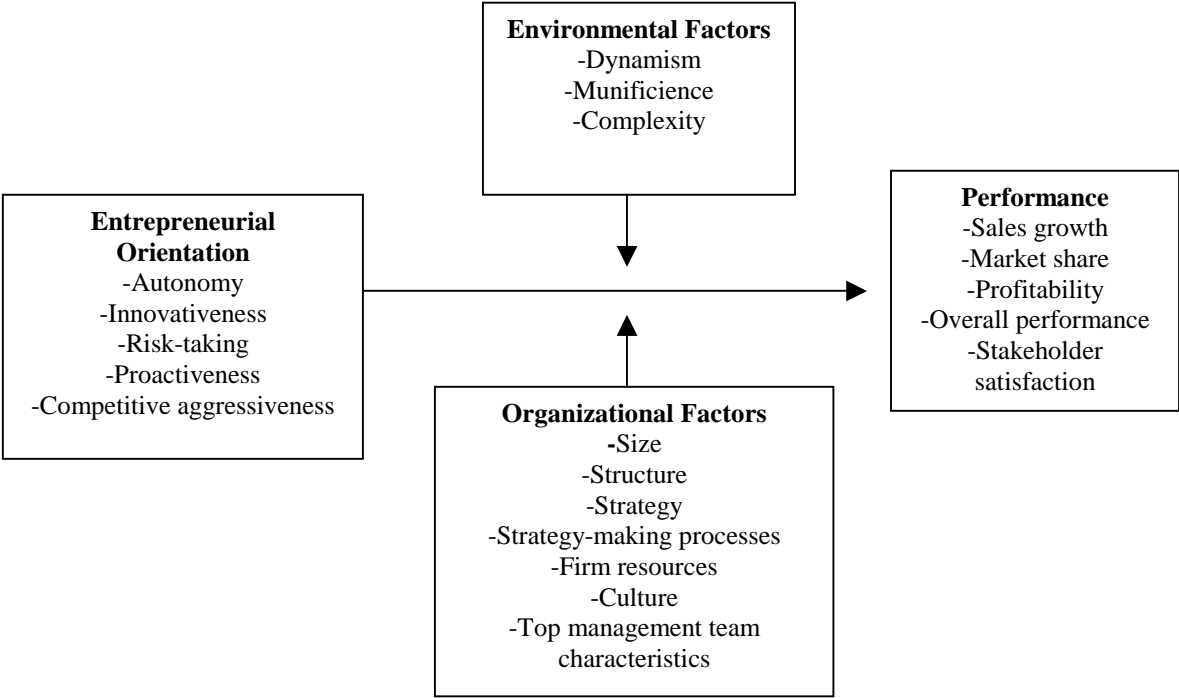


Figure 1. 1 Conceptual Framework of Entrepreneurial Orientation (Lumpkin & Dess, 1996).

Even though the definition of EO has become quite homogenous, there has been a debate whether or not EO is related to firm performance. However, the lion’s share of EO-literature suggests that firms using an Entrepreneurial Orientation perform better (Lumpkin & Dess, 2001; Wiklund, 1999; Zahra & Covin, 1995). Lumpkin and Dess (1996) argue that an EO is critical for achieving optimal performance such as sales growth, increased market share and profitability, overall performance and stakeholder satisfaction. In order to come to a final conclusion regarding the different views of EO and performance, Rauch et al. (2005) carried out a meta-analysis in which they combined previous studies in order to establish the relationship between EO and performance. The results show that firms benefit from taking on an entrepreneurial approach and should hence clear the view.

EO increases performance in several ways. For one, it enables organizations to pay attention to new opportunities which makes it possible to create first mover advantages and “skim” the

market ahead of competitors (Zahra & Covin, 1995). Wiklund and Shepard (2003) state that EO is not only important for product innovation. Their research shows that EO also works as a moderator in the relationship between knowledge-based resources and performance. This means that having an Entrepreneurial Orientation enables companies to better take advantage of their knowledge-based resources. Wiklund (1999) states that the pay off from EO increases over time and that both growth and financial performance are positively affected, i.e. a positive effect on one of the factors does not exclude the possibility of a positive effect on the other.

1.3 Problem discussion

As established above, previous research has proved a positive relationship between EO and improved firm performance. This view is embraced throughout this thesis. Most articles concerning EO deal with small or medium sized companies (e.g. Lumpkin & Dess, 1996; Rauch et al., 2005; Salavou & Lioukas, 2003; Wiklund & Shepherd, 2003). Many *large* companies, however, do not apply an Entrepreneurial Orientation. When companies grow bigger it often happens that they loose their entrepreneurial spirit. The ability to innovate is often either completely lost or the number of innovations drops remarkably. It is shown that successful large companies often continue to act as if they were small companies by encouraging an entrepreneurial sprit and letting employees far down the hierarchy act relatively independently (Peters & Waterman, 1982).

The fact that many large companies find it difficult to maintain their entrepreneurial spirit makes corporate entrepreneurship in large companies an interesting area for research. This standpoint is further emphasized by several researchers suggesting this field of research as important for further studies (e.g. Skovvang Christensen, 2005; Dess & Lumpkin, 2005). Skovvang Christensen conducted a study on Danfoss Drives, one of Denmark's largest industrial companies, examining how corporate entrepreneurship can be encouraged. She found that it was a very complex organization that differs from traditional study objects (small companies) in previous studies and she hence encourages more research to be carried out on complex companies. Dess and Lumpkin (2005) argue that additional research on how to promote a balance between exploration of new opportunities and exploitation of the existing business is needed. This question is particularly interesting for large organizations wishing to become entrepreneurial whilst keeping focus on existing operations.

Considering that most research on EO is made on small and medium sized businesses and that several researchers encourage more research to be conducted on corporate entrepreneurship in large organizations, we felt that there was a research gap to be filled. The question arose whether or not the EO-model, as presented by Lumpkin and Dess (1996), would be applicable to large, established companies. The model indicates that both environmental and organizational factors influence the effect of the different EO-dimensions on firm

performance, and there are rather obvious differences between the contingency of a small or medium sized business and a large. Thus, we wanted to investigate if the EO-model could be used on large, established organizations or if there was a need for adjusting the EO-model in order to fit into the contingency. Dess and Lumpkin (2005) support this idea by saying that research can be conducted in order to derive a theory that can confirm or disconfirm existing knowledge. Entrepreneurship within large, established organizations can be a very rewarding area to investigate because even though entrepreneurship might not be the first thing associated with such a company, previous research has shown that many of the skills required for achieving an Entrepreneurial Orientation are teachable. In other words, it is not predetermined whether the organization has or can have an Entrepreneurial Orientation and an organization wishing to become more entrepreneurial can therefore successfully achieve this by implementing an EO-strategy (Stevenson & Jarillo, 1990). Antoncic and Hisrich (2003) also argue that practicing corporate entrepreneurship can eventually lead to the creation of a routine and a more efficient entrepreneurial approach.

We believe that entrepreneurship can have just as positive effect on large organizations as on small. As argued for in the previous chapter this implies that an EO can lead to increased performance, such as increased sales growth, increased market share and profitability, overall performance and stakeholder satisfaction. In fact, we believe that entrepreneurship can be very important for many large companies. This idea is based on the fact that large firms today tend to grow through acquisitions, whereas the growth of small and young firms generally is organic (Davidsson & Delmar, 1997). If a large, established company focused more on entrepreneurship it might be possible to convert the acquired growth to organic growth.

Organic growth is defined as total growth minus the growth that comes from acquired companies. A variety of growth indicators is to be found in the literature, like assets, employment, market share, physical output, profits, and sales (Delmar et al., 2003). Thus, organic growth can be measured in several ways and there is no fix definition. However, the most common indicator used in empirical research is sales. It is argued that sales growth is a good measure of performance, since it is more accurate and straight forward than accounting measures (Lumpkin & Dess, 1996). It also precedes growth in other dimensions (e.g. growth in the number of employees) and is therefore a general growth indicator (Wiklund, 1999). Other reasons for focusing on organic growth are described in the following. In the eighties, many companies aimed at becoming conglomerates, i.e. being active in a diverse field of businesses. In the nineties, companies focused more on their core competencies. In the nineties, M&A really was in the limelight reaching its climax, at least in Sweden, with the numerous M&A:s in the IT business. The number of acquisitions peaked in 2000 and has dropped since then (Förvärv & Fusioner). In 2004 and 2005 organic growth has taken position on the top of the corporate agenda with 59 percent of senior executives of European, US and Asian firms considering organic growth as being the number one priority (Meer, 2005).

Why is then organic growth something to strive for in contrast to acquired growth? Acquired growth is a fast way to attain size, market share or to just grow in general and can lead to immediate cash flows. On the other hand, it is often expensive and risky; as a matter of fact, most mergers fail to create value for the shareholders of the acquiring company (Arnold, 2002; Harrison, 2005). Organic growth is indeed a slower approach, but it is sustainable in the long run and has a strong focus on the core competencies. In contrast, large companies generally have difficulties finding targets that are large enough and at the same time fulfil the acquirer's desired growth rate (Harrison, 2005). Young and small companies generally grow organically, i.e. by finding market opportunities for their products or services. On the other hand, old and large firms tend to rely very heavily on growing via acquisitions since the markets often get saturated (Harrison, 2005; Davidsson & Delmar, 1997). Firms growing fast organically differ from other companies in that they have a disciplined approach to growth by emphasizing its importance, making long-term decisions and investing heavily in R&D and customer insight. They also react rapidly to changes and have creative employees. The incentive system should support growth and the management team cannot view failure as entirely negative but rather as a link in the growth chain. Last but not least, the focus should be on ongoing small innovations rather than on groundbreaking ditto (Meer, 2005). There is a quite obvious resemblance between these factors describing firms with high organic growth and the fundamentals of the EO-model as in the five dimensions. This supports the proposition of this thesis that EO is a good tool for obtaining organic growth.

1.4 Purpose

The purpose is to:

- Investigate the Entrepreneurial Orientation in a large, established company that wants to increase organic growth.
- If necessary, adjust the EO-model to fit into this particular contingency.
- Give advice on how a large, established company can improve its Entrepreneurial Orientation.

1.5 Research questions

In order to fulfill the purpose, five research questions that needed to be studied were identified:

- To what extent are the EO-dimensions fulfilled in a large, established company today?
- What are the advantages and disadvantages of each of the EO-dimensions in a large established company?

- Do the employees see any possibilities of increasing the EO-dimensions?
- Are there any other dimension(s) that should be added or taken away?

1.6 Cooperation with Trelleborg AB

Trelleborg AB was chosen as case company and the thesis was written within an established cooperation between EHL and Trelleborg. Trelleborg is a large, established Swedish industrial group with a global business in polymer technology. The company has traditionally grown through acquisitions but has in recent years changed its strategic target focusing strongly on organic growth as well. The division Materials and Technical Composites, which is part of business area Engineered Systems, was chosen as case division. The division produces polymer products like road tape, rubber flooring and different types of composite materials. The reasons for choosing Trelleborg AB and Materials and Technical Composites are presented in chapter 2 and further information about the Group and the division is presented in chapter 4.

1.7 Definitions

Autonomy -	the possibility of an individual or a team to independently work with an idea and bring it to completion.
Comp aggressiveness -	how companies relate to competitors and respond to, rather than influence, environment and demand.
EHL –	Lund University School of Economics and Management
Innovativeness -	firms engagement and support in new ideas and their willingness to do things differently than the current state of the art.
Large company –	A company with more than 250 employees and a turnover exceeding EUR 50 million or a balance sheet total of more than EUR 43 million (European Commission).
Organic growth –	Total growth (in sales) minus acquired growth.
Proactiveness -	seeking new opportunities and a proactive firm is often a leader who tries to influence the environment and create demand.
Risk-taking -	taking on heavy debt or large resource commitments to be able to capture opportunities.

1.8 Disposition of the thesis

Chapter 2

This chapter begins with an explanation of the contingency theory which is used as a comprehensive approach throughout the study. To create an overview, this is followed by a clarification of the purpose and an explanation of how the investigation of Trelleborg and the adjustment of the EO-model are to be done. Further, a motivation to why a case study was chosen as research strategy, the reasons for choosing Trelleborg as a case company and a discussion of how this affects the generalizability of the study are presented. The chapter ends with an account of the collection of data which includes primary data in the form of interviews, secondary data and a discussion of the validity and reliability of the findings.

Chapter 3

This chapter aims at creating a deeper understanding of the Entrepreneurial Orientation. First, the relationship between an Entrepreneurial Orientation and firm performance is shown by a figure. This is followed by an account of the different EO-dimensions Autonomy, Innovativeness, Risk-taking, Proactiveness and Competitive Aggressiveness. To end the chapter, the EO-dimensions are presented in relation to the contingency theory in order to establish their interdependence and their dependence of the additional variables environmental and organizational factors on firm performance.

Chapter 4

In this chapter, the case company Trelleborg and the case division Materials and Technical Composites are presented. The presentation begins with an account of the wish of growing organically within the Group and includes previous research on the barriers of organic growth. Thereafter, Trelleborg and Materials and Technical Composites are presented on the basis of the contingency factors organizational and environmental factors as presented in chapter 3.

Chapter 5

The chapter starts with a table of information about the respondents. This is followed by the results from the interviews divided into seven parts; general comments about entrepreneurship, the five EO-dimensions and concluding comments. The results are displayed in unchanged but aggregated form, i.e. the most important parts of the interviews are presented without comments. In the end of each part, a table is presented with a summary of the most important opinions and comments of each respondent. The core opinion, as we interpret it, is presented in bold. This is the only place in the chapter where an interpretation of the respondent's opinions to some extent has been made.

Chapter 6

In this chapter, the research questions presented in chapter one are answered. The analysis is divided into two major parts. The first part describes to what extent the EO-dimensions are fulfilled in Trelleborg today. The second part establishes if any EO-dimensions should be added or excluded. This part is mainly based on research questions two and three, namely the advantages and disadvantages and the possibilities of increasing each dimension. The chapter ends with a presentation of the adjusted EO-model.

Chapter 7

In this chapter, conclusions concerning the analysis are presented. A theoretical contribution in the sense of the adjusted model and an empirical contribution in the sense of concrete advice for Trelleborg are given and the chapter ends with suggestions for further research.

2. Method

This chapter begins with an explanation of the contingency theory which is used as a comprehensive approach throughout the study. To create an overview, this is followed by a clarification of the purpose and an explanation of how the investigation of Trelleborg and the adjustment of the EO-model are to be done. Further, a motivation to why a case study was chosen as research strategy, the reasons for choosing Trelleborg as a case company and a discussion of how this affects the generalizability of the study are presented. The chapter ends with an account of the collection of data which includes primary data in the form of interviews, secondary data and a discussion of the validity and reliability of the findings.

2.1 The contingency theory as a comprehensive approach

The contingency theory is used as a lens to view organizations throughout this thesis. Even though previous research in the field of entrepreneurship has shown that an Entrepreneurial Orientation generally has a positive effect on firm performance, the contingency theory suggests that performance is dependent on the context wherein the organization is present. The contingency approach will help explain how the effect of an Entrepreneurial Orientation on firm performance depends on additional variables. These additional variables are called contingencies and include environment, organizational size and organizational strategy (Donaldson, 2001). The contingency theory, related to this thesis, indicates that firm performance results from fitting the EO-dimensions to organizational factors (e.g. size, strategy, and culture) and environmental factors (e.g. dynamism, industry characteristics). This implies that an organization implementing an Entrepreneurial Orientation needs to adjust to the contingencies in order to obtain optimal performance.

The fact that a contingency approach is used in this thesis has a great impact on the understanding of the Entrepreneurial Orientation. Many other theories argue that there is a “best way” to organize, indicating that maximum performance is obtained by the maximum level of structural variables (Donaldson, 2001). In the case of an Entrepreneurial Orientation this implies that all companies, independent of environmental and organizational factors, benefit from applying the maximum of all EO-dimensions, i.e. maximum Autonomy, Innovativeness, Risk-taking, Proactiveness and Competitive Aggressiveness. The contingency theory in contrast suggests that maximum performance is obtained by applying the appropriate, not necessarily the maximum, level of EO-dimensions and that the appropriate level is dependent upon the contingency. This is the same view as Lumpkin and Dess adopt when they suggest that “factors such as industry and environmental variables, or the structural

and managerial characteristics of an existing firm, influence how an Entrepreneurial Orientation will be configured to achieve high performance” (1996, p. 97) .

The Contingency theory hence proves that the purpose of this study is highly relevant. The contingency differs between small and large organizations, and large organizations trying to become entrepreneurial consequently need to adjust the EO-dimensions in other ways than small companies. The preconception was that the existing EO-dimensions needed to be adjusted before applied to large, established organizations. We found it possible that increasing some of the EO-dimensions in large organizations would influence the existing business negatively. One aim for the research was therefore to find a break-even point where the EO-dimensions create as many new opportunities as possible whilst not affecting the existing business negatively.

2.2 The research process

2.2.1 Clarification of the purpose

In the beginning of the research process there were two starting points. The first one was our interest in writing the thesis within the field of corporate entrepreneurship. The second was that we were offered to write the thesis within a co-operation between EHL and Trelleborg. As described in the previous chapter, after reading literature on entrepreneurship we found a research gap concerning the Entrepreneurial Orientation that brought the two starting points together. The model of the Entrepreneurial Orientation has mainly been tested on small and medium sized companies and we therefore saw the need for investigating how the model works in large, established organizations. We saw the possibility of making both an empirical contribution by investigating the Entrepreneurial Orientation in the specific case of Trelleborg, and a theoretical contribution by establishing if, and in that case how, the EO-model should be adjusted to fit the contingency of a large, established company. After adjusting the EO-model, our intention was to take the empirical contribution one step further and give concrete advice on how Trelleborg could optimize its Entrepreneurial Orientation. Before beginning the research we had no preconceived opinion of whether adjusting the EO-model meant adding an additional variable, excluding one or leaving them unchanged and just comment on each dimension's relative importance. Large organizations are more complex and the success of entrepreneurship might therefore depend on more dimensions than a small company. On the other hand, emphasizing disadvantages of the EO-dimensions is particularly interesting when coping with large, established companies since such companies have an existing business to regard and hence have to make considerations that differ from a smaller company's. Some of the features of an entrepreneurial organization might possibly be harmful to a large, established company.

2.2.2 Investigating Trelleborg

We saw the investigation of the Entrepreneurial Orientation in a large, established organization as a prerequisite for knowing whether or not the EO-model needed to be adjusted. The first step in the research process was therefore to establish to what extent the different EO-dimensions were fulfilled in Trelleborg. Different researchers have designed different ways of measuring the degree of EO. An example is the frequently used quantitative 7-grade scale measuring Innovativeness, Proactiveness and Risk-taking (Miller, 1983; Covin & Slevin, 1989). One reason for not choosing this scale was that the dimensions Autonomy and Competitive Aggressiveness, added by Lumpkin and Dess (1996), were not included. The major reason, however, for dropping this measurement scale was that we were not interested in only measuring the Entrepreneurial Orientation. In order to establish if and how the EO-model should be adjusted we also found it important to establish the advantages/disadvantages and the need for increasing/decreasing each dimension. Furthermore, due to the small number of respondents numerical answers would be insignificant because the average might be strongly affected by deviant answers. A qualitative, interpretive measurement tool was therefore a better choice and we decided to use a list of questions presented by Lumpkin and Dess (2005). The process of designing the interview questions is further presented in 2.4.1.2.

When having investigated the Entrepreneurial Orientation in Trelleborg we wanted to share our findings, not only in the sense of contributing to the theory development, but also using the adjusted model to give advice to Trelleborg regarding how they could improve their Entrepreneurial Orientation. Our intention was that this advice should be generalizable to other companies with similar contingencies.

2.2.3 Adjusting the EO-model

As stated above, investigating the Entrepreneurial Orientation in Trelleborg in the sense of establishing the degree, advantages/disadvantages and the need for increasing/decreasing each dimension was seen as a prerequisite for knowing whether or not the EO-model should be adjusted. After this was determined we analyzed each dimension one by one to see if all of them were useful in a large, established organization or if any of them should be excluded. We also tried to see if any dimensions were especially critical. The process of deciding if there were any additional variables to be added came to be the most difficult task. This was done both by looking for potential problems within the existing dimensions that could be solved by an extra dimension, and by looking for totally free-standing dimensions that independently would help the overall Entrepreneurial Orientation.

2.3 The case study as research strategy

When deciding how to conduct the research, ideas concerning different strategies came up to discussion. We knew that we were welcome to join the cooperation between EHL and Trelleborg and that we hence had a good source of information concerning EO in large, established organizations. However, a possible strategy could have been to include more companies in the research. This would have enabled us to get a richer and more detailed understanding of the Entrepreneurial Orientation in large organizations and the focus would have been on the phenomena rather than on the contingency. However, as described above, we strongly believe that the contingency is very important when it comes to determining a company's Entrepreneurial Orientation. Even if we would have chosen a variety of large, established organizations it would have been possible that the contingencies of these companies differed too much to draw any conclusions from the findings. A decision was therefore made to focus on one study object.

Another important factor when choosing research strategy was that we sought a strategy appropriate for theory development. Initial studies within the field of corporate entrepreneurship have been conducted by several researchers to build on the idea of EO and to identify important dimensions. Once the dimensions were established, statistical studies to establish the relationship between EO and firm performance, especially among small companies, were conducted. The drawback with such studies is that they are static in the sense of not considering, for example, the possibility of adding new dimensions. The just mentioned course of action follows a typical research cycle (George & Bennett, 2005). The next step in the cycle often shows to be yet another study in order to improve the initial concept. Often, this is carried out as a case study on a deviant case. Our study aims at building on the existing knowledge and developing the theory further and hence corresponds well to this point in the cycle. Case studies are suitable for theory development by providing information that can be used in order to alter or develop the existing theory (Jacobsen, 2002). Another strength of the case study is that it, in opposition to statistical studies that require large samples and thus may group together dissimilar study objects, considers contextual factors. This fact consequently increases the validity of the study (George & Bennett, 2005). Taking into account the wish to adjust and develop the EO-theory and the characteristics and advantages of the case study design, we found that they fitted very well together and therefore considered the case study to be a suitable research strategy.

A theory developing case study is mainly an inductive process (George & Bennett, 2005). However, the collection and analysis of the empirical data was of course strongly influenced by the existing EO-theory, since the intention was to develop the theory. Consequently, there was an alternation between theory and empiricism during the research process, letting the existing theory influence the collection and analysis of empirical data and then letting the empirical data influence the development of the existing EO-theory.

2.3.1 Reason for choosing Trelleborg as case company

Case studies can be conducted either as single or multiple case designs (Yin, 2003). When challenging or extending an existing theory like the EO-theory, a single case study is an appropriate choice. However, it is important to find a case that is critical in relation to the existing EO-theory to give a better understanding of the circumstances under which the theory is applicable or not (Bryman & Bell, 2003). Selection bias is not as crucial in case studies as in, for example, statistical studies. Differing from a statistical study, a case study object can be chosen just because of a certain feature. When choosing a critical case, foreknowledge therefore is an advantage enabling for choosing a true critical case (George & Bennett, 2005).

We believe Trelleborg to be a critical case for the purpose of this study. Since the EO-theory in general is built upon small organizations, the case company chosen needed to be critical in the sense of being a large, established company with an existing business to consider. To succeed in our research it was also crucial that the case company chosen had a pronounced desire to become more entrepreneurial and focus on organic growth. Trelleborg fulfils these requirements. However, these requirements are not unique for Trelleborg and several other Swedish companies would most likely have made just as good critical cases. The decisive factor in the choice of case company instead came to be the availability of data. Since we were offered to participate in the cooperation between EHL and Trelleborg, this was a convenient choice. Trelleborg is further presented in chapter 4.

2.3.1.1 Choice of case division

Having chosen a case company, a delimitation of the study object had to be done in order to get it manageable. Since the Group is built up of independent units with the mother providing group functions, we chose to conduct the study on a certain division that is part of the Trelleborg Group. This felt natural and made the thesis more focused. The next question was which division to choose. We wanted to find a division that was somehow typical for the Trelleborg Group and in which an interest in being entrepreneurial was to be found. In discussions with our contact persons at Trelleborg, Dan Eisengarten and Stéphane de Tavernier, we came to the decision that Materials and Technical Composites was a suitable division. The General Manager was well-known for being open-minded and interested in entrepreneurial issues. The CEO of the Trelleborg Group, Peter Nilsson, was earlier business area President for Engineered Systems, the business area to which Materials and Technical Composites belongs and thus, his goals and visions ought to be well rooted in the division.

To get the broadest span possible we were interested in finding a department within the division that had both officials and union contract employees. Materials and Technical Composites consists of four departments; Market & Sales, Logistics & Purchasing,

Operations Materials and Operations Calender. Operations Calender fulfilled our requirements and was therefore chosen (see appendix 2 for organization chart).

2.3.2 Generalizability

When conducting a case study it is often necessary to make a trade off between a broad applicability of the findings and a more explanatory richness, which is due to trying to keep the number of cases manageable (George & Bennett, 2005). In this thesis the focus was on explanatory richness and, consequently, only a single case study was made. We are aware that this decision affects the possibility of making broad generalizations of our findings, but consider contingent generalizations to be more important for the specific purpose of this study. The main purpose was to possibly adjust the EO-model to fit into the contingency of a large, established company and the research was made in order to develop a more comprehensive theory. The generalizations of this study should be seen as analytical generalizations, meaning that the results are generalized to the theory in question rather than to a broad population (George & Bennett, 2005; Yin, 2003). Thus, our findings concerning the EO-theory are generalizable to the EO-theory when dealing with the contingency of large, established companies. It is important to note, however, that the contingency may differ also within this group of companies. To increase the understanding of the specific contingency of Trelleborg, it is presented on the base of its environmental and organizational factors in chapter 4.

2.4 Collection of data

The fact that this study is conducted within a research project between EHL and Trelleborg made the most critical part of the study, the collection of data, easier. Our contact persons at Trelleborg have helped us with the preparations of collecting both primary and secondary data such as contacting interview objects and collecting written information about the group. The preparations such as choosing case objects within the Trelleborg group and discussing ways in which to conduct the case study was made in cooperation with Trelleborg.

2.4.1 Interviews

A number of methods for collection of primary data were possible. However, as mentioned above, a quantitative method like for example the 7-grade measurement scale was not considered appropriate. Since the general view applied in the thesis is interpretive, i.e. the emphasis is on understanding and interpreting the employees' perception of the social context, we wanted to deeper examine the respondents' opinions about the different EO-dimensions. In order to find advantages and disadvantages and to understand the respondents' spontaneous feelings about entrepreneurship we therefore found it important to talk to the respondents in person. Consequently, interviews were chosen as the method for data collection in this thesis.

2.4.1.1 Choice of respondents

When conducting a case study in an organization it is generally necessary to speak to the CEO or other top leaders (Andersen, 1989). In the case of Trelleborg, the CEO has a central role of this study since he is the one advocating an Entrepreneurial Orientation. The CEO is usually the initiator of the organization's EO-approach. A problem when implementing an EO in large organizations is the risk of the message getting lost on its way down the hierarchy, which may happen if the CEO is separated from the actual operations by a layer of middle-managers (Rauch et al., 2005). This fact makes it interesting to conduct interviews with employees from different hierarchical levels in order to see if they have the same perceptions of the EO-dimensions or not. Hence, an interview was conducted with the CEO of the Trelleborg Group. Interviews were also conducted with employees from the division Materials and Technical Composites.

Within the department Operations Calender, interviews were conducted with respondents on all hierarchical levels from the General Manager via the Production Manager, the Production Leader, and the Production Supervisor to the Machine Operators. These are all in a straight line in the organization and hence report to one another. When it came to the positions Production Supervisor and Machine Operator there were more than one employee on each position, and it was hence necessary to make a selection. The selection of Production Supervisor was made by the General Manager and the selection of Machine Operators was made by the Production Supervisor, due to who was available on the specific date of the interview. Interviews were conducted with two Machine Operators. All respondents are further presented in chapter 5.

2.4.1.2 Designing the interview questions

As established earlier, a list by Lumpkin and Dess covering all five dimensions and consisting of 21 issues to consider when seeking to develop an Entrepreneurial Orientation was used when designing the interview questions. The questions by Lumpkin and Dess are mainly "yes-or-no-questions" and we used them as a source of inspiration for creating new questions adjusted to fit the purpose of this study. The adjustments implied combining important aspects from different questions and turning them into "how-questions" requiring descriptive answers. The new questions were designed to both measure the degree of the EO-dimensions and to establish the advantages/disadvantages and possibilities of increasing the EO-dimensions.

The questions were designed slightly differently depending on what level of the organization the respondent was in. Questions to the upper levels of the organization were more focused on what effect the different EO-dimensions might have on performance, whereas questions to production workers were more focused on how they can contribute to an Entrepreneurial Orientation. The purpose of having similar questions to all levels of the organization was to

establish to what extent the opinions about entrepreneurship differ between different levels of the organization. This is interesting because it is essential that the EO is rooted in the whole organization.

Having finished the interviews with the employees at Materials and Technical Composites, we structured and wrote down the results. Based on this, we constructed the questions intended for the CEO. The questions for him can thus partly be seen as a result of an early analysis. We attempted to follow up the different thoughts and indications we received in the first interviews. The interview with the CEO therefore functions both as a source of information, like the other interviews, and as a check-up and reference regarding the picture built up from the interviews. The interview guides are presented in Appendix 1 a-e.

2.4.1.3 Conducting the interviews

The interviews took place at three occasions. At the first occasion we talked to the General Manager, the Production Manager and the Production Supervisor. A couple of days later we interviewed the Production Leader and then the both Machine Operators. As a finish, we conducted the interview with the CEO. The interviews were conducted at Trelleborg, in or nearby the respondents' ordinary office or workplace. The respondents decided when the interviews were going to take place as well as the amount of time available. The interviews were done in 45 – 60 minutes, which in all cases was enough to get the information needed. The set-up was semi-structured in the sense that follow-up questions were asked and that elaborations on especially interesting issues that came up could be done. Both of us were present during all interviews, one conversing and the other taking notes. A voice recorder was used and the sound files were transcribed into written form after the interviews.

2.4.2 Secondary data

The secondary data collected is used to form a background, create an understanding for the field of research and to help analyze and interpret the findings of the study (Rienecker & Stray Jørgensen, 2002). In this study, the main form of secondary data used is articles by other researchers presented in international business and management journals. Almost all articles concern EO in one way or another and were read to get a better understanding of the theory and to create a picture of previous studies conducted.

In order to find relevant articles in the field of corporate entrepreneurship in general and EO in particular, the Lund University database ELIN@lund was used. The area of EO turned out to be very convenient to investigate since the majority of the scholar literature is highly related to one another. There is a small group of researchers present in the lists of references of almost all articles found. Therefore, the secondary input data was more or less homogenous. This however, can also be a problem since the researchers within the field naturally have a

very positive attitude to the EO-model. We have searched for articles containing criticism with no success, but are aware of the fact that there of course could be negative aspects of applying an EO as well. In the analysis in chapter 6, much effort has therefore been put into analyzing and describing the advantages as well as the disadvantages with an Entrepreneurial Orientation in the specific contingency of Trelleborg.

2.5 *Can we trust the results of the study?*

There are many possible factors that may affect the results of a study. In order to assure that we found what we intended to find and that these findings were reliable, several precautions were made throughout the study. These precautions are presented below. Some things, however, are difficult to avoid and this chapter therefore also aims at making the reader aware of potential weaknesses of the study.

A couple of precautions were taken in order to minimize the risk of letting the strategy of the data collection affect the results. First of all, a deliberate decision was made not to send the interview questions in advance. We believe that this increased the reliability of the answers since they were spontaneous rather than polished. We were not interested in receiving the 'right' answers, but rather answers that correspond well to how the organization is perceived spontaneously by the employees and managers. Secondly, a voice recorder was used and the sound files were transcribed into written form after the interviews. This increased the reliability of the findings since we avoided the risk of forgetting important quotes or parts of the interviews. By recording the interviews we also avoided the risk of letting the note taker's priorities and preconceived opinions of what was important influence what information were documented.

Another advantage of this study, that makes the results more reliable, is that the majority of the questions were designed to capture the respondents' *opinions* of entrepreneurship and the different EO-dimensions. This fact made it impossible for the respondents to give erroneous answers due to lack of knowledge. Some of the questions that were more based on facts, however, turned out to be rather difficult to answer depending on the respondent's position and it is possible that incorrect answers were given unintentionally. Misunderstandings and deviant answers of this kind are an important part of the study and should not be seen as a problem, but rather as part of the empirical findings. Choosing to conduct interviews with respondents in a straight line from the CEO to the Machine Operators in the division helped us establish where the misunderstandings appeared and was a great help for the analysis in chapter 6. One criticism against choosing respondents that report to one another, however, is that it could affect the answers. It is possible that respondents did not dare to express their true opinions because they thought they would be compared to the opinions of their superiors or subordinates and get pointed out if expressing deviant opinions. On the other hand, however,

it was just as likely to take the other turn, namely making the respondents tell the truth due to thinking that the wrong answer would be found.

In order to ensure the validity of our findings, two main precautions were taken. Firstly, the results as presented in chapter 5 were returned to the respondents by e-mail for inspection. This is important because it proves that the results presented have been accepted and corrected by the informants. The only one changing anything was the Production Leader who made a minor modification regarding one competitor. This change has been included in the thesis. Secondly, in the end of the research process, the results were presented to our contact persons at Trelleborg. They had nothing to do with the actual interviews, but their overall opinions were still seen as important to validate the findings. There were no reactions that made us change anything in the thesis.

Another potential problem that might have affected the results of the study is the choice of respondents. The case division was chosen in cooperation with our contact persons and the respondents within the division were chosen by the General Manager and the Production Supervisor. The choice was mainly based on who was available at the specific day of the interview, but it is likely that other factors, such as who was the most positive regarding entrepreneurship, also played a role.

3. The Entrepreneurial Orientation

This chapter aims at creating a deeper understanding of the Entrepreneurial Orientation. First, the relationship between an Entrepreneurial Orientation and firm performance is shown by a figure. This is followed by an account of the different EO-dimensions Autonomy, Innovativeness, Risk-taking, Proactiveness and Competitive Aggressiveness. To end the chapter, the EO-dimensions are presented in relation to the contingency theory in order to establish their interdependence and their dependence of the additional variables environmental and organizational factors on firm performance.

In order to fulfil the purpose of this study it is very important to clarify what exactly an Entrepreneurial Orientation is. Previous chapters have touched upon this but there is a need for further explanation. The term Entrepreneurial Orientation has been used by a large number of researchers since it was first developed by Miller in 1983 (Lumpkin & Dess, 1997). It does not explain *what* a firm does (entrepreneurship) but rather *how* entrepreneurship is undertaken (Lumpkin & Dess, 1996). Entrepreneurial organizations can be characterized by five dimensions creating an Entrepreneurial Orientation. These dimensions are *Autonomy, Innovativeness, Risk-taking, Proactiveness* and *Competitive Aggressiveness*. Even though frameworks with a larger number and/or other dimensions have been developed by several researchers in the past, the five-dimensional approach has won a lot of support and is a manageable and usable approach. The relationship between an Entrepreneurial Orientation and firm performance is show by the following figure:



Figure 3.1. How the EO-dimensions affect performance in its simplest form, i.e. without considering the contingency (Lumpkin & Dess, 1996).

The different EO-dimensions, their dependence/independence of each other and their relationship with environmental and organizational factors will be discussed below.

3.1 The EO-dimensions

Autonomy means the possibility and will of an individual or a team to independently work with an idea and bring it to completion. That is, being able to take actions and not being choked by the organization. Autonomy is a feeling or spirit that is deeply rooted in the organization and even though many external factors, e.g. actions by competitors, affect the behaviour of the organization, it will not quench the autonomous process of the organization's members (Lumpkin & Dess, 1996). A view of how Autonomy in an organization encourages entrepreneurship is Hart's (1992) integrative framework, which is applied in this thesis. Five different modes of strategy making are presented, of which one, the generative mode, is applied in this thesis because it supports the dimension of Autonomy. The generative mode is based on autonomous behaviour in the sense that strategy is created in the organization via corporate entrepreneurship. Members everywhere in the organization come up with new ideas and the role of management is to encourage and support ideas with a high potential. Established firms, like in this study, accomplish to innovate by acting more like small entrepreneurial ventures. The generative mode can for example be found in industrial companies. Important features in the generative mode are the sponsoring role of management, the use of skunk works (small, independent working groups within the company) and identifying and supporting product champions (people with the ability to connect ideas with resources to turn it into a commercial product). Thus, Autonomy is defined as allowing members of the organization, no matter where they are in the hierarchy, to come up with ideas and, if promising, promoting them on the part of the management. Furthermore, skunk works and product champions also indicate Autonomy.

Innovativeness has for long been a central part of entrepreneurship, with Schumpeter as one of its strongest advocates (Landström, 2005). The dimension refers to how firms engage in, and support, new ideas and to their willingness to do things differently than the current state of the art. Innovations can be divided into product market innovation and technological innovation (Lumpkin & Dess, 1996). In this thesis, a combination of the two aspects of innovation is used; referring to "technology policy" as Zahra and Covin (1993) defines it. It includes three aspects: 1) aggressive technological posture, which means taking a stance as being first to adopt new technology in the industry, 2) automation and process innovation implies investing in new, advanced machinery and improving its processes according to the latest technology and 3) new product development has to do with the intensity of investing in product development. It indicates that the firm understands the importance of providing the customers with superior products.

Risk-taking has been an important component all since the term entrepreneurship was first used by Cantillon in 1734. The first definition separated entrepreneurship from employment by pointing at the riskiness of the former (Lumpkin & Dess, 1996). Entrepreneurship literature has focused a lot on individual Risk-taking, but since this thesis is about *corporate* entrepreneurship, the focus is more on firm-level Risk-taking. Risk-taking is typified by

taking on ventures in unfamiliar business areas that, eventually, could result in corporate ruin, allocating a large part of assets to business ventures and, finally, taking on heavy debt (Baird & Thomas, 1985). However, as mentioned, these factors illustrate a *typical* Risk-taking firm. Thus, we do not mean that all three factors necessarily must be fulfilled in order to be Risk-taking.

Proactiveness can be defined as “seeking new opportunities which may or may not be related to the present line of operations, introduction of new products and brands ahead of competition, strategically eliminating operations which are in the mature or declining stages of life cycle” (Venkatraman, 1989, p. 949). The difference from Innovativeness is that the main focus of Proactiveness is the aspect of time and that the products or services provided can be imitative and not necessarily new. Proactiveness has often been equalled with first mover advantage leading to a role as a shaper of the environment rather than a follower. However, a firm can be a leader and forward thinking without necessarily being absolutely first (Lumpkin & Dess, 1996). Thus, the definition of Proactiveness in this thesis implies seeking new opportunities and acting as a leader trying to influence the environment and create demand.

Competitive Aggressiveness “refers to a firm’s propensity to directly and intensely challenge its competitors to achieve entry or improve position, that is, to outperform industry rivals in the marketplace” (Lumpkin & Dess, 1996, p. 94). Examples of strategies to compete aggressively are cutting prices, copying competitors and creating smoke. Cutting prices means entering a market with very low prices in order to outperform the competitors; a strategy suitable for large firms that can endure long periods with narrow margins. Copying competitors is a simple and cheap way of adopting successful business practices and techniques. Creating smoke implies making preannouncements indicating the launch of new products to retain customers and prevent competitors to launch a similar product (Dess & Lumpkin, 2005). Other possible strategies can be to spend heavily on marketing, product service and quality or manufacturing capacity (Lumpkin & Dess, 1997). Even though Competitive Aggressiveness and Proactiveness might resemble each other, there are differences that should be clarified. Competitive Aggressiveness, in contrast to Proactiveness, refers to how the company relates to competitors and responds to, rather than influences, environment and demand (Lumpkin & Dess, 1996).

3.2 The EO-dimensions and the contingency theory

The contingency theory can help explain the internal dependence between the different EO-dimensions. As stated earlier the contingency theory suggests that optimal performance is obtained by applying the appropriate, not necessarily the maximum, level of EO-dimensions. This means that entrepreneurial behaviour is not limited only to those companies in which high levels of all EO-dimensions are present. Lumpkin and Dess (1996) argue that all five

EO-dimensions are important but that they may occur in different combinations and hence vary independently of each other in a given context. What stage the company is in affects, for example, the amount of Proactiveness and Competitive Aggressiveness, suggesting that large established companies should be more competitive aggressive in order to defend existing resources whereas a new company should be more proactive (Lumpkin & Dess, 2001). Further more, it might not be necessary for a company to apply the maximum level of both Innovativeness and Competitive Aggressiveness in order to be entrepreneurial, but rather let a competitor innovate and then compete aggressively (Lumpkin & Dess, 1996).

The contingency theory can also help explain the dependence of additional variables on firm performance. According to Lumpkin and Dess (1996) firm performance results from fitting the EO-dimensions to organizational factors and environmental factors according to the following figure:

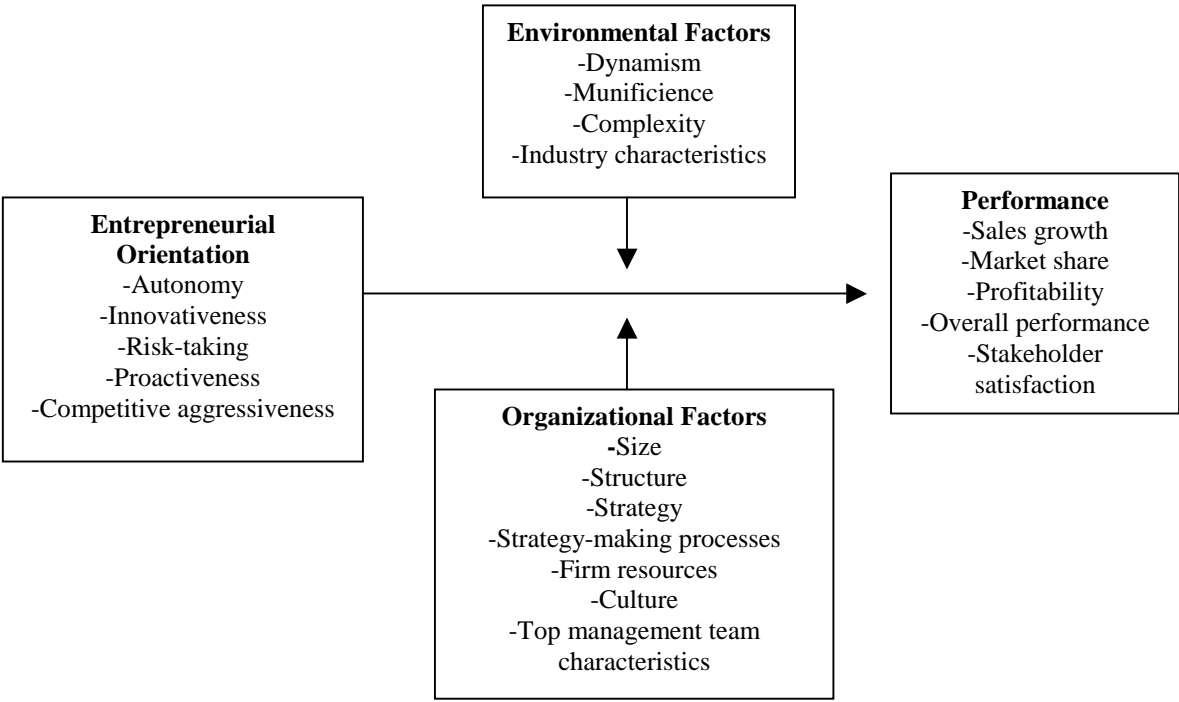


Figure 3.2. Conceptual Framework of Entrepreneurial Orientation (Lumpkin & Dess, 1996).

This way of viewing an Entrepreneurial Orientation is used throughout this thesis. The dimensions of organizational and environmental factors should be seen as fixed and are not adjustable in order to increase entrepreneurship and organic growth. To answer how an Entrepreneurial Orientation can be used in a large, established company the only dimensions adjustable are the dimensions of the Entrepreneurial Orientation. The dimensions of organizational and environmental factors should be seen as factors affecting the relationship between EO and performance, explaining why the EO-dimensions differ between organizations and clarifying the contingency theory.

There are two major ways in how to look at the connection between entrepreneurship and firm resources; the pursuit of opportunity with or without regarding resources controlled by the firm. The former is in line with the resource based view, whereas the latter is called the opportunity view (Davidsson et al., 2001). The resource based view is applied in this thesis since it is about large, established companies with significant resources that have to be considered when grasping an opportunity.

4. Materials and Technical Composites – Trelleborg AB

In this chapter the case company Trelleborg and the case division Materials and Technical Composites are presented. The presentation begins with an account of the wish of growing organically within the Group and includes previous research on the barriers of organic growth. Thereafter, Trelleborg and Materials and Technical Composites are presented on the basis of the contingency factors organizational and environmental factors as presented in chapter 3.

4.1 Organic growth in Trelleborg

As expressed in chapter 1 Trelleborg strongly emphasizes organic growth. Previously in the cooperation between Trelleborg and EHL, a master thesis was written in order to identify the barriers of organic growth in large, mature companies. The Business Unit Industrial Hose was used as a case study object. The results showed that organic growth in large companies in general and in Trelleborg/Industrial Hose in particular is hindered by culture, organizational structure, lack of resources/competence and lack of common focus. In order to create organic growth in large, established companies it is necessary to have a culture that encourages entrepreneurship. This culture should involve a tolerance for mistakes and follow ups/rewards for desired actions. Entrepreneurship can also be encouraged by the organizational structure. Teams are said to be more successful than independent entrepreneurs due to mixing knowledge from different people. A suggested solution for Industrial Hose is to create independent units, so called new ventures, where new business opportunities can be explored without being hindered by the old structure. Further, the study shows that the employees at Industrial Hose lack competence/resources when it comes to specialist knowledge and knowledge on how to develop ideas. The employees have no experience from growing organically and it is of high importance that the top-management succeeds in conveying a common focus. The visions of entrepreneurship need to be linked to the business strategy by for example appropriate reward systems (Månsson et al., 2004).

Another master theses in the cooperation between EHL and Trelleborg, found two additional important barriers to organic growth in the Group (Fridh & Reuter, 2004). These barriers are strategic trust and control. The results of the study indicate that Trelleborg is more managed by control than by shared values. The strategic trust includes responsibility and independence but with a strict financial follow up. The researchers emphasize that the financial control creates a short-sightedness which impedes the organic growth. As a solution for increasing organic growth in the Group the researchers suggest rewards for strategic goals, competence development and product ideas far down in the organization.

4.2 The contingency of Trelleborg

As stated in chapter 3, the relationship between EO and performance is affected by the organization's environmental and organizational factors. In order to create a better understanding of the case company Trelleborg and the contingency in which it operates, Trelleborg is here presented based on these factors. Since the case study is carried out on the division Materials and Technical Composites this particular division is also further explained referring to the contingency. Presenting the company information on the basis of environmental and organizational factors makes it easier in the future when deciding whether or not this study is generalizable to a particular company, i.e. when comparing Trelleborg to other companies in order to decide whether or not their contingencies are similar enough to generalize the results of this study. The environmental factors are dynamism, munificence, complexity and industry characteristics. The organizational factors are size, structure, strategy, strategy-making processes, firm resources, culture and top management team characteristics. The different factors influence firm performance for a company with an Entrepreneurial Orientation (Lumpkin & Dess, 1996).

History/Background: Trelleborg is a Swedish industrial group established in 1905 by Henry Dunker. The business concept is: *“Trelleborg seals, damps and protects in demanding industrial environments throughout the world. We offer our customers engineered solutions based on leading polymer technology and unique applications know-how.”* (Trelleborg Annual Report, 2005, p. 5)

Materials and Technical Composites mixes a variety of polymers and sells it to either internal or external customers, or processes it further into semi-manufactured, or in some cases, end products. The processing implies calendering¹ and vulcanization². An example of an end product is rubber flooring for public areas and the industry. The semi-manufactured material is, among other things, being used for diver suits and noise dampening shims in car brakes (Bengt Lindqvist, 2006-05-12).

Size: The Trelleborg Group had an average number of employees totalling about 22 000 in 2005 and net sales approximating MSEK 24 000 (Trelleborg Annual Report 2005). Materials and Technical Composites had about 200 employees and net sales approximating SEK 500 million (Bengt Lindqvist, 2006-05-12).

Structure: The Trelleborg group has a much decentralized structure. The mother mainly carries out group functions and has no selling task. The Group is divided into five business areas; Trelleborg Automotive, Trelleborg Sealing Solutions, Trelleborg Engineered Systems,

¹ Calendering a polymer material means heating the material and then running it through a series of rollers until it has become a rubber foil with the wished for thickness.

² Vulcanization implies heating the rubber together with chemicals with the intention of turning the material from a sticky, plastic condition into a stable, elastic one. The process is irreversible.

Trelleborg Wheel Systems and Trelleborg Building Systems. These business areas are divided into different business units which in turn are divided into divisions. Materials and Technical Composites, our case study object, is a division under the business unit Industrial Fluid Systems as shown in the organizational chart below (Trelleborg Annual Report, 2005):

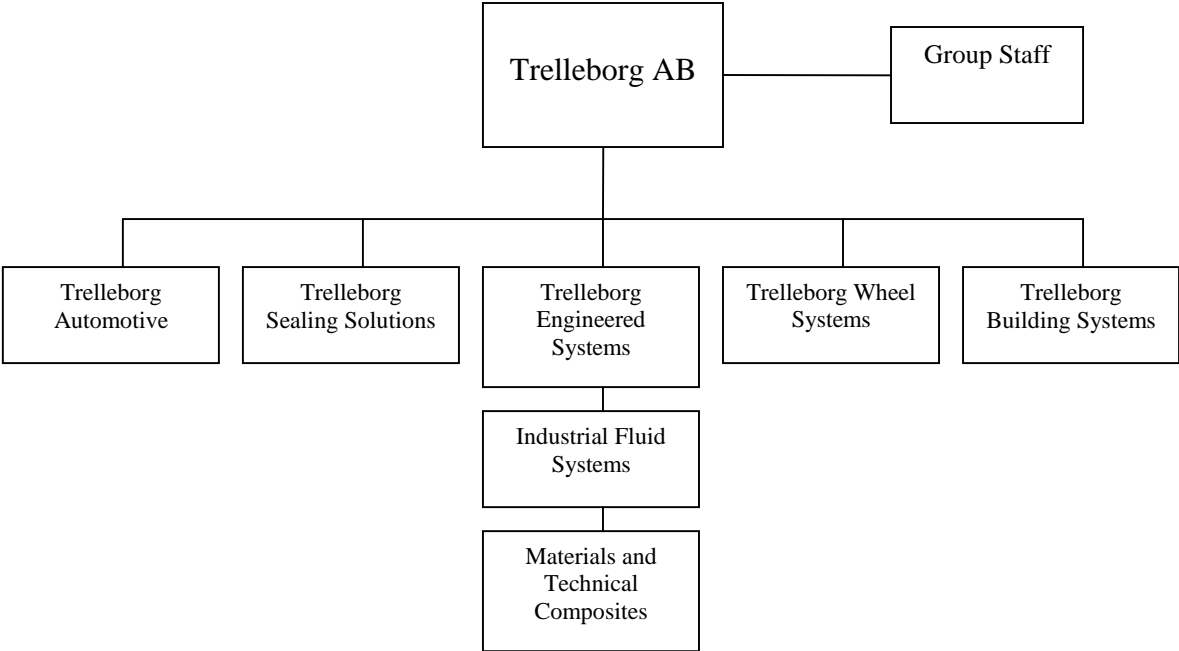


Figure 4.1. Organization chart of the Trelleborg Group

Materials and Technical Composites is an autonomous division operating like an independent company within the Trelleborg Group and the General Manager can be seen as a CEO. The internal structure of the division is visualized in appendix 2.

Strategy: Trelleborg’s strategic target is to achieve market-leading positions within well-defined segment and market areas, and this idea is applied throughout the entire organization. This is to be done through operational excellence, organic growth, value-generating acquisition and target-orientated leadership. Operational excellence implies providing solutions with the highest quality to a competitive price. Trelleborg emphasizes a strategy of being “leading” which means that if they are not among the leading companies in a particular business area, they quit. What is meant by a leading position differs from situation to situation, but often implies having pricing power. The organic growth target is to grow faster than the underlying markets, and in 2005 it totalled 3 %. The overall growth target for the Trelleborg Group is 8-10 percent per annum over a business cycle, and in order to achieve this quite aggressive growth target it is necessary for Trelleborg to also grow through acquisitions. The group therefore has well-developed acquisition skills and expertise (Trelleborg Annual Report, 2005).

Strategy-making processes: In yearly strategy meetings, the direction for each business unit is established and financial forecasts are made. These stand by as long as nothing unpredictable happens. The strategies and financial targets concern the whole Group, i.e. all divisions work after the same goals. Based on the Group-level goals, Materials and Technical Composites works with its own more detailed strategies and targets.

Firm resources: In Lumpkin & Dess (1996) firm resources refers to the organization's networks. We interpret networks as being all human resources available to the organization, internally as well as externally. In this case, internal is inside Materials and Technical Composites whereas external refers to the Trelleborg Group and all other possible networks. Since Materials and Technical Composites operates in a concern with more than 20 000 employees, they have a large, natural network within the Group. Another important resource is the customers, because much innovation takes place together with them.

Culture: The culture and values of Trelleborg are said to be applied in the everyday work of all employees throughout the organization. The values are customer focus, performance, innovation and responsibility. Being a performance-orientated company means that everything in Trelleborg gets measured and that the employees are expected to work independently to achieve their own objectives. Being innovative indicates that a lot of resources are dedicated to R&D and that the employees take an active role in solving their own tasks and challenging quality and efficiency. Employees at Trelleborg are expected to act proactively and take own initiatives and responsibility if they see things that need to be done. This is supported by incentives for new ideas and an encouraged process from the management of learning by mistakes (Trelleborg Annual Report 2005).

Looking at the values and culture of Trelleborg as presented above might give the impression that Trelleborg is already an entrepreneurially orientated company. In several places in the annual report of 2005, however, the CEO and president Peter Nilsson argues the need for Trelleborg to become more innovative and entrepreneurial. Presenting the company's future plans he declares: "*We shall strengthen our goal-orientated, decentralized organization with increased incentives for entrepreneurial spirit.*" (Trelleborg Annual Report, 2005, p.2)

Top management team characteristics: In Materials and Technical Composites, we regard the General Manager as being the top management. Having worked 40 years in the company, he is highly experienced and knows the division from the production level and up. He is unanimously described as a true entrepreneur by his inferiors and the division is permeated by his spirit.

The Group top management consists of 14 people, of which two are women. About one third is born in the 40's, 50's and 60's respectively with the youngest, the CEO, being born in 1966 and the oldest in 1943. Most of them have studied business or engineering (Trelleborg Annual Report, 2005).

Dynamism: Relates to the rate of unpredictable change in a firm's environment and indicates uncertainty that erodes the ability of managers to predict future events as well as their impact on the organization (Lumpkin & Dess, 2001). In 2005, the Trelleborg Group was struck by rapidly rising costs of input material, which is the most difficult aspect to foresee, even on a monthly or quarterly basis. Their goal is to achieve a leading position in fast growth segments with a high technological content. To be able to focus enough on those growth segments, Trelleborg now aims at abandoning unprofitable segments at a faster pace than before. They also focus consciously on Asia, Eastern Europe and South America as growth markets. (Trelleborg Annual Report, 2005). This indicates a fairly dynamic market and business environment. On the other hand, it is an old industry that does not change fundamentally. Demand and other customer market variables remain relatively stable. All in all, Trelleborg must be considered to be active in a moderately dynamic environment (Stéphane de Tavernier, 2006-06-01).

Munificence: Environmental munificence has to do with the availability of resources and the amount of external opportunities in the environment in which the firm is present, that is how profitable the industry is (Dess & Beard, 1984). Stéphane de Tavernier (2006-06-01) considers environmental munificence to be moderate. It is not like a high-tech industry but by finding certain niches the munificence increases.

Complexity: This concerns the market complexity, e.g. variation among firms and a market that requires diversity in production and marketing orientation. A complex market makes the possibility of having a good general view of competitors and market trends more difficult leading to a need for increased scanning behaviour (de Koning & Brown, 2001). In general, the complexity is not that high and the market is well defined in all segments (Stéphane de Tavernier, 2006-06-01).

Industry characteristics: The process of working with rubber is the same as has been used over the last 100 years and it is the surrounding equipment that has developed over time. Trelleborg acts in a mature industry that in many segments is saturated. It is a business-to-business industry, which means they are more sensitive to swings in the business cycle than business-to-consumer companies in general. However, the Group is less sensitive to swings in the business cycle than specific business areas thanks to the diversification the five different business areas contribute to (Stéphane de Tavernier, 2006-06-01).

5. Results

The chapter starts with a table of information about the respondents. This is followed by the results from the interviews divided into seven parts, general comments about entrepreneurship, the five EO-dimensions and concluding comments. The results are displayed in unchanged but aggregated form, i.e. the most important parts of the interviews are presented without comments. In the end of each part, a table is presented with a summary of the most important opinions and comments of each respondent. The core opinion, as we interpret it, is presented in bold. This is the only place in the chapter where an interpretation of the respondent's opinions to some extent has been made.

5.1 Information about respondents

Title	Name	Education	Years with Trelleborg	Tasks
General Manager	Bengt Lindkvist	Engineer	40	Top manager and operational responsibility of the division.
Production Manager	Thomas Ahlström	3 yrs electrical and technical, post compulsory school.	26	Responsible for the production, reports to General Manager.
Production Leader	Magnus Olofsson	3 yrs natural science post compulsory school + 10 university credits rubber and plastic.	23	Responsible for parts of the production with three Production Supervisors as inferiors. Reports to the Production Manager.
Production Supervisor	Peter V Nilsson	Trained car mechanic + production supervision courses.	9	Responsible for the direct production, leads the Machine Operators. Reports to the Production Leader.
Machine Operator I	Goce Drijovski	Technical education from Macedonia.	25	Responsible for handling the machines. Reports to the Production Supervisor.
Machine Operator II	Vasile Cret	Trained painter from Romania.	16	Responsible for handling the machines. Reports to the Production Supervisor.
CEO	Peter Nilsson	MSc.Eng.	11	CEO

Table 5.1. Information about the respondents.

5.2 General comments about entrepreneurship

When asked how he views entrepreneurship within Trelleborg, the **General Manager's** spontaneous answer is limitations. He believes that it is more difficult to be entrepreneurial in large organizations, much due to the controlling system, and the entrepreneurial spirit being slowed down by complicated administrative systems. An advantage of being a large organization on the other hand is the access to resources. The General Manager, however, stresses that he never gets orders from the top management telling him to act more entrepreneurial.

According to the General Manager, an entrepreneur is something you are born as. You either are an entrepreneur, or you are not. A good entrepreneur can, however, become better by learning how to become more structured and administrative. He believes that a good way of doing this is through the kind of studies that we are conducting. The General Manager considers knowledge of the business to be one of the most important factors to consider in order to act entrepreneurial. You can not develop new products or markets until you know the business very well.

The **Production Manager** considers entrepreneurship to be how people from the outside view the organization. According to him, entrepreneurship is about delivering the right quality and the right amount to the customer in the right time. He considers Materials and Technical Composites to be very entrepreneurial, but does not know exactly what it is like in the rest of the company. The major reasons why Materials and Technical Composites is so entrepreneurial are that the General Manager is an entrepreneur and that they have been organized in a certain way for a long time. He also thinks that the CEO is very entrepreneurial.

According to the **Production Leader** entrepreneurship is the reason why Materials and Technical Composites still exists in Trelleborg making money. He stresses that Trelleborg is very open when it comes to trying new things. As soon as there is a new product coming up that suits the machines at Materials and Technical Composites, they try to produce it. This way of working differs from the traditional way of doing things in the Group, i.e. focusing to become number one in a narrow segment. The machines and equipment at Materials and Technical Composites are very expensive and help produce things for other divisions, but there is often free capacity that is used in order to capture new customers.

When asked if he believes that the entrepreneurship differs between Materials and Technical Composites and other divisions, the Production Leader answers that he would like to believe so. He would like to think that they are special and that it is their entrepreneurial spirit that creates the success. However, he has worked a lot with *Trelleborg Rubore*³ in Kalmar and

³ Trelleborg Rubore is a formerly family-owned company in Kalmar, Sweden, that is now part of the Trelleborg Group. They are world leaders in the production and development of brake noise and vibration damping solutions for automotive and industrial applications (Trelleborg Rubore).

knows that they have a very strong entrepreneurial spirit as well. The entrepreneurship in Materials and Technical Composites is very dependent on the General Manager who is a true entrepreneur. The Production Leader stresses that the entrepreneurship within the division has got very little to do with the Group management and he is convinced that things would never be as good as they are today if they had had another General Manager. One of the strongest advantages with the present General Manager is that he knows the business so well. He knows exactly what each person can handle and can therefore let go of the reins.

The **Production Supervisor** associates the term entrepreneurship with people who start their own things and think for themselves. He believes there are a lot of opportunities for entrepreneurship within Trelleborg. An example of this is the suggestion scheme where employees can come with suggestions for improvements and if it is considered a good idea it will be realized very soon. He believes that the access to resources is one of the advantages with belonging to a large group. He also mentions the General Manager as a source of inspiration for entrepreneurship and creative thinking by encouraging the employees to think independently and to stand up for their ideas.

When asked how he views entrepreneurship within Trelleborg, **Machine Operator I** first answers that an entrepreneur is someone who delivers things to them. After a while he develops his definition to include the deliverance of a product from Materials and Technical Composites to a customer. He stresses that it is important for the division to keep their promises concerning quality and on time delivery, otherwise the customers will go somewhere else. The entrepreneurship is encouraged by the Production Manager, the Production Leader and the Production Supervisor in meetings four times a year where they discuss what has been done and what needs to be done in order to keep the customers happy.

The **CEO** wishes to increase the entrepreneurship within the Group. According to him, entrepreneurship has a broad definition including new ways of thinking and acting in all different kinds of processes and daily routines. He emphasizes that entrepreneurship is not only innovation and that entrepreneurship is different in different organizations. The main goal of increasing the entrepreneurship within the Group is to create increased shareholder value, but the CEO also sees a connection between entrepreneurship and organic growth.

	General Comments
General Manager	Very important, born as entrepreneur, large resources, limitations, complicated controlling system, no encouragement from Group management. Entrepreneurial spirit within the division.
Production Manager	How people from the outside view the organization, about delivering right amount and quality on time, division very entrepreneurial thanks to General Manager and partly the CEO. High degree of entrepreneurship.
Production Leader	The reason why the division is still making money, open-minded, wants to think they differ from the rest of the group in being more entrepreneurial, dependent on General Manager and not on Group management. Very entrepreneurial thanks to General Manager.
Production Supervisor	Associates with independent thinking, thinks there are many opportunities within Trelleborg, suggestion scheme, access to resources in large groups, General Manager big source of inspiration. Good environment for entrepreneurship.
Machine Operator I	Defines entrepreneurship as taking on a contract, important to deliver the agreed quality on time, encouraged by his superiors in meetings four times a year. Defines entrepreneurship differently than the EO-definition.
Machine Operator II	N/a
CEO	Wishes to increase the entrepreneurship in order to increase organic growth and shareholder value.

Table 5.2. The most important general comments about entrepreneurship

5.3 *Autonomy*

The **General Manager** points out that every department of Materials and Technical Composites, e.g. purchase and logistics, manages its own business. There is a management team that sets goals for the different departments and from start to goal it is up to the team which way to choose. Each and every one of the employees at Materials and Technical Composites is free to come up with his own initiatives and the division has a suggestion scheme where everyone can leave ideas for discussion. The ideas are then brought to a higher level for evaluation and the General Manager stresses the need to quickly take care of the ideas and provide feedback so that the employees' creativity is not inhibited. Most suggestions come from the production workers and concern everything from the products and the machines to methodological questions such as how the team works together. Suggestions have been rewarded from SEK 100 to SEK 100 000 so the General Manager strongly believes it is worth to make an effort. The General Manager believes that the degree of Autonomy depends on the interest of the Group management. However, he thinks that Autonomy is

common among many companies the size of Trelleborg today. In the eyes of the General Manager there are no downsides with employees taking own initiatives.

The **Production Manager** has always felt that he has been encouraged by his superiors to come with suggestions on how to perform tasks. However, in his area they do not apply independent work units in the sense of managing everything from planning and forward. Instead, he meets with the General Manager, the Production Leader and Production Supervisor every week in order to discuss what has happened and what is to be done. A very important factor when it comes to letting subordinates work independently is to make sure that they have an understanding of the overall goal of the organization. These goals are conveyed to the employees in monthly meetings. He says that his subordinates have freedom with responsibility and that if they come up with better ways to carry out their tasks they are more than welcome to do so. The best way to motivate people to independent thinking is by wages and the suggestion scheme. Motivation through climbing the hierarchy ladder seems to be small since Machine Operator is about as high as you can climb as production worker. The Production Manager considers the suggestion scheme to be very good when it works properly. He stresses that the suggestion scheme is mainly there for union contract employees and that he does not use it himself, simply because coming up with new ideas is naturally included in his tasks. It is possible for other officials to use the suggestion scheme but they seldom do. It is a lot of administration to be done in order to keep the suggestion scheme up and running, and the success seems to depend on who is in charge. The suggestion scheme was earlier operated as a central service but is now operated in the production line. Due to restructuring and dismissals last year it was not top priority and it took a long time to get feed-back on an idea.

The **Production Leader** enjoys working in an autonomous environment since he loves poking his nose into everything, as he puts it. He works independently, but with support from the Production Manager, who acts like some kind of counterbalance since he is quite moderate whereas the Production Leader more or less always steps on the gas, just like the General Manager. He thinks that one of the basic principles of the Group is a high degree of independence and self-acting for individuals as well as for divisions. At the same time, he feels that Materials and Technical Composites is ruled somewhat too hard on the part of the Group management when it comes to financial targets and return on investments, causing a negative short-sightedness. Even though an investment of a couple of SEK million would have a positive effect on the result in the long run, it is hard for a manager to explain the impact on the income statement in the short run to the Group management. Within the division, the rules of the game are very free due to the fact that the General Manager understands the business and what all employees are capable of. Therefore, the General Manager knows how to take good care of ideas popping up within the division.

When it comes to processes, the **Production Supervisor** believes that he has good opportunities to influence his tasks and come up with new ideas. When it comes to product

characteristics on the other hand he clearly states that it is the chemists' table and the only thing he can influence regarding the products is what they are like to work with, e.g. if a rubber needs to be a little softer in order to process more smoothly. The Production Supervisor works independently to a certain extent but is given certain goals from the Production Manager. However, if there are other things, like for example process development or a certain product that interest him, he is welcome to spend time on that as well. Overall, he is happy with the extent of influence he has over production and processes and feels that he gets a good response for new ideas. There are no totally independent work units within the production in the sense of putting up own goals. Instead the teams are created with a certain focus, e.g. to solve a certain problem.

The Production Supervisor works actively with the suggestion scheme and writes his own suggestions when he can. However, he does not want to be rewarded for using the suggestion scheme because he considers suggestions to be a natural part of his leading role. The suggestion scheme is mainly for the union contract employees even though officials are also encouraged to use it, this works rather poorly. The union contract employees have a lot of ideas. It is important to let the creativity flow and no idea is considered a bad idea, it might just not be the right moment to go through with it. He does not believe that higher rewards would result in higher levels of creativity. He says that it has more to do with what kind of person you are and states that from his own perspective it is rewarding enough to have a creative job. The most positive thing with being autonomous is that people dare to come with new ideas and be creative. He sees no real drawbacks with being autonomous as long as people consider their primary tasks to be top priority.

Machine Operator I works in a group of four people where he decides the speed, the temperature and the thickness of the rubber. He says that the suggestion scheme is inspiring and that it enables the workers to come up with ideas that ease the working conditions. If the idea is not approved, the managers come down to discuss advantages and disadvantages and then make the final decision. However, he does not know exactly who decides upon the ideas. One problem that he sees with the suggestion scheme is that not everybody has the confidence or perhaps not even the ability to deliver ideas, since many of the workers are immigrants who do not know the Swedish language sufficiently well when they are new in the country. Furthermore, he feels that when he has a big workload he does not give any suggestions and no manager asks him why or tries to push him to do so. When asked if someone in the production has had an idea that really changed the product or the process, Machine Operator I tells us about an occasion in the eighties when they could rationalize the work by excluding one machine and one task from the process. The person who came up with the idea received about SEK 5000 - 10 000. Product development, on the other hand, is nothing the production workers deal with; that is what the chemists are for.

The Machine Operators work in groups and that is what counts. In the morning, Machine Operator I gets a list with the tasks of the day, i.e. specifications of the product that they are

going to work with. Then, he says, nobody else but themselves decides how to “run” the process. He thinks that Autonomy is merely positive, but the amount that exists today is enough, he could not handle more due to the hard work load. The salary does not affect him to think more independently and he would be just as active with the suggestion scheme even if he did not get paid. What matters is that they are able to affect their working situation.

Machine Operator II works in the same group as Machine Operator I, but is less experienced. Just like his colleague, he finds the suggestion scheme beneficial when it comes to improving the working conditions in the factory. He does not consider compensation an especially important component of the suggestion scheme and would try to come up with ideas despite if he got paid or not. He must start taking initiatives from the moment he arrives at work in the morning and if there is a problem he discusses it with his co-workers.

The **CEO** believes that entrepreneurship is dependent on people who can take own responsibility. It is necessary to give the employees free reins and to let them think for themselves, and he believes in controlling/managing only the big picture. In order to encourage independent thinking and generate suggestions among the employees, the Group has different kinds of suggestion schemes. These were implemented three or four years ago and differ between countries. In Sweden the suggestion scheme often implies written suggestions, but in for example Asia, it is more common with discussion groups.

	Autonomy
General Manager	Independent departments, suggestion scheme, emphasizes rewards, Group management responsibility, no drawbacks. High degree of Autonomy.
Production Manager	No totally independent work units, employees' understanding of overall goal important, freedom with responsibility, wages and suggestion scheme is the best motivation. Quite high degree of Autonomy.
Production Leader	High degree of Autonomy a basic principle for the Group, ruled too hard financial from Group management, the rules of the game are free due to the General Managers's understanding of the business and the employees. High degree of Autonomy but ruled too hard financially.
Production Supervisor	Opportunities to influence processes but not products, works independently but no totally independent units that set their own goals, suggestion scheme, rewards not important. High degree of Autonomy.
Machine Operator I	Works independently after given specifications, suggestion scheme inspiring but confidence/ language barriers may impede, no one pushes if lack of suggestions, rewards not important. Degree of Autonomy sufficient.
Machine Operator II	Suggestion scheme important part of Autonomy, rewards unimportant, considers his team to be independent. Satisfied with the degree of Autonomy.
CEO	Autonomy very important for entrepreneurship, controls only the big picture, suggestion scheme.

Table 5.3. The most important opinions about Autonomy.

5.4 Innovativeness

There is no general goal in the Trelleborg group to be experimental in the every day work. The **General Manager** of Materials and Technical Composites, however, finds innovation very important and says that the most profitable products and changes spring from walking alternative paths. If you do not dare to try new things you never achieve the very best. Trelleborg works actively with small changes and constant improvements. According to the General Manager, waiting for big investments is often the weakness of Scandinavia and northern Europe compared to Asia. To encourage small changes and new ideas, Materials and Technical Composites employs the suggestion scheme. He says that the degree of innovation is highly dependent on the different personalities within the organization and does not believe that large companies need to be more careful with innovations than small companies. The General Manager would like to see the degree of Innovativeness increase in Trelleborg by

making it more accepted to request money to invest in market research and product development. Trelleborg has a relatively strong controlling system and at times he feels that the CEO and Group management requires too rapid pay-back. Instead he would like to increase innovations by adding more capital and long-term thinking. At the same time, however, he points out the importance of not engaging in everything. Looking at the possibilities of doing profit and knowing when to quit is necessary even when the creativity is present. The R&D in Materials and Technical Composites is carried out in the production line instead of having central research teams. The advantage of this is that the resources are available also in bad times, thus avoiding the problem of perhaps having to shut down R&D centers in order to save money.

The **Production Manager** believes there is a strong feeling of Trelleborg being an experimenting company when it comes to both products and processes, at least within his division. He states that Materials and Technical Composites does things differently than the current state of the art and is in the forefront when it comes to, for example, calender technique. The former division producing tires in the town of Trelleborg is mentioned as an example of what happens when you forget to innovate and invest in the future; they had to close at this location in 2005. In Materials and Technical Composites, new products are presented yearly, according to the Production Manager. The products are often developed and adjusted together with the customer, much because it has to do with semi-manufactured articles. The Production Manager, however, is not as involved in the product development and customer contacts today as he was before the restructuring some year ago. He believes that the degree of Innovativeness is highly dependent on the Group management, especially in old industries like the rubber industry. In newer businesses, e.g. hoses for oil rigs, he means that the innovation process catches speed by itself. The only downside he can see with Innovativeness is to have too much going on so that you miss all the opportunities. He does not believe that the employees are bothered by the new products. When asked if there is any particular area in which Trelleborg should be more innovative, he answers that they have been bad at getting hold of signals from the market. However, he says that this works better today than before due to a large market research project that started last year. It is the management's job to go out in the market and analyse competitors.

The **Production Leader** thinks that Trelleborg is a quite experimental company and as an example of that, he brings up the Kalmar factory *Trelleborg Rubore* which invests heavily in R&D and is little of a pioneer that tests everything under the sun. It is also one of the best yielding entities of the Group. Another example is the Ystad factory *Trelleborg Protective Products*⁴ that, as he puts it, tests a little of this and a little of that. He continues by saying that one problem with the polymer industry is that it is an old industry where a whole lot of development already has been done, meaning that major changes demand large capital

⁴ Trelleborg Protective Products is of the world's leading producers of protective clothing and products. They develop and manufacture chemical protective suits, dry diving suits, inflatable shelters and a wide range of products for industrial use (Trelleborg Protective).

expenditures. And then, he says, we are back to the discussion about returning the money from investments in short time. Since he started working at Trelleborg in 1991, heaps of new products have been created throughout the years and much of this has been developed in cooperation with Rubore, which is Materials and Technical Composites' largest customer.

The Production Leader thinks that a high degree of Innovativeness definitely makes the job more fun and it helps them to be one step ahead of the competitors, which in itself is a major advantage. The downsides are partly that it is difficult for rationalizations and quality to keep up with the pace and partly that it is really tough administrative, as it requires, for example, changing specifications, finding suppliers and altering the planning. He says that they would need to hire another person or two to work with process rationalization and quality systems. The risk of losing focus on the existing business is impending when you concentrate too much on innovations. This has, to some extent, been the case at Trelleborg, but the Production Leader says that they are very well aware of the problem, which he emphasizes as a severe one.

The **Production Supervisor** does not believe that Trelleborg is a particularly experimenting company when it comes to products, even though there are many new products. During his time at Materials and Technical composites since 1997, he appreciates that there has been 30-40 new products. Instead, he calls Trelleborg a developing company and points out that they are constantly active on the market looking for new customers and products. This needs to be done in order to survive and he mentions the former tire producing division in the town of Trelleborg as an example of a division where they only walked in their old footsteps. This worked in the seventies and eighties but not today. The Production Supervisor is not involved in the development of new products. It is too complicated and they have chemists and sellers responsible for this.

When it comes to processes, the Production Supervisor emphasizes that Materials and Technical Composites is experimental in that they run a lot of tests, almost every week, and stake a lot of money in becoming more productive. Running tests is done in cooperation with the person responsible for the product and the chemist in order to come up with new ways to produce existing products; either to make them cheaper or to make them easier to produce. The production workers also come with suggestions on how the production can become more easy, e.g. if a rubber needs to be softer in order to shape it. He stresses that the term experimental in Trelleborg does not indicate playing around and taking chances just for the sake of it. Mass production is more about producing the next product as similar to the former product and as cheap as possible. Even though the production workers complain a lot when new products and tests are introduced the Production Supervisor believes that they understand. He tells them it is necessary in order to survive and they take it seriously, especially since the tire division disappeared. The responsibility for innovations in the production is in much the Production Supervisor's but he also stresses that it is necessary that the managers support him.

Machine Operator I believes that if Trelleborg should be able to compete with the Estonians they are forced to innovate. He regards Trelleborg as an experimental company striving to produce better and cheaper products. When he started working at Materials and Technical Composites they only had a handful of products, but today they can present a palette of 100 – 200 different qualities. Before, they ran one single quality for a whole day but today they often experiment by doing only “a couple of rolls” of the same quality and then change. Not only the products, but also the processes have changed and nowadays it is much easier to carry through the tasks. The working environment is much better than it used to be as well and, as Machine Operator I puts it, in the past only the teeth were clean after a day at work. Machine Operator I, as being the most experienced operator, always runs all tests. He receives instructions and is then involved in the innovation process by adjusting the conditions under which the production takes place, such as speed and temperature. The negative aspect of doing a lot of testing is the fact that it is much harder for the production workers, and especially for Machine Operator I, who is always involved. On the other hand, if they would not be experimental they could risk losing their jobs. On the question if he sees any particular area where Trelleborg could be more innovative, he explains that it is not his job and the ones “up there” (read: the officials) have better education for dealing with that kind of questions.

Machine Operator II also considers Trelleborg to be an experimental company, since they have tried a lot of new products during the years he has been with the firm. Often, there are problems in the beginning but eventually they solve them and the result turns out well. He does not consider himself to be involved in the development of new products, except for the production process. The positive aspects of being innovative are that many new customers can be captured and new products are the future. Machine Operator II thinks he learns something new every time they test new products and in addition, it is important to experiment if he and his colleagues want to keep their employment.

When asked if R&D is the first area in which cut offs are made in bad times, the **CEO** answers that profitable businesses are the ones most suitable for growing, and hence the ones most suitable for devoting resources to R&D. Every business within the Group has to pay for its own R&D and it comes naturally that if a business is not performing good enough it becomes difficult to afford investments in R&D. Instead, the main priority for these businesses is to increase the profitability of the existing business.

	Innovativeness
General Manager	Very important, encourages incremental innovations, dependent on personalities, no R&D departments - R&D carried out in production line, requests of too rapid pay-back. Could be improved.
Production Manager	Experimental concerning both products and processes, innovation together with customer, dependent on management, a non-innovative industry, risk of losing focus with too much innovation. Innovative division but too much can be problematic.
Production Leader	Trelleborg is quite experimental, brings up Rubore and Protective Products as examples, needs more capital to be more innovative, helps in being ahead of competitors, risk of losing focus on existing business. Could be more innovative but it takes resources.
Production Supervisor	Not experimental but developing, does not "play around", many new products and tests, involved a lot in process development, product innovation responsibility of chemists/sellers, innovation necessary to survive. Important but not his responsibility
Machine Operator I	Division is experimental due to many tests, process innovations have made production easier and cleaner, much testing makes job tougher but necessary for survival, managers' responsibility. Important and satisfying but not his responsibility.
Machine Operator II	Experimental division, runs a lot of tests and tries new products, not involved in product innovation but only process ditto, innovations capture customers and are a prerequisite for him to keep his job. Very important but product innovation not his concern.
CEO	Successful business areas most suitable for R&D, nothing you do to get back on track.

Table 5.4. The most important opinions about Innovativeness.

5.5 Risk-taking

When asked if Trelleborg is bold in its efforts to invest in products and processes that possibly could go wrong, the **General Manager** gives a blunt no. However, it is his wish that Trelleborg would allocate more resources to new technologies and processes even if the risks are high and he says that this question depends on the Group management to 80 percent. He stresses that Trelleborg seldom makes big mistakes, mainly because they have a lot of competence to discuss different alternatives and eliminate risks. Having access to a lot of resources and knowledge is one of the advantages of belonging to a big group. A disadvantage of being a big group, however, is that you have to weight every risk against the existing business. The risks taken need to be separated from the "going business" so that the

business, from which the money for taking on new opportunities comes, is not harmed. Trelleborg accepts failures and there is no problem for individuals or teams to make mistakes. Having a high degree of tolerance when it comes to making mistakes increases creativity which the General Manager sees as something positive. He himself has experience from staking money on projects that have not turned out well, but that still have gained acceptance by the company. However, he emphasized that the acceptance and tolerance is highly dependent on how the business in general is running. Mistakes on his level in the company are accepted if he shows a good profit on everything else. If not, the punishment is a new name on the door. In lower levels of the organization there are no consequences for an individual who makes mistakes within reasonable limits.

When asked if Trelleborg is bold in its efforts to invest in products and processes that possibly could go wrong, the **Production Manager** says that at his level they have not done any particularly large investments, except for the new calendar. SEK 0,5 – 1 million is alright and nothing to worry about, but before investing many millions they wait to the very last. He sees it as a matter of course that an investment needs to be a good bet before investing. The degree of Risk-taking is highly dependent on the Group management. A larger investment needs to be accepted by the board of directors and it is necessary to start lobbying in good time before.

Trelleborg accepts failures, but not too much and only to a certain degree. The Production Manager stresses that the result at the bottom line is the only thing that counts and as long as you fulfill your goals you are free to make mistakes. If you start showing the wrong numbers, Trelleborg is pretty good at checking it up and investigating what the problem is. The Production Manager emphasizes that punishments in the sense of being dismissed is possible as far down in the organization as his level. Production workers are allowed to take own initiatives and if something goes wrong it is no big deal. He stresses that people often learn from mistakes.

A situation when Materials and Technical Composites was Risk-taking, but not the Trelleborg Group, was in the early days of *Rubore*, the **Production Leader** tells us. The project had been declined by the Trelleborg Group management, but the General Manager still carried on with the project, running tests in the nights. Today, *Rubore* is one of the best yielding companies in the Group. The Production Leader has failed many times but his superior, The General Manager, has never said anything more than “think of that the next time”. If you want your employees to dare to try new things, it is a condition that you permit some mistakes. An old boss of his once told him when something went wrong and he said that he had nothing to do with it: “Well, that is a fool-proof way of acting”.

The Production Leader does absolutely not think that Trelleborg is bold when it comes to investing in projects that possibly could go wrong causing big losses. He even says that they are very afraid of such investments on Group-level. One reason for this could possibly be that Trelleborg is a stock market company, focusing on steady and fast returns and losing its long-

sightedness. He points at Germany, where many family-owned companies act under the opposite conditions which is very beneficial for them.

When asked if Trelleborg is bold in its efforts to invest in products and processes that possibly could go wrong, the **Production Supervisor** says that they have become a lot bolder in recent years. Trelleborg was earlier known to go only for safe bets and previous managers seemed to think that their job was to preserve rather than to develop. An example of this is the division “tires” that did not survive because they never tried anything new. Trelleborg in general is a lot better today but managers higher up in the organization still tend to be scared of taking risks and of being punished. The General Manager of Materials and Technical Composites is mentioned as an example of the contrary and he has been strongly criticized by other managers throughout the years. The Production Supervisor thinks that this step forward in the process of becoming more Risk-taking is due to general changes in how to view businesses. Change and development has become a popular topic on the agenda of most Swedish companies.

The Production Supervisor believes that a mistake is always a failure. However, he stresses that we are all human and everyone can make mistakes. The worst thing a company can do is to hang someone due to mistakes since this impedes the creativity. Personally, he believes there is a good degree of Risk-taking at his level. He does not have completely free reins but has to ask for approval by the Production Manager if he is uncertain. Losses around SEK 100 000 is a lot of money at his level of the organization. The punishment for a mistake might be to get dismissed, but he stresses that a lot more than one mistake is needed for a production worker to get dismissed.

Machine Operator I spontaneously regards Trelleborg as a company that takes risk, but also explains that he is not very well versed in those issues. It is a fact that each and everyone can make a mistake, since they are people and not robots. As long as the mistake is found and corrected, Machine Operator I does not feel that he is being punished for it. Instead, they discuss it in order to not make the same mistake again and thus to learn from the mistakes.

Machine Operator II has the same attitude to taking risks as his colleague. They seldom make mistakes, but if it happens the rubber can most often be reworked. Machine Operator II is not afraid of making mistakes and has taken the blame many times.

The **CEO** does not mind taking high risks as long as the possible profit is large. At the moment he has a couple of high risk projects running, but he stresses that it is too risky to have too many running at the same time. The risks of different investments or projects are evaluated in oral discussions and not in standardized calculations. If someone comes up with a good idea and a motivation good enough, the CEO stresses that he will say yes even though the profits will take a couple of years. If an idea is well motivated he stresses that Trelleborg loosens up its strict short-sighted pay-back requirements.

	Risk-taking
General Manager	No risky projects, few big mistakes, risks weighted against existing business, high tolerance for personal mistakes, tolerance of General Manager's mistakes dependent on success of other business. Low Risk-taking.
Production Manager	An investment needs to be a safe bet before investing, waits to the last minute before investing, mistakes accepted if bottom row positive, learns from mistakes, top-management responsibility. Low Risk-taking.
Production Leader	Very risk-averse at Group level, Trelleborg focuses on steady fast returns, the division more Risk-taking due to General Manager, learns from mistakes. Wishes that the Group was more Risk-taking.
Production Supervisor	More Risk-taking in recent years, higher managers still scared of being punished for taking risks but General Manager of division is the contrary, believes punishments impede creativity. Division Risk-taking satisfying, Group Risk-taking low.
Machine Operator I	Trelleborg is Risk-taking, everyone can make mistakes, learn from mistakes in production by discussing what went wrong. Rather Risk-taking but not his concern.
Machine Operator II	Same view as Machine Operator I, makes few mistakes, not afraid of making mistakes, rubber can be re-worked. Rather Risk-taking but not his concern.
CEO	High degree of Risk-taking, oral and not formalized evaluation, good motivations soften the strict financial requirements.

Table 5.5. The most important opinions about Risk-taking.

5.6 Proactiveness

The **General Manager** emphasizes that Trelleborg strives to be a proactive company that introduces new products ahead of competitors and creates demand. However, when we dug deeper into the question it seemed as though Trelleborg works mainly on the basis of specifications from the customers. The general manager says that the process of developing and introducing new products is a combination of looking at competitors and listening to customers. He also stresses that most ideas concerning new products come from customers seeking contact through a specification or presenting a problem that needs to be solved, but that Trelleborg also conducts market research in order to find out what the customers demand. It also happens that Trelleborg develops entirely new products in order to create demand, but this does not seem to happen very frequently and it only concerns smaller changes of already existing products, e.g. changing the material of a product.

The General Manager sees great advantages in being proactive. He believes that every time you develop something new you get the best possible chance to make a good profit margin. This should be a spur for Trelleborg to develop new products. The only disadvantage he sees with Proactiveness is the risk of developing for too long and spending too much money without any real pay-back. In order to increase the Proactiveness in Trelleborg, the General Manager believes that the Group management needs to show that it is a prioritized question by devoting resources to the development process.

As a spontaneous answer the **Production Manager** believes that Trelleborg is a company in the forefront of development which creates demand and which competitors want to follow. It has been like this since 1995 when Trelleborg became a pure industrial group. However, after a while he stresses the need for Trelleborg to better analyze the market to spot the latest trends. At the moment, Trelleborg follows demand rather than creates demand and the Production Manager believes that the major reason for this is that they produce semi-manufactured products. It is easier to create demand when you sell a complete product. However, he still believes that the sellers should get out in the market more often and see if there are any new things that could be suitable for Trelleborg. A good way is to look at the customers' production when selling a product and then try to see if there is anything else they might need. He emphasizes that Trelleborg actually has become better at noticing market signals since a large market research project started last year, but that there still is a lot to do. He believes that this is the job of the management and that there have not been enough resources dedicated to this kind of work.

Most of the innovative work takes place together with the customers since Trelleborg does not have any basic research. Trelleborg has chosen not to invest much in that and this is an area where the **Production Leader** thinks Trelleborg could become better. They have had some internal, ground breaking ideas but they have not really been taken care of. He believes that Trelleborg could work in a more proactive manner, since many other companies do so, but it requires resources, both human and financial, and managers that want to work like that. This is also due to the hard restrains when it comes to return on investments. Despite this, he still considers Trelleborg to be in the forefront.

The **Production Supervisor** also believes that Trelleborg is a company in the forefront of development that creates demand and which competitors want to follow. If the degree of Proactiveness was to increase he stresses that it is not at his level of the organization. Proactiveness is about money and it is a decision higher up in the organization. He believes that there is nothing the production can do unless they are asked to do it. They can not start developing new products just for the fun of it.

According to the **CEO**, Trelleborg strives to be a proactive company introducing products and technologies before competitors and creating a customer demand. However, he emphasizes

that in the case of Materials and Technical Composites the majority of the products are developed in cooperation with the customers which indicates that they follow demand. The main reason for this is that they produce very few end products and it is difficult for them to sell new products when customers have end products that work fine. The CEO believes that Materials and Technical Composites could become more proactive by trying to find new customers to already existing products.

	Proactiveness
General Manager	Something to strive for, opportunity to make good profit, most products based on customers' specifications, undertakes market research but to a small extent, Group management concern. Wishes to become more proactive.
Production Manager	Follows rather than creates demand much due to producing semi-manufactured products, sellers should conduct more market research, lack of resources, responsibility of management. Wishes to become more proactive.
Production Leader	Considers Trelleborg to be in the forefront but the company follows demand due to lack of basic research, too hard restrains of return on investments and too little resources for Proactiveness. Wishes to become more proactive.
Production Supervisor	Trelleborg creates demand and competitors follow, production workers not involved in Proactiveness, only do what they are asked, a matter of resources and responsibility of superior managers. Important but not his responsibility.
Machine Operator I	N/a
Machine Operator II	N/a
CEO	Trelleborg strives to be proactive but Materials and Technical Composites follows demand due to producing semi-manufactured products.

Table 5.6. The most important opinions about Proactiveness.

5.7 Competitive Aggressiveness

Trelleborg never competes aggressively in the sense of entering markets with drastically lower prices, according to the **General Manager**. Instead he says that Trelleborg generally has rather high prices due to their reputation of holding such a high quality. They want to show their customers that their products have a surplus value and therefore have a higher price than the products of competitors. When it comes to competing aggressively through

copying competitors' business methods or technologies, the General Manager first says that Trelleborg has nothing against copying competitors and that they probably do so more frequently today than before. If Trelleborg, for example, is number three in a market they might seek help from the competitors. After a while, however, he stresses that it is impossible for a company like Trelleborg to copy competitors. He indicates that they need to have their own development and their own products, but that they can be pretty close to competitors. The General Manager finds it possible that Trelleborg could compete aggressively through creating smoke by for example announcing a new product in advance in order to make the customer postpone its purchase. However, he strongly emphasizes that this can only be done if there is a realistic possibility of producing the product. If not, they risk losing their customers' confidence if they promise something they can not keep.

For the General Manager, Competitive Aggressiveness is mainly about choosing strategic locations close to the customers. A lot of large customers like the safety of having technical support close by and if you can not deliver this you will become number two. Trelleborg is very aggressive in the sense of being close to its customers in areas where they have good products. The General Manager sees no disadvantages of being competitive aggressive. On the contrary, he believes that there is too little knowledge of competitors in the business world. Competition is something that is often not taken seriously enough and he believes that in order to be successful you need to know a lot about your competitors. He stresses that the degree of Competitive Aggressiveness could be increased by dedicating more resources to market research. In Materials and Technical Composites it is his responsibility to make sure that Competitive Aggressiveness is included in the overall strategy.

According to the **Production Manager**, there is a lot of talking about industry conditions and price competition. A large focus is on the commodity prices. He mentions that an increase in the commodity price can not be taken out on the customers and hence makes production efficiency extremely important. Calender Service⁵ does not look too much on what the competitors are doing since they are basically solo on the market. When asked if there are any areas in which Trelleborg can copy competitors' processes or technologies he can not think of any. He stresses that the most important thing is to find end users that do not have their own calenders. The Production Manager stresses that it is possible for Trelleborg to keep rather high prices due to their good quality and that being a world leader makes you somewhat like a price setter.

The **Production Leader** thinks that Trelleborg is very bad at looking at its competitors. He believes this can be a problem because they always do things their own way without looking at others to get new influences. Trelleborg's strongest competitive advantage is their entrepreneurship and that they are very flexible and open for trying new things. They are more expensive than competitors but have a higher quality and produce technically more

⁵ A part of Materials and Technical Composites.

advanced products that are difficult for the competitors to meet. He knows the name of one Italian competitor, Reeves Brothers. He says there is one other major competitor in Germany which he can not remember the name of.

According to the **Production Supervisor**, it is not common that people in the production talk about competitors, industry conditions or commodity prices. They have meetings every month where they sometimes talk about competitors, but it is nothing general. The production does its own thing and does not look at other companies. The Production Supervisor stresses that it is the General Manager's, the sellers' and the chemists' job to keep track of competitors. The production's job is to produce products with high quality. He believes that Trelleborg's competitive advantage is that they produce technically very advanced products. The key to a high profit margin is to find difficult products that no one else can produce and this is what is going to make Trelleborg a survivor.

According to **Machine Operator I**, Trelleborg has high prices and good quality and he believes that customers always prefer high quality. He says that as a production worker you are not interested in competitors and stresses that when he gets information about competitors, it is easy to forget it. However, he believes that the biggest competitor is Eastern Europe due to the low production costs. According to **Machine Operator II** on the other hand, they talk a lot about competitors on their meetings. He believes that Trelleborg's biggest competitive advantage is that they always have new, high quality products.

The **CEO** is well updated when it comes to Trelleborg's competitors. He emphasizes that Materials and Technical Composites does not have many threatening competitors. In their field they are number one in Europe and have only one equivalent in America. Other firms in the industry constitute no real threat since they can not deliver the same quality as Trelleborg. The reason for this is that the demand is not big enough to convince potential competitors to invest in the expensive machines and equipment needed. Due to holding a high quality and producing the most complicated solutions Trelleborg can charge high prices.

	Competitive Aggressiveness
General Manager	High prices and high quality, do not copy competitors, create smoke if realistic possibility, compete by being close to customers, Competitive Aggressiveness could be improved by more resources to market research. Wishes to become more competitive aggressive.
Production Manager	Do not look at competitors due to being almost solo on the market, high prices due to quality, price setter, can not think of an area in which to copy competitors. Happy with degree of Competitive Aggressiveness.
Production Leader	Group keeps bad track of competitors, Production Leader spontaneously knows a couple of competitors, few new influences, high prices due to quality and advanced technology, entrepreneurship and flexibility competitive advantages. Wishes to become more aware of competitors.
Production Supervisor	Production workers do not look at competitors, their responsibility is to produce products, Competitive Aggressiveness responsibility of sellers, chemists and General Manager, competitive advantage is high quality and advanced products. Not interested in Competitive Aggressiveness.
Machine Operator I	Trelleborg charges high prices and has high quality, customers prefer high quality, not interested in competitors, easy to forget given information about competitors if given in meetings. Not interested in competitors.
Machine Operator II	Talk a lot about competitors in meetings, strongest competitive advantage is that Trelleborg has a lot of new high quality products. The division keeps track of competitors.
CEO	High prices due to high quality, complicated solutions and few threatening competitors.

Table 5.7. The most important opinions about Competitive Aggressiveness.

5.8 Concluding comments

To end the interviews we asked the respondents whether or not they thought their ideas about the discussed dimensions and earlier questions were the same in all levels of the organization. We also asked them if they found any of the discussed areas especially interesting or important for Trelleborg.

The **General Manager** believes that the most important area is creativity. He emphasizes that creativity is very important in order to develop new, leading products. Except creativity, most companies do things similarly, but a company that takes good care of creativity will become number one. He believes that his ideas concerning entrepreneurship are deeply rooted at all levels of Materials and Technical Composites but stresses that everyone does not have such a

broad view as he does. This, however, does not stop them from thinking in the same way. He also emphasizes that the view of entrepreneurship may differ between different business units and divisions.

The General Manager feels that Trelleborg does not have the right structure for encouraging development. Everything is included in the normal budget and he finds it difficult to get extra money from the Group to try new things and make new investments. The budget for Materials and Technical Composites is rather tight which results in that he can not be as experimental as he would like to be. The problem today is that if he wants to invest in new things he has to do it at the expense of the existing business and he believes that a possible solution to this could be to earmark resources. The General Manager is a bit worried about the controlling system of Trelleborg being too complicated. It very rarely happens that the Group management suggests changes and development and instead, most new ideas come from below. However, he believes that the new CEO is a bit more open minded and therefore hopes to see a change in the future.

The **Production Manager** considers innovation to be the most important area for Trelleborg. He believes that most people in the organization have similar opinions about the questions discussed, but stresses that if everyone thinks in the exact same way there will be no innovations. It is necessary to be different at different levels of the organizations. He strongly believes his superiors to be aware of the entrepreneurial spirit and competence that exist among employees in the lower levels of the organization. This is due to the fact that both he and the General Manager have a long history in the division and that they are familiar with everyone. There is a strong team spirit and they work a lot with “walking around management”. He stresses, however, that he has very little to do with the Group management and that he does not know if they are on the exact same track.

The **Production Leader** believes that we would get the same answers on all levels of Materials and Technical Composites and stresses that both the officials and the union contract employees think that they are innovative and try new things. He considers the most important question for Trelleborg to be to always be one step ahead. The only time this could be a disadvantage is if you make a radical mistake. Unfortunately he does not believe that it is possible for Trelleborg today to always be one step ahead. In order for this to happen they need more resources and the right people.

The **Production Supervisor** believes that both his superiors and his subordinates have the same view of the discussed questions. A proof of his superiors being aware of the competencies that exist in the production is the suggestion scheme. He says that the ones who do not understand that new things need to be done are in deep water. A downside with Trelleborg is that the perspective is too short and the Production Supervisor sometimes thinks that there are too few investments in the production. It took 10 years of lobbying before they

finally got their new calendar. This is something that will be a disadvantage for Trelleborg in the long run.

Machine Operator I considers all the discussed areas to be linked together and stresses that it is important to focus on all parts. The quality of the products, however, is particularly interesting to him. He believes that his superiors have the same opinion as he does and that they are aware of the entrepreneurial spirit and competence that exists in the production. This awareness is mainly due to the fact that the General Manager, the Production Manager and the Production Leader have worked in the production. Machine Operator I sees Materials and Technical Composites as a big family with a lot of cooperation. He also feels solidarity with other divisions within the Trelleborg Group but stresses that he hardly ever speaks to the Group management. He has no idea of the goals and visions of the CEO.

Machine Operator II finds it difficult to answer which of the areas discussed is the most important, but emphasizes that he believes in taking risks. He says that Trelleborg takes risks when they are forced to, e.g. when they test new products. Even if they lose money in the beginning he believes that it is good in the long run. Not many companies, however, think in long terms and Machine Operator II stresses that all companies want to make fast money. He believes that his superiors have more or less the same opinion about the questions as he does and stresses that everyone gets along very well. The superiors listen to what he has to say and have trust in him to operate the machines. He does not know what visions and values Trelleborg works after and considers the only goal to be to make money.

The **CEO** believes that everyone will say that the Group management does not dedicate enough resources and that the financial requirements are too strict. However, he stresses that it is up to every division to generate its own money in order to make investments. The resources of the Group are not unlimited and in the economic reality you have to generate your own profits to pay for your investments.

	Concluding Comments
General Manager	Creativity most important success factor, most ideas from below, view of entrepreneurship same throughout division but might differ in entire Group, tight budget for experimenting, wishes to earmark resources, too complicated controlling system.
Production Manager	Innovation most important success factor, view of entrepreneurship similar throughout division due to "walking around management", little contact with Group management.
Production Leader	Being one step ahead most important success factor, needs more resources and the right people to do this, view of entrepreneurship same throughout the division.
Production Supervisor	Same view of entrepreneurship throughout the division, superiors aware of competence in production much due to suggestion scheme, too few investments in production, too short perspective from Group management.
Machine Operator I	Product quality important question, superiors in division aware of competence in production, not aware of CEO's goals and visions.
Machine Operator II	Risk-taking important question, similar opinions throughout the division, not aware of the Group's visions and values.
CEO	Different opinions about the financial requirements.

Table 5.8. The most important concluding comments about the discussed topics.

6. Analysis

In this chapter, the research questions presented in chapter one are answered. The analysis is divided into two major parts. The first part describes to what extent the EO-dimensions are fulfilled in Trelleborg today. The second part establishes if any EO-dimensions should be added or excluded. This part is mainly based on research questions two and three, namely the advantages and disadvantages and the possibilities of increasing each dimension. The chapter ends with a presentation of the adjusted EO-model.

6.1 To what extent are the EO-dimensions fulfilled in Trelleborg today?

In this first part of the analysis, we establish to what extent the five EO-dimensions are fulfilled. We base our judgment on the respondents' answers and the impression we have received in our contact with Trelleborg. Our judgments are not necessarily consistent with how the respondents perceive the dimensions in chapter five. Even though the respondents perceive a particular dimension in a certain way, we might very well judge it differently perhaps due to seeing it as part of a bigger picture or due to the fact that we are outsiders with another view of the firm. A paragraph concluding the essentials is presented in the end of each dimension.

6.1.1 Autonomy

The respondents within Materials and Technical Composites consider the Autonomy to be high. The division works as an independent company within the Group and the General Manager is free to set his own goals. His budget, however, depends on the Group-management which we believe decreases the degree of Autonomy. Even if he wants to try new things and do things differently he might not be able to do it without taking resources from other areas. This might have the effect that good suggestions are stopped and creativity is impeded. This is in line with what previous research has established and can be a strong barrier for entrepreneurship and organic growth. However, having limited resources is of course a reality for all firms.

Materials and Technical Composites has independent teams that work after given goals and specifications. This indicates a high degree of Autonomy because it lets the employees take own initiatives and think for themselves. However, none of the teams are totally independent in the sense of setting their own goals. The production workers are free to come with suggestions but these only concern the processes. It is a general perception that production workers can not influence the products in other ways than how the material is to work with.

We believe that this preconceived opinion may have a negative effect on the Autonomy in the division. The Production Manager emphasizes the importance of subordinates' understanding of the overall goal of the organization before letting them work independently. The awareness of those issues is unfortunately quite low in Materials and Technical Composites. The goals are said to be conveyed to the employees in monthly meetings but none of the Machine Operators know anything about the visions of the Group or how the suggestion scheme really works behind the scene. Another interesting detail we found is that even though the respondents in general consider Autonomy to be important for the division, no one really considers him or herself to be responsible for the degree of Autonomy.

The suggestion scheme highly increases the degree of Autonomy in Materials and Technical Composites. All respondents consider it a good way of promoting own initiatives and new ideas. A negative aspect with the suggestion scheme that impedes Autonomy, however, is that many of the production workers are foreigners who are not fluent in the Swedish language. It is difficult for them to write suggestions in Swedish and it sometimes happens that they hold their ideas to themselves due to language barriers. There is no follow-up on behalf of the management due to few suggestions which may cause good ideas to be missed. The production workers generally seem to be happy with the degree of Autonomy, but unfortunately it seems as though own initiatives are something you only take if you have time to spare after finishing your ordinary tasks. This is indicated by the Production Supervisor saying that he sees no drawbacks with being autonomous as long as people consider their primary tasks being top priority. One of the machine operators supports this view by saying that he could not handle more Autonomy due to the hard work load, and that when he is too busy he does not use the suggestions scheme at all.

The employees at Materials and Technical Composites consider the degree of Autonomy to be high. The division management sets its own goals and the production workers work independently in teams after given goals and specifications. There is a suggestion scheme to capture ideas and initiatives. We agree with that the degree of Autonomy is rather high for being a large, established company, but think that it decreases due to strict financial demands from the Group management and to the fact that the employees do not set their own goals.

6.1.2 Innovativeness

The majority of the respondents consider Innovativeness to be an important part of a successful company and they rate Innovativeness in Materials and Technical Composites from “rather high” and “could be improved” to “very high”, which indicates a rather big discrepancy of how innovative the division is perceived. The General Manager, who has the best overview of the organization, is the one who emphasizes the need for being more

innovative the most. The amount of tests that are run in the machines is the major topic discussed and is the reason why some see the division as experimental and innovative. A large amount of “new” products are tested, but the problem is that the products most often seem to be an old product with only a smaller cosmetic change or an already existing product that has not been manufactured in a polymer material before. That is, very few radical product innovations are made. A problem for the production workers concerning a high degree of Innovativeness is that it makes their working situation tougher without giving them any direct benefits. Believing that testing new products makes the job more difficult without getting anything for it could inhibit the innovative spirit even though most employees are aware of the fact that innovations are beneficial for the company and all employees in the long run.

Materials and Technical Composites does not have a R&D department, which sheds light on the fact that the innovations are quite modest. Furthermore, Trelleborg as a group does not have any basic research. Making much of the innovative work together with the customers points in the same direction.

When it comes to process innovation, it is an old industry where the manufacturing process basically is the same as a hundred years ago with the peripherals differing. The products can thus be made more complex than before. As a matter of fact, the technological content is high thanks to advanced equipment and highly experienced employees. This, however, is not the same as Innovativeness but rather a competitive aggressive attitude. Even though Materials and Technical Composites is a leading actor when it comes to calender technique, the process is still a very old and mature one. The most striking improvements in the factory seem to concern the working environment and the efficiency with more automation and a smaller number of tasks to carry out. This, however, is a most natural development that follows the changes in society and the industry as a whole. The fact that the Trelleborg Group is active in an old and mature industry implies a natural obstacle for the possibilities of being highly innovative. A general opinion among the respondents is that innovations are someone else’s concern.

We consider the dimension Innovativeness to be quite low, even though the will to be innovative and an understanding of the dimension’s importance is present among the respondents. The reason for making this judgment is that the division has no R&D department nor basic research, makes few radical product innovations and that the manufacturing process looks a lot like it has done for many decades. On the positive side of the scale is the high number of tests they run in the machines and that they are among the world leaders on calendar technique.

6.1.3 Risk-taking

The perception of Risk-taking among the respondents in the upper part of the hierarchy lies towards the lower end of the scale whereas the Machine Operators consider it to be somewhat higher. They mean that Trelleborg takes risks when trying to produce new things. This is true, but we consider this risk to be very limited and to only concern small amounts of money. If a person, who is not a top-manager, makes a mistake, it is accepted and he or she learns from it and does not get punished. Thus, it does seem like personal Risk-taking is promoted. The problem lies foremost on Group level, as it seems. The General Manager of Materials and Technical Composites has had hard times in the past just for being to Risk-taking. What matters appears to be that all projects yield a positive return every time. A common opinion in the division is that it is difficult to request money for projects that will not make a direct and certain profit and that deviations from the financial goal with very few exceptions are accepted. Even though the CEO says that if someone can motivate an investment or a project good enough he is not late to invest in a risky project if the possible benefits are good, we characterize Trelleborg as a company with a very low Risk-taking.

Not devoting money to uncertain projects and demanding that the divisions stick tightly to the financial goals are factors indicating a low Risk-taking. A positive aspect is that the employees do not feel scared to make mistakes. All in all, however, the degree of Risk-taking is very low.

6.1.4 Proactiveness

The general spontaneous reaction among the respondents was that Trelleborg is in the forefront of development and that the degree of Proactiveness is high, but after explaining more what Proactiveness is about they changed their minds. Proactiveness is about seizing new opportunities and monitoring trends in order to get ahead of the market and anticipate changes in demand. We consider the degree of Proactiveness in Materials and Technical Composites to be very low.

The majority of the production in Materials and Technical Composites is made upon request from customers through specifications. This means that the division is contacted by a customer telling them what to produce. It might also be a customer presenting a specific problem that needs to be solved and it is up to the division to suggest a solution. There are a couple of barriers making the process of increasing the degree of Proactiveness in Trelleborg more difficult. The first is that Trelleborg develops mainly semi-manufactured products meaning that the customers do not use the products as they are, but buy them in order to process them further. This probably makes it more difficult to create a customer demand by “pushing” a product onto a customer before they really have a demand for it. We strongly

believe that this way of working is to follow demand and it is hence the opposite of Proactiveness.

The degree of Proactiveness is very low. The reasons for this are that they innovate in co-operation with the customers and that they produce semi-manufactured products.

6.1.5 Competitive Aggressiveness

Competitive Aggressiveness is an issue that, not very surprisingly, mainly the upper levels of Materials and Technical Composites have something to say about. It seems as though the division does not look a lot at what the competitors do. The General Manager wants to become more competitive aggressive. In several segments, Trelleborg is solo on the market, which of course makes all questions concerning competitors uninteresting. The reason for being the only actor is often that the segments are quite small, and entering the market requires very large capital investments. In other areas, however, there are competitors that must be beaten in one way or another. Trelleborg competes primarily by providing high quality products that are technically advanced. Therefore, Trelleborg can charge high prices and thus cover the high costs of manufacturing such sophisticated products. They do not sign contracts where the margin is low and instead let the deal go to a competitor. A typical competitive aggressive manoeuvre is to invest heavily in production capacity which Trelleborg obviously does. Materials and Technical Composites strives to be located close to its customers since much of the innovative work takes place together with them. Consequently, they often compete on local markets. “Creating smoke” and copying competitors do not seem to be strategies taken under consideration much, even though the respondents thought that it could probably work in some cases. On the whole, the degree of Competitive Aggressiveness is rather high.

Trelleborg is a company with a competitive aggressive focus. The degree of Competitive Aggressiveness in Materials and Technical Composites is rather high since they, by means of the expensive equipment, outperform their competitors. However, the degree could be considerably higher.

6.2 *Should the EO-model be adjusted?*

The question if the EO-model should be adjusted was the key question for fulfilling the purpose of this study. In order to find an answer, we first evaluated the five original dimensions on the base of the empirical findings from the study of Materials and Technical Composites. Throughout the evaluation, we kept in mind the respondent's opinions about advantages and disadvantages and the possibilities of increasing each dimension. If any of the dimensions had dominant disadvantages or low possibilities of increasing, it was excluded from the model. After this, we tried to see if there were any additional dimensions missing in the EO-model. This was done both by looking for potential problems within the existing dimensions that could be solved by an extra dimension, and by looking for totally free-standing dimensions that independently would help the overall Entrepreneurial Orientation. Finally, the remaining existing dimensions and the additional dimensions were put together and presented in an adjusted EO-model.

6.2.1 Evaluation of the original dimensions

In this part we will go through the five dimensions and give our view of their importance in a large, established organization which aims for organic growth. We will also explain and justify why each dimension from the original model is kept or excluded in the adjusted model.

Autonomy: We believe Autonomy to be one of the pillars that is most important for being entrepreneurially orientated, not least in a large, established organization. Autonomy contributes with a feeling of being important which we believe spurs the employees to be more dedicated to their job. It is also a way of utilizing the employees' competencies effectively and being able to spot more opportunities and it leads to new ways of doing things and new sources of competitive advantages. These factors all contribute to increasing the organic growth. A small organization is autonomous in itself, i.e. it has no Group to be autonomous towards, whereas a division in a Group can be autonomous to a larger or smaller extent. When it comes to personal level Autonomy, the employees in a small organization are not necessarily more autonomous than in a large organization, but the prerequisites are certainly better since it is easier for the management to have a general view of the employees which makes it easier to give freer reins. Consequently, it is a challenge for a large, established organization to become autonomous and it is therefore of outermost importance to concentrate and focus on this issue. Thus, Autonomy has a given place in the EO-model.

Innovativeness: This dimension is, according to us, essential for as good as all companies regardless of size. As we see it, having a high degree of Innovativeness is a prerequisite for continuing being a competitive company, growing organically and making profits in the

future as well. The products and processes the company has today may very well be in the forefront, with a high technological content or something else that makes them competitive, but this will not continue forever. Thus, innovations are essential for the survival of the company. One thing that moderates the importance, as we see it, is the fact that Trelleborg is a company in an old and pretty mature industry, which makes Innovativeness a little less crucial in comparison to, for example, rapidly moving hi-tech industries. Innovativeness has one particular drawback, which is the risk of losing focus on the existing business. This risk is especially obvious in a large, established company where the going business provides the cash-flow that pays for everything else. Except for this risk, we do only see advantages with being innovative. The dimension should definitely stay in the EO-model, but in the specific contingency a little lower degree of Innovativeness is expected.

Risk-taking: The dimension partially determines the degree of the other dimensions since it is a risk to have autonomous individuals, a high degree of innovations etc. Therefore, an acceptance of Risk-taking increases the possibility of also increasing the other dimensions. A project with a large portion of risk implies a better upside as well. Investing more money in new technologies and processes even though the outcome is uncertain has the advantage of stimulating creativity and initiatives among the employees. If a company wants to enhance the organic growth, it can, except for increasing the current market share, aim for a new geographical market or at exploring a new area of business. Those strategies are, without doubt, much riskier than sticking to the ongoing everyday business, but at the same time provide a chance for a decent organic growth. All in all, we consider Risk-taking to be a central dimension since the other dimensions are interdependent with it. Trelleborg must reflect on if they are Risk-taking enough. Taking risks is important in order to grow organically but the necessary degree is reduced due to the contingency, i.e. a large, established company in a slow moving industry. Risk-taking is hence a relevant dimension, but its importance for a company like Trelleborg is moderate.

Proactiveness: Many of the largest and most successful companies in the world have probably reached their position by acting proactive. We believe it can be one of the most important success factors in many cases but it is no universal strategy that automatically leads to growth and success. For Materials and Technical Composites, which innovates together with its customers and mainly sells semi-manufactured products, Proactiveness is not that crucial. We do not say that Proactiveness is negative for Trelleborg, but rather think the opposite. However, being proactive requires a lot of resources and much dedicated work and it would probably not be worth the effort. As stated earlier in the thesis, we believe that Trelleborg in practice needs to make a choice between Proactiveness and Competitive Aggressiveness and we consider the latter to be more appropriate than the former. After much consideration, we consequently decided to exclude Proactiveness from the EO-model when applied in this particular contingency. It was no easy decision since we believe that the dimension is of great importance in many other cases. In this case, however, we simply do not think that it is crucial enough to keep its place in the EO-model. Competitive Aggressiveness

is far more important and when choosing between the dimensions, Competitive Aggressiveness was prioritized.

Competitive Aggressiveness: As just stated, we consider Competitive Aggressiveness to be superior to Proactiveness for a company like Trelleborg. The company has a well established business and a large stock of expensive machinery which is the base for their competitiveness. Using this to produce more sophisticated products than the competitors is one way to outperform them. We believe that in a mature market it is very important to take every opportunity to compete aggressively. It is especially important in Trelleborg's case not only since the industry is mature, but also due to the fact that the company mainly produces semi-manufactured products, which altogether makes it very difficult to be proactive. In this contingency, we consider competitive aggressive measures to be an appropriate way of creating organic growth. Like argued above under Risk-taking, organic growth can be achieved by increasing the current market share or attacking new geographical or product markets, which in turn requires a competitive aggressive attitude if to succeed. The market can be too small to nourish two or more competitors and eventually some must leave it to the winners. As a newcomer on a market, the market share is probably very small and before being well-known it can be tough to gain market share. We certainly think it is a challenge to be competitive aggressive but at the same time we see many benefits of it and many ways how to become competitive aggressive. Thus, Competitive Aggressiveness is a vital dimension that should be kept in the EO-model.

To conclude the evaluation of the original dimensions, it can be said that we decided to keep all dimensions except for Proactiveness in the adjusted EO-model. Consequently, Proactiveness was excluded.

6.2.2 The need for additional variables

When investigating the Entrepreneurial Orientation in Materials and Technical Composites there seemed to be a general opinion throughout the organization that entrepreneurship was something desirable, and a will to increase the dimensions. Despite this, however, the account for the extent to which the dimensions are fulfilled in the division today shows that the dimensions are far from maximized. We experienced that there was something preventing the Entrepreneurial Orientation from developing in Trelleborg. It did not take long to realize that employees from different levels of the organization had different opinions and perceptions of matters concerning the dimensions, and we started to distinguish a barrier to entrepreneurship. We identified this barrier as Communication. We believe Communication to be especially critical in large, established organizations and hence, we would like to add Communication to the EO-model. To start with, we will provide our view of why Communication is such a critical factor. We have identified four especially interesting areas where the Communication has influenced the Entrepreneurial Orientation in Trelleborg; Communication regarding goals,

visions and values, Communication regarding the allocation of financial resources, Communication regarding responsibility and Communication regarding the importance of the reward system.

Communication regarding goals, visions and values: The first step in achieving common goals via certain visions and values is to make sure that the entire organization has the same perception of what is to be done and within which framework this is to be accomplished.

An obvious shortcoming in Materials and Technical Composites is that the Machine Operators do not have a satisfying picture of where the Group is heading or which visions and values that should permeate the organization. When asked about this, none of them could give an answer and they seemed puzzled by the question. We believe that they suppose that the goals, visions and values do not concern them. This is most unfortunate since the ability to successfully work autonomously is dependent on understanding the organization's goals, visions and values. Communication regarding goals, visions and values is hence very important for making sure that the results from using other dimensions is fully utilized.

Communication regarding the allocation of financial resources: Common for implementing all dimensions is the dependence on resources. The allocation of resources seems to be problematic in a large, established company like Trelleborg. There seems to be a wish throughout the entire organization to increase the Entrepreneurial Orientation and a belief that this would lead to increased firm performance in the form of organic growth. The problem is who should foot the bill. The employees in the division consider the advantages of belonging to a large, established Group to be that there are larger amount of resources than if they would have been totally independent, and they believe this should be used. Instead of taking resources from the existing business and the division budget, they believe that the Group should show their interest in entrepreneurship by supporting these activities above the normal budget. Another way of doing it, as they see it, is for the Group to loosen up its strict financial requirements. It would be possible for the division to support its own initiatives and entrepreneurial activities if the investments were not required to show profitability so soon. They find the strict financial control to be very impeding for long-sightedness and entrepreneurial activity. The CEO, on the other hand, stresses that this is not how the economic reality works. He argues that if the division was a small local entrepreneur it would be impossible to run away from its objectives of showing profit. He agrees that being a quoted company makes it necessary to deliver good results quarterly but sees no real differences from being an unquoted company. The requirements of delivering good financial results are the same in small companies; it is just that the pressure comes from the credit institutions and not from the shareholders. However, he says that if a division wants to make a large investment and can present well-founded arguments they will receive the funds and the financial requirements can be loosened. This is not exactly the picture conveyed by Materials and Technical Composites, and we therefore see the communication within the Group as something that impedes entrepreneurship.

Communication regarding responsibility: Everybody in the division regard personal Autonomy as being very important since it enhances the feeling of being an important part of the organization and increases the amount of new ideas which in the long run is beneficial for the Group. The respondents also considered Innovativeness to be an essential factor determining why Trelleborg is a successful company, and they meant that the fact that Trelleborg has a high degree of Autonomy in turn leads to a higher degree of innovations. We fully embrace this view but we have also identified a problem that we believe inhibits the autonomous behavior and the degree of Innovativeness. This problem has to do with a tendency to often consider someone else, often superiors, to be responsible for non-routine work in general and innovations in particular. For example, the people working in the production say that the products are the chemists' and salespersons' responsibility and nothing they really bother about. Although it may be true that they do not have any formal responsibility of the product development, they should at least be interested in the products and, if possible, come up with ideas regarding them. The situation as it is now decreases the effectiveness of having an autonomous organization since people do not fully take advantage of the possibility of acting and thinking independently, but instead unintentionally limit their own initiatives.

We consider this problem as mainly being due to a lack of communication regarding what role everybody in the organization plays. We believe that in a truly entrepreneurial organization, all employees should have a feeling of being involved in and having a responsibility for as good as all parts of the organization. Communicating that everyone in the organization plays an important role, not only in their everyday work but also when it comes to grasping unexpected opportunities and thinking outside the frames, would help utilizing Autonomy and Innovativeness to their full extent.

Communication regarding the importance of the reward system: After interviewing respondents in the higher levels of the organization, it seemed as if reward systems were very important for getting the employees to work entrepreneurially, and especially for using the suggestion scheme. A common answer from the managers was that the best way to inspire people and get them to think independently is by making sure that ideas are rewarded financially. Nobody mentions the emotional reward that is embedded in the pure nature of being allowed to influence and simplify one's own work and the situation surrounding it. The union-contract employees, that are the target group of the suggestion scheme, conversely state that the financial reward plays a minor role whereas the emotional reward is said to be the major determinant of how entrepreneurial one acts. It is an honour to know that one's idea has been implemented and has improved and simplified the production. Unfortunately, in this discussion, just like in other discussions, only the production process is mentioned and not the possibility of influencing the product characteristics.

However, we believe that the reward system can have a positive effect. The workers would probably use the suggestion scheme to about the same extent even if they were not rewarded,

but we think that the rewards can be seen much as symbolic rewards indicating how important the management considers the employees' contributions to be. The problem, though, is the management's and the employees' differing opinions about how these factors influence the employees' behaviour. If the management was aware of the fact that the major determinant of giving suggestions is the possibility to influence the working situation and the feeling of making a difference, they could work with other incentives as well. Such incentives could focus more on honouring the originator of the idea than giving him or her money for it. The lack of insight into this problem is due to not having sufficient communication. We also believe a good way of motivating the use of the suggestion scheme to be that the managers push the employees if they do not come up with suggestions often enough. They should actively request suggestions from the employees, which also has to do with the degree of Communication.

After finding the new dimension Communication, which can be said to solve problems concerning the already existing dimensions, we tried to find totally free-standing dimensions that independently would help the overall Entrepreneurial Orientation. This, however, turned out to be difficult and we came to the conclusion that the dimensions, except Proactiveness, presented by Lumpkin and Dess and the additional dimension Communication together were sufficient to capture the Entrepreneurial Orientation of a large, established company. Hence, no further dimensions were added.

6.2.3 The adjusted EO-model

As established above, in order to adjust the EO-model to a large, established company, we decided to exclude the dimension Proactiveness and to include the dimension Communication. When designing the adjusted EO-model, the question of where in the model Communication should be added arose; as a dimension of the Entrepreneurial Orientation or as a dimension of the Organizational or Environmental factors. After a discussion, however, we came to the conclusion that there was no option. The Organizational and Environmental factors constitute the contingency of a company and are fixed dimensions that can not be easily changed. Communication, however, is an activity just like for example Risk-taking, and it consequently belongs to the dimensions of the Entrepreneurial Orientation. This decision gave us the following adjusted EO-model:

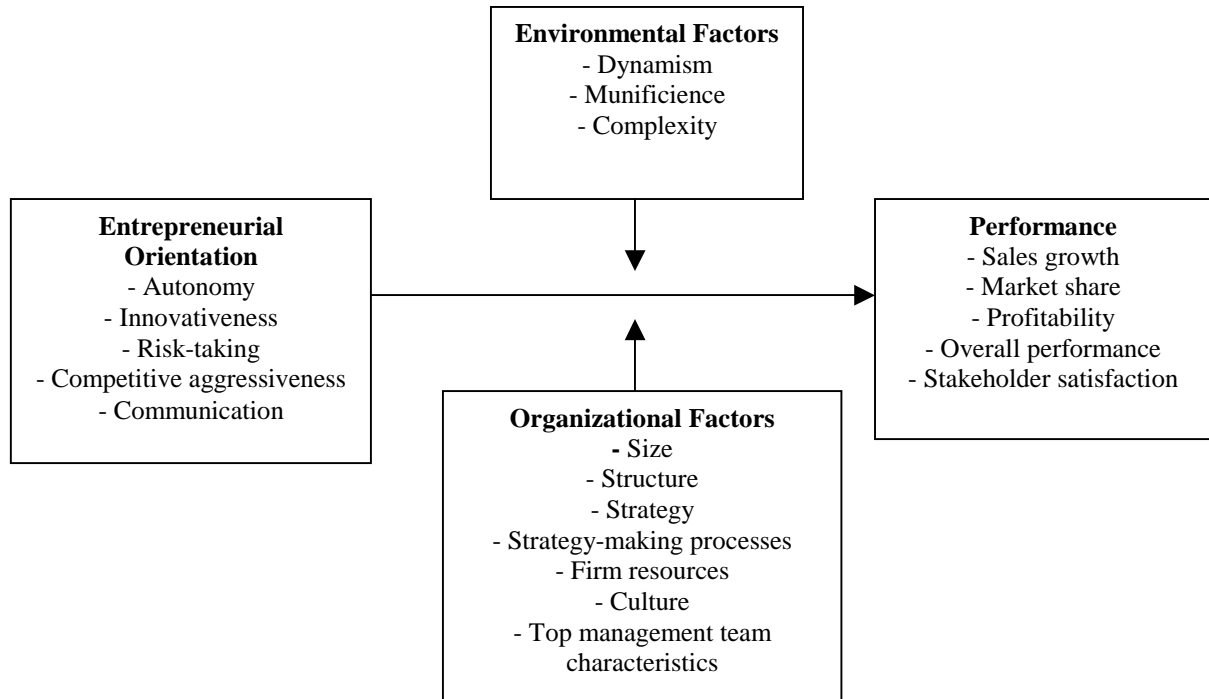


Figure 6.1. The adjusted EO-model for a large, established company.

7. Conclusions

In this chapter, conclusions concerning the analysis are presented. A theoretical contribution in the sense of the adjusted model and an empirical contribution in the sense of concrete advice for Trelleborg are given and the chapter ends with suggestions for further research.

The purpose of this study was to:

- Investigate the Entrepreneurial Orientation in a large, established company that wants to increase organic growth.
- If necessary, adjust the EO-model to fit into this particular contingency.
- Give advice on how a large, established company can improve its Entrepreneurial Orientation.

The first two questions are thoroughly discussed in the previous chapter, but here we want to conclude the study by taking the discussion one step further. Both the empirical and theoretical contribution of the study is discussed and the purpose fulfilled.

7.1 The Entrepreneurial Orientation in Trelleborg today

We consider the degree of **Autonomy** to be **rather high**. This since the division sets its own goals to some extent, the employees work independently after given goals and instructions and they have a suggestion scheme to encourage creative, independent thinking. **Innovativeness** within Trelleborg is **rather low** due to the facts that they do not have any basic research and the division has no separated R&D activities and thus no earmarked resources for innovations. They are active in a mature industry and even though they make innovations, very few of them are of radical character. Since Trelleborg is restrictive when it comes to devoting money to uncertain projects, and demands the divisions to stick tightly to the financial goals, we consider the degree of **Risk-taking** to be **low**. However, personal level Risk-taking is higher than Group level. The degree of **Proactiveness** has been estimated to be **very low** as, mainly because Trelleborg does not prioritize to create demand and to be among the first to introduce new products. This, however, is probably due to the fact that they innovate together with the customers and produce mainly semi-manufactured products. The fact that Trelleborg instead prioritizes to react on demand and that they have a large production capacity to produces high-quality products makes the degree of **Competitive Aggressiveness rather high**.

7.2 Theoretical contribution – The adjusted model

We found that all dimensions but Proactiveness could be successfully increased in Trelleborg. Proactiveness might be important to large, established companies in other industries, but in the case of Trelleborg it is opposed by Competitive Aggressiveness. Since Trelleborg operates in a mature market, mainly innovates together with its customers and produces semi-manufactured products, we find it difficult to increase the degree of Proactiveness. Instead they should focus harder on competing aggressively. We have therefore chosen to exclude Proactiveness from the adjusted EO-model. Instead, we have replaced it with the new dimension **Communication**. Communication is added because it is highly critical for utilizing the other dimensions satisfactory. We believe that Communication is especially critical in large organizations since there is such a long way from the CEO to the production workers. In small organizations it is more likely that managers have daily contact with the employees whereas in larger organizations there is a layer of middle managers where the message might get lost on the way up or down the hierarchy.

The areas where we have found Communication in Materials and Technical Composites to be especially critical are Communication regarding goals, visions and values, Communication regarding the allocation of financial resources, Communication regarding responsibility, and Communication regarding the importance of the reward system. We believe that the ability to communicate the goals, visions and values of Trelleborg to all employees is highly important in order for the Autonomy to work well. Giving employees free reins when they do not know exactly where the organization is heading seems like a risky business. Communication regarding the allocation of financial resources has shown to be a problem since the perception of how money is allocated differs between the division and the Group management. This lessens the sense of being prioritized which we believe decreases the motivation for working with the Group's interest in mind. A better knowledge among the employees of how the firm resources are distributed might create a more positive environment where no one feels unfairly treated. When it comes to responsibility, there is a tendency to think that tasks not being part of one's everyday work are someone else's responsibility. In a truly entrepreneurial organization, however, all employees should feel that they are responsible, not only for their ordinary tasks, but also for seizing all opportunities they come across. This should be done even though the tasks concern other parts of the organization. Therefore, communicating that the employees are part of the organization as a whole and responsible for overall entrepreneurship is of great importance. The last problem regarding communication concerns the importance of the reward system in connection with the suggestion scheme. The management thinks that financial rewards are the most important incentives for getting the employees to use the suggestion scheme actively. The employees on the other hand do not have the same opinion and rather emphasize the value of being able to affect their working condition and the situation surrounding it. A better communication regarding what is important might increase the number and the quality of the suggestions.

7.2.1 Comments on the new dimension

The areas established above are the most critical factors of Communication found in Trelleborg. It is highly possible that the particular areas vary between different organizations, but we truly believe that Communication is an important dimension in all large organizations. We do not only see it as an important, general variable, but regard it as being especially important in the case of a company that wants to become entrepreneurially orientated. We believe that the term entrepreneurship is often associated with an easy-going attitude and a feeling of working, innovating and investing spontaneously. This might be the case in small organizations, but we consider one of the most important conclusions of this study to be that entrepreneurship in large organizations needs to be carefully planned and managed. It is impossible for a division to get resources for research and new innovations or investments if they do not have a well-formulated plan and the ability to communicate it to the Group-management. Furthermore, it is risky and ineffective to give employees free reins if the overall goals and visions of the organization are not well communicated and rooted in all parts of the organizations. In a large organization it is also easier for an individual employee to escape the responsibilities that come with entrepreneurship. It is therefore crucial that all employees understand the meaning of entrepreneurship and why it is important. We believe that all these factors point out the need for better communication in order to obtain an Entrepreneurial Orientation in large, established organizations and that they justify the theoretical contribution of adding Communication as an extra variable in the EO-model. The need for Communication as a new variable is most likely present in all large organizations, and we are hence of the opinion that the new EO-model is generalizable across large, established organizations.

7.3 Empirical contribution – Advice to Trelleborg

Concrete suggestions on how the Entrepreneurial Orientation could be enhanced in Trelleborg are given below. These pieces of advice are derived from the analysis and one must be careful when generalizing them since they concern the specific situation in Trelleborg.

7.3.1 Autonomy

- There is a positive spirit among the employees about Autonomy, which we think should be taken advantage of in order to increase the degree further, i.e. the preconditions for enhancing Autonomy are good.
- The fact that new ideas take a lot of time and hinder the existing business to be carried out can be solved by creating so called “skunk works”, separated from the existing business, consisting of, for example, teams with mixed skills given free reins to work with things departing from the regular business. Having skunk works would hopefully

also help overcome the language barriers of the production workers, since they would be more or less forced to challenge their fears.

- We believe it is necessary for the division to improve the suggestion scheme. The follow-up needs to be improved in order to minimize the risk of people walking around with ideas without communicating them.
- We believe that there would be more and better ideas about the product if the organizational structure was changed to form teams consisting of people from different areas of the division. This way, the competencies of the production workers could be combined with those of the chemists in order to create new ideas and increase Autonomy. If production workers worked more in cooperation with e.g. chemists and sellers they would hopefully become more interested and confident in coming up with product suggestions.

7.3.2 Innovativeness

- A suggestion on how to solve the problem with the financial constraints is to earmark resources especially dedicated to supporting new ideas and initiatives. This way the General Manager of Materials and Technical composites does not have to exceed the budget for the existing business in order to develop new ideas.
- We consider the R&D efforts to be an area for Trelleborg to concentrate more on in the sense of focusing more on basic research. Materials and Technical Composites does not have a special R&D department, but instead carries out the R&D as part of the regular work. We think this increases the risk of losing focus on the existing business. Instead, having people with the task of working with innovations in a separate team or department could help increase the degree of Innovativeness. The discussion about skunk works in the previous chapter about Autonomy is highly relevant regarding Innovativeness as well. In fact, skunk works do lead to higher Autonomy which in turn can result in a more innovative organization.
- Short-sightedness is no good when aiming at becoming entrepreneurial. Even if Materials and Technical Composites has a well-considered long-term strategy for being more entrepreneurial and thus grow faster organically, e.g. by investing heavily in the vulcanization equipment, this may perhaps not be realized because of too short-sighted investments. A clear, long-term focus on organic growth must therefore be prioritized.

7.3.3 Risk-taking

- We believe that Trelleborg should take advantage of being such a large company possessing a lot of resources in different areas. This should be used in order to assess

and manage risks to minimize uncertainty. Thereby, Trelleborg can get involved in riskier projects.

- More money invested in new ideas will lead to more ideas getting realized even if they are not completely safe bets. This, in turn, might lead to employees feeling that their suggestions are taken more seriously, which makes them more positive towards giving suggestions. A larger sample of suggestions to choose from will hopefully lead to more successful investments in the long run.

7.3.4 Competitive Aggressiveness

- Trelleborg has the general strategy to charge high prices and thus get high margins on their products. The opposite strategy, i.e. charging low prices, as an initial action on new markets or with new products could, as we see it, enhance the organic growth.
- To market the product aggressively is also a vital strategy on a new market. Looking more at competitors and perhaps copy their business practices could have the same effect.

7.3.5 Communication

- Trelleborg should try to spread its goals, visions and values to all levels of the organization. This is important for getting an effective autonomous organization.
- The rationale and criteria for the suggestions scheme should be further explained to the Machine Operators.
- Differing views on the financial constraints impedes the motivation and leads to a false understanding of the business. The problem must be solved by better communication between the Group and the division.
- Communicating that everyone in the organization plays an important role, not only in their everyday work but also when it comes to grasping unexpected opportunities and thinking outside the frames, would help utilizing Autonomy and Innovativeness to their full extent.
- Incentives should focus more on honouring the originator of an idea than giving him or her money for it. The lack of insight into this problem is due to not having sufficient communication. We also believe a good way of motivating the use of the suggestion scheme to be that the managers push the employees if they do not come up with suggestions often enough. They should actively request suggestions from the employees.

7.4 Further research

We have two suggestions for further research. The first is yet another qualitative study which can be conducted within the frames of a master thesis, whereas the second is a statistical study that would require such a large amount of time and resources that it would not be possible to carry it through as a master thesis. However, we believe it can be of interest to the reader to present the idea anyway.

We suggest another qualitative study to further build on the EO concept. It could imply taking the adjusted EO-model as presented in this thesis and apply it to a larger number of companies, which all have a contingency similar to Trelleborg. The researchers could then concentrate on investigating if the model seems to be relevant, and thus generalizable, in other companies than just Trelleborg. The researchers could, for example, choose a set of large, established companies in a mature industry, producing semi-manufactured products. In order to strengthen our theoretical proposal of excluding Proactiveness from the EO-model, a reference group consisting of large, established companies in a less mature industry, producing end products could be chosen. This method would probably prove when Proactiveness is and is not an appropriate dimension.

A statistical study would, as stated above, require too many resources to be doable within the frames of a master thesis. The selection of companies must be large and it would be a two-step study taking a long time to conduct. The first step could be to choose the companies to investigate and establish the degree of each dimension for every company. As a second step in the process, the correlation between the degree of the dimensions and the organic growth of the company must be determined by means of a regression analysis. Such a study would prove if there really is a statistical relationship between the adjusted EO-model and firm performance in the form of organic growth.

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Appendix 1a - Questions for the General Manager

- How independent is Materials and Technical Composites in relation to the mother?
- How do you view entrepreneurship within Trelleborg? From where does the encouragement come?
- How do you look at your entrepreneurial role within Trelleborg?

Autonomy:

- Do you (Materials and Technical Composites) have independent work units or individuals? Are they independent in the sense of working independently to achieve predetermined goals or in the sense of working independently with goals they set up themselves?
- Do you encourage Autonomy? If yes, how? If no, why not?
- What decides the degree of Autonomy, if you consider factors such as structure, hierarchy, size, age and alike?
- What advantages or disadvantages can you see with independent thinking and initiatives among the employees in connection with the firm result and the existing business?
- How could the degree of Autonomy increase and where in the organization could this happen the way you see it? Whose responsibility is this?

Innovativeness:

- Do you encourage and stimulate technological, product or administrative innovations, i.e. do you do things differently than the current state of the art? In what way is this encouraged?
- Does your firm “safeguard” investments in R&D during difficult economic periods or is this generally the first area where large cuts are made?
- What decides the degree of Innovativeness, if you consider factors such as structure, hierarchy, size, age and alike? Is it a pronounced goal?
- What advantages or disadvantages can you see with a highly innovative organization in connection with the firm result and the existing business?
- Do you want the degree of Innovativeness to increase?
- How could the degree of Innovativeness increase and where in the organization could this happen the way you see it? Whose responsibility is this?

Risk-taking:

- Do you feel that Trelleborg is bold in its efforts, investing in products and processes that possibly could go wrong and thereby cause big problems or losses?
- Does Trelleborg accept a certain degree of failure and learns from its mistakes, or do you view every failure as something negative? Rewards or punishments?
- Does Trelleborg allocate many resources to previously untried technologies and processes because you can see a great potential, even if the risk is large as well?

- What decides the degree of Risk-taking, if you consider factors such as structure, hierarchy, size, age and alike?
- What advantages or disadvantages can you see with a high Risk-taking in connection with the firm result and the existing business?

Proactiveness:

- How does Trelleborg act by the development and introduction of a new product? Do you, for example, benchmark competitors or innovate with the customers?
- Does Trelleborg strive to be proactive, i.e. introduce products and technologies ahead of competitors and create a demand among the customers? Why and how?
- What decides the degree of Proactiveness, if you consider factors such as structure, hierarchy, size, age and alike?
- What advantages or disadvantages can you see with Proactiveness in connection with the firm result and the existing business?
- How could the degree of Proactiveness increase and where in the organization could this happen the way you see it? Whose responsibility is this?

Competitive Aggressiveness:

- Does Trelleborg improve its competitive position using aggressive methods, such as entering markets with considerably lower prices? Copying successful competitors' business practices or techniques? Creating smoke by, for example, making timely announcements of coming products and thus make the customers postpone their buying decisions?
- What decides the degree of Competitive Aggressiveness, if you consider factors such as structure, hierarchy, size, age and alike?
- What advantages or disadvantages can you see with Competitive Aggressiveness in connection with the firm result and the existing business?
- How could the degree of Competitive Aggressiveness increase and where in the organization could this happen the way you see it? Whose responsibility is this?

Concluding questions:

- Do you believe that your thoughts and visions regarding entrepreneurship are deeply rooted at all levels of the organization?
- Having conducted this interview, are there any discussed areas particularly interesting to Trelleborg?

Appendix 1b - Questions for Production Manager and Production Supervisor

- How do you view entrepreneurship within Trelleborg? From where does the encouragement come?
- How do you look at your entrepreneurial role within Trelleborg?

Autonomy:

- Are you encouraged to come up with suggestions and ideas of improvements and changes that are taken into consideration by your superiors? Regarding the quality and characteristics of the product? Regarding new products?
- Are you familiar with independent work units or individuals? Are they independent in the sense of working independently to achieve predetermined goals or in the sense of working independently with goals they set up themselves?
- Would you like to have more influence over the production or the quality and characteristics of the product? How?
- What advantages or disadvantages can you see with independent thinking and initiatives among the employees in connection with the existing business?
- How would you be encouraged to think more independently? How important are rewards?

Innovativeness:

- Do you feel that Trelleborg is an experimental company when it comes to products, production processes or other processes, i.e. does things differently than the current state of the art?
- During your time with Trelleborg, have new products been introduced? How often?
- Are you in any way involved in the development of new products? How much contact do you have with the customers in the innovation process?
- What decides the degree of Innovativeness, if you consider factors such as structure, hierarchy, size, age and alike?
- What advantages or disadvantages can you see with a highly innovative organization in connection with the existing business?
- How could the degree of Innovativeness increase and where in the organization could this happen the way you see it? Whose responsibility is this?

Risk-taking:

- Do you feel that Trelleborg is bold in its efforts, investing in products and processes that possibly could go wrong and thereby cause big problems or losses?
- Does Trelleborg accept a certain degree of failure and learns from its mistakes, or does Trelleborg view every failure as something negative? Rewards or punishments?
- What advantages or disadvantages can you see with a high Risk-taking for you personally? Are you afraid of taking risks?

Proactiveness:

- Does Trelleborg profile itself, towards the employees, as a company that leads the development, creates a demand and which the competitors want to follow? Is this consistent with the reality?
- How could the degree of Proactiveness increase and where in the organization could this happen the way you see it? Whose responsibility is this?

Competitive Aggressiveness:

- Does one talk a lot about competitors, industry climate and price competition within the company?
- Do you consider Trelleborg's biggest competitive advantage to be producing cheaper products, better products or that you succeed in being earlier than competitors with products on the market?
- Can you see any possibilities where Trelleborg could imitate successful competitors' processes or technologies? Whose responsibility is this?

Concluding questions:

- Having conducted this interview, are there any discussed areas particularly interesting to Trelleborg?
- Do you believe that you and your superiors have the same opinions about the issues we have discussed here today? If not, which particular questions and why?
- Do you believe that your superiors are aware of the possible entrepreneurial competence that is to be found among you and your co-workers?

Appendix 1c - Questions for the Production Leader

- How do you view entrepreneurship within Trelleborg? From where does the encouragement come?
- How do you look at your entrepreneurial role within Trelleborg?

Autonomy:

- Are you encouraged to come up with suggestions and ideas of improvements and changes that are taken into consideration by your superiors? Regarding the quality and characteristics of the product? Regarding new products?
- Are you familiar with independent work units or individuals? Are they independent in the sense of working independently to achieve predetermined goals or in the sense of working independently with goals they set up themselves?
- What advantages or disadvantages can you see with independent thinking and initiatives among the employees in connection with the existing business?
- How would you be encouraged to think more independently? How important are rewards?

Innovativeness:

- Do you feel that Trelleborg is an experimental company when it comes to products, production processes or other processes, i.e. does things differently than the current state of the art?
- During your time with Trelleborg, have new products been introduced? How often?
- How could the degree of Innovativeness increase and where in the organization could this happen the way you see it? Whose responsibility is this?
- Are you in any way involved in the development of new products? How much contact do you have with the customers in the innovation process?

Risk-taking:

- Do you feel that Trelleborg is bold in its efforts, investing in products and processes that possibly could go wrong and thereby cause big problems or losses?
- Does Trelleborg accept a certain degree of failure and learns from its mistakes, or does Trelleborg view every failure as something negative? Rewards or punishments?
- What decides the degree of Risk-taking, if you consider factors such as structure, hierarchy, size, age and alike?

Proactiveness:

- Does Trelleborg profile itself, towards the employees, as a company that leads the development, creates a demand and which the competitors want to follow? Is this consistent with the reality?
- How could the degree of Proactiveness increase and where in the organization could this happen the way you see it? Whose responsibility is this?

Competitive Aggressiveness:

- Does one talk a lot about competitors, industry climate and price competition within the company?
- Do you consider Trelleborg's biggest competitive advantage to be producing cheaper products, better products or that you succeed in being earlier than competitors with products on the market?
- Can you see any possibilities where Trelleborg could imitate successful competitors' processes or technologies? Whose responsibility is this?

Concluding questions:

- Having conducted this interview, are there any discussed areas particularly interesting to Trelleborg?
- Do you believe that you and your superiors have the same opinions about the issues we have discussed here today? If not, which particular questions and why?
- Do you believe that your superiors are aware of the possible entrepreneurial competence that is to be found among you and your co-workers?

Appendix 1d - Questions for the Machine Operators

- How do you view entrepreneurship within Trelleborg? From where does the encouragement come?
- How do you look at your entrepreneurial role within Trelleborg?

Autonomy:

- Are you encouraged to come up with suggestions and ideas of improvements and changes that are taken into consideration by your superiors? Regarding the quality and characteristics of the product? Regarding new products?
- Please tell us about the suggestion scheme.
- Would you like to have more influence over the production or the quality and characteristics of the product? How?
- Are you familiar with independent work units or individuals? Are they independent in the sense of working independently to achieve predetermined goals or in the sense of working independently with goals they set up themselves?
- What advantages or disadvantages can you see with independent thinking and initiatives among the employees in connection with the existing business?
- How would you be encouraged to think more independently? How important are rewards?

Innovativeness:

- Do you feel that Trelleborg is an experimental company when it comes to products, production processes or other processes, i.e. does things differently than the current state of the art?
- Are you in any way involved in the development of new products? How much contact do you have with the customers in the innovation process?
- What advantages or disadvantages can you see with a highly innovative organization in connection with the existing business?
- How could the degree of Innovativeness increase and where in the organization could this happen the way you see it? Whose responsibility is this?

Risk-taking:

- Do you feel that Trelleborg is bold in its efforts, investing in products and processes that possibly could go wrong and thereby cause big problems or losses?
- Does Trelleborg accept a certain degree of failure and learns from its mistakes, or does Trelleborg view every failure as something negative? Rewards or punishments?
- What advantages or disadvantages can you see with a high Risk-taking for you personally? Are you afraid of taking risks?

Proactiveness:

- Does Trelleborg profile itself, towards the employees, as a company that leads the development, creates a demand and which the competitors want to follow? Is this consistent with the reality?
- How could the degree of Proactiveness increase and where in the organization could this happen the way you see it? Whose responsibility is this?

Competitive Aggressiveness:

- Does one talk a lot about competitors, industry climate and price competition within the company?
- Do you consider Trelleborg's biggest competitive advantage to be producing cheaper products, better products or that you succeed in being earlier than competitors with products on the market?
- Can you see any possibilities where Trelleborg could imitate successful competitors' processes or technologies? Whose responsibility is this?

Concluding questions:

- Having conducted this interview, are there any discussed areas particularly interesting to Trelleborg?
- Do you believe that you and your superiors have the same opinions about the issues we have discussed here today? If not, which particular questions and why?
- Do you believe that your superiors are aware of the possible entrepreneurial competence that is to be found among you and your co-workers?

Appendix 1e - Questions for the CEO

- In the Annual Report 2005, you wrote that you want to increase the incentives for an entrepreneurial spirit within Trelleborg. What do you expect an entrepreneurial spirit to bring to the company?
- What do you mean by an entrepreneurial spirit? What actions are rewarded?
- What kinds of incentives do you think about?
- Are increased incentives the only way in which you encourage an entrepreneurial spirit? How else?
- Is your encouragement about an entrepreneurial spirit intended for the whole organization? How do you convey your message?
- Why does Trelleborg aim more at organic growth now?
- Do you think that increased entrepreneurship can lead to enhanced organic growth?
- Do you think that Materials and Technical Composites is a representative division within Trelleborg, both in general and when it comes to the degree of entrepreneurship?
- Is the mother, being a stakeholder, pleased with Materials and Technical Composites when it comes to organic growth and entrepreneurship?
- How much time does a new segment have to reach its goals, e.g. being among the top three actors in the world, before you abandon the business?

Autonomy:

- Does the suggestion scheme exist in every division? Is it an initiative that comes from the top?
- We have got the impression that the divisions are under hard financial control with tough requirements of returns. Do you believe this can impede their possibilities of taking care of opportunities and working long-sighted?

Innovativeness:

- Do you consider Trelleborg to be experimental?
- What advantages or disadvantages can you see with a highly innovative organization in connection with the existing business and the result?
- Does your firm “safeguard” investments in R&D during difficult economic periods or is this generally the first area where large cuts are made?

Risk-taking:

- We have got the impression that Trelleborg is afraid of investing in risky projects, even if the upside is good. Why is it so?
- Could the entrepreneurship and the organic growth be impeded by you not taking more risks?

Proactiveness:

- Does Trelleborg strive to be proactive, i.e. introduce products and technologies ahead of competitors and create a demand among the customers? Why and how?

- Is there a realistic possibility for Trelleborg to act more proactively, considering the industry you are in?
- What do you think about investing more in basic research in order to bring out new products and thereby aiming at being one step ahead in the market?
- **Competitive Aggressiveness**
- We have got the impression that Trelleborg looks rather little at competitors and that one, in general, has a pretty bad knowledge about them. How do you comment on that?
- Could Trelleborg be more competitive aggressive if you invested more in market research and gathered more information about your competitors?
- How do you compete if you charge relatively high prices and do not do much basic research?

Appendix 2 - Organization chart

