THALES
HENGELO

SOCIAL RESPONSIBLE BUYING AT THALES

Final report | Tim Hoogstrate

SOCIAL RESPONSIBLE BUYING AT THALES:

Improvement of purchasing performance and prepared for future changes.

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Abstract

To be socially responsible these days is of growing importance to businesses around the globe including Thales. To come so far, purchasing as a business function can play an important role. In this report the role of purchasing is defined as social responsible buying. In order to be able to buy socially responsible, purchasing has to have certain capabilities. These capabilities are described in purchasing maturity models. In this report we have a look towards the maturity purchasing organizations should have to be able to buy socially responsible. Then we apply the knowledge to Thales and formulate recommendations for improvements.

Keywords: Social Responsible Buying, Defense, Thales, Purchasing maturity

Management summary

Introduction and scope:
The defense industry used to have a conservative nature. Nowadays, however, social responsibility seems to increase in importance in the defense industry.

For us CSR means that a company not only takes care of economic issues but also handles environmental and social issues (people, planet, and profit). This has two reasons, first for the motivations of being good, and second, to increase business results.

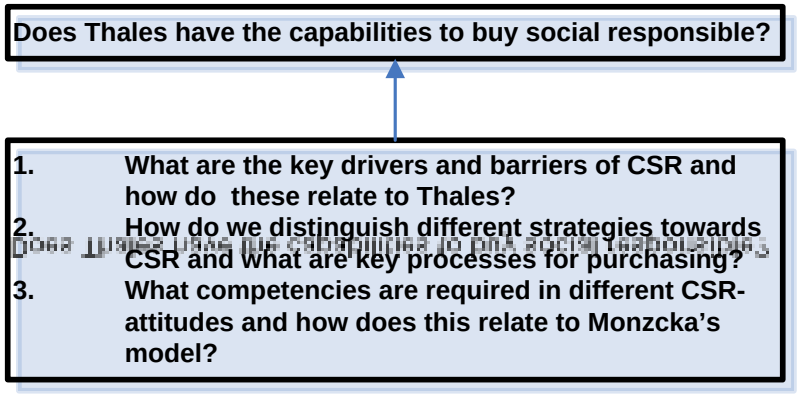
The Thales group expects that they can increase their business results by taking social and environmental issues into account.

Since Thales' buying volume increased, responsibilities resulting from social issues shifted towards purchasing. Thus, purchasing as a business function can help organizations improve their social performance.

We defined the role of purchasing within social responsibility as Social Responsible Buying (SRB).

This thesis focuses on the elements in purchasing that are essential for Thales to buy socially responsible.

Research questions:
The following research question was formulated, which had been divided into sub questions 1, 2, and 3:



Research approach:
Figure 1 gives the schematic view of the different research activities.

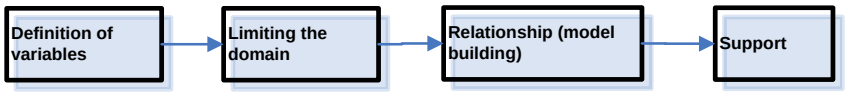


Figure 1 The stepwise procedure for theory combining is: definition of variables, limiting the domain, relationship (model building), and finally theory practicing (support).

Step 1 and 2 are bodied by a literature review, and theory is combined in step 3, so that a model could be formulated which gives insight in the relation between purchasing maturity and SRB.

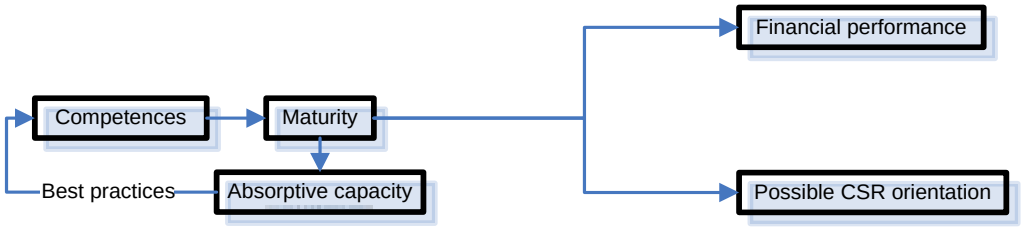
To answer the main research question a large number of respondents could be used within Thales. (Formal and informal) Interviews with these respondents were used as a primary source of data collection.

After analysing the data, research questions are answered. By applying the model we provide insights whether Thales needs improvements to buy socially responsible.

Literature review:

Organizations can follow different strategies towards SRB. In this report these different strategies are defined as CSR-orientations. These differences are shown on a line from reactive towards proactive. Reactive companies typically add minimal effort in SRB, so that they for example hardly comply with regulations. On the other hand, proactive companies will voluntary take initiative to reduce their social impact.

For organizations the ability to execute a CSR-orientation seems to be dependent on its maturity as shown in the following figure:



To define the maturity of purchasing in this thesis the Michigan State University (MSU) model is used. This model states 10 different stages of maturity for 8 strategic processes. We chose the MSU model from several other models because:

- It is empirically tested with financial performance,
- It is well known and used throughout the world,
- It handles the five main elements that describe maturity,
- It handles integrity,
- It is the most exhaustive,
- It is not a model, which forces the user to one unique solution,
- Finally, it needs information from many different departments and a broad scope of department's increases validity.

To determine a preferred CSR-orientation we used a 5 step procedure which is based on the 5 principles of Maignan et al. (2002): analyse of stakeholder pressure, estimation of potential benefits and costs, purchasing policy, choosing, and implementing a CSR-orientation. This process is shown in Figure 2.

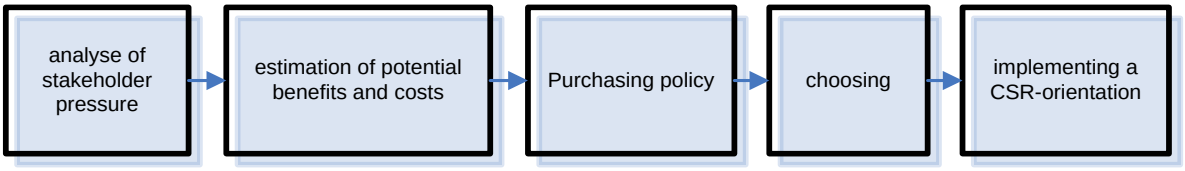
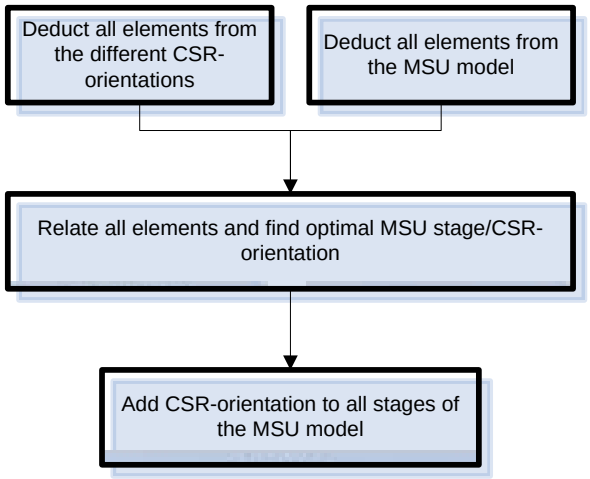


Figure 2 The 5 step approach to help organizations determine the preferred CSR-orientation (based on Maignan et al. (2002)

Combining theory:

MSU states different stages of development purchasing can have. In order to determine how mature purchasing should be to execute a CSR-orientation we combined the elements of the different CSR-orientations (SRB elements) with the MSU model through the following procedure:



This procedure results in an integration of the different CSR-orientations in the MSU model.

Theory practicing:

We applied the result of the combination to Thales. And used semi structured interviews with data triangulation as a basis for analysis of the current purchasing elements at Thales. We used 6 respondents from several disciplines for interviews.

Conclusions:

The conclusion is that:

Based on the analysis a reactive CSR-orientation is preferred for Thales.

Furthermore, the following SRB elements are not sufficiently present at Thales:

Table 1: insufficient SRB elements

Element	At Thales
The level of planning horizon for CSR objectives	The *purchasing involvement* in product and process planning differs between projects and products. Project with early and late (none) involvements are known. CSR objectives are not or ad hoc planned.
Benchmarking and market research	Both benchmarking and market research happens basically only on price, and barely on other factors. Sometimes Thales analyse suppliers on different certificates. But this is not an order winner or loser.
Collaboration that is commonly used in order to deal with social responsible objectives	Use supply chains for innovative solutions, but social issues are not a goal itself. Supplier selection happens by: first, look to suppliers already in the database; another supplier must have substantial advantages before they are switched. Two, new suppliers fill in a questionnaire and thereby environmental subjects and ISO certificates are tested. Purchasing is responsible for supplier selection. However, it is not that they always have the product knowledge to actively debate product specifications with suppliers.
A systematic supplier evaluation process	Supplier evaluation happens on logistical issues, quality, and financial situations on a three months basis. A new tool QLTC in now introduced where hard and soft issues are continuously evaluated. Selective visits at suppliers. Normal audits for itself and its vendors (to expose and identify poor CSR performers within the supply base).
A systematic procedure for supplier development	Supplier development measures are developed individually.

We have indicated that a reactive level seems to fit best to Thales' situation. Therefore, Thales also needs fill in the gaps (black spots) so that they have enough absorptive capacity, and therefore are able to buy socially responsible, which Figure 3 shows.

8 strategic processes	**Stage**										
In sourcing and outsourcing	0	1		3	4	5	6	7	8	9	10
Commodity Strategy Development	0		2	3	4	5	6	7	8	9	10
Establish and leverage a world class supply	0	1	2	3	4	5	6	7	8	9	10
Development and manage supplier relationship	0	1			4	5	6	7	8	9	10
Supplier involvement in new product/process development	0	1	2	3	4	5	6	7	8	9	10
Supplier involvement in order realization process	0	1	2	3	4	5	6	7	8	9	10
Supplier development and quality management	0	1	2	3	4	5	6	7	8	9	10
Strategic costs	0	1	2	3	4	5	6	7	8	9	10

Figure 3 Shows the black spots where MSU elements are missing.

In short, Thales should focus on getting the elements from Figure 3 so that they have sufficient absorptive capacity towards SRB, and are able to buy socially responsible, and should, if they follow a reactive CSR-orientation, give SRB shape with the missing and pointed SRB elements from Table 1. Resulting from the conclusion the recommendations could be formulated.

Recommendations:

To come to a reactive CSR-orientation, the following recommendations were formulated:

- Create a process to indentify suppliers that are performing below the level that the Thales Group has stated. Formulate supplier improvement programs and evaluate suppliers based on these processes and programs.
- Include SRB criteria in market research, benchmarks, and contracts.
- Product lifecycles within Thales are long and changing products is expensive. Therefore including social statements early in the planning process is recommended. Changing products in the early part of the lifecycle could be cheaper.
- Use the supply chain for innovative solutions, and move as much as possible towards standardization. Standardized products are easily interchangeable. Therefore, if for example a less energy consuming product enters the market it's effortlessly implementable.
- Demand suppliers to help listing harmful materials, if there are any of them. Some entities (for example firefighters) also need this information for safety reasons.
- Purchasing should feel more responsible to debate opportunities in the product specification phase, and should understand more technical requirements. Thereby, increasing the power of the purchasing department.
- Use the MSU model regularly as a benchmark to determine maturity, show improvement opportunities, and use MSU as a starting point for long term purchasing improvement programs. Monzcka claims that one a year is fine, Philips does it every year for all purchasing employees and links it with objectives. For example, every purchasing manager should next year have an level 7 maturity on process 1.

- Communicate with other business functions (e.g. technical managers) and personnel the facts and opportunities SRB can have, so they become more familiar with the opportunities it creates.
- Make courses mandatory.
- Include SRB policies within purchasing policies as stated by the organizational policies and check ethical subjects on performance.

For Thales it's important to realize that an increased maturity level of purchasing can have can have a tremendous effect on the purchasing performance.

Acknowledgements

I did not write this thesis on my own. Writing this thesis was not easy and therefore impossible without my friends, family, and colleagues' support. In particular I want to thank my dear friends Niels Pulles, Inge Hoefman, and Joe van Duyn for their support as friends and for critics which helped me a lot. I also thank my colleagues Jan van Putten and Martin Bos for their support at Thales. Finally, I want to thank Jan and Hans for their professional and academic support, something I could not have done without. Thanks!

Table of content

Chapter 1 Introduction to the research problem

This first chapter describes the scope and goal of the research. Furthermore, it describes the research method to achieve this goal. Starting with the environment of the research, then the research objectives and research approach are described. Furthermore, detailed research questions are formulated. We end this chapter with a brief overview of the methodology and the outline of this thesis.

Research environment

In this section we discuss the main elements of this thesis including: Thales, scope, goal, methodology, and the structure of the report.

1.1 Thales

This section provides background information about Thales and its purchasing department.

Thales Netherlands is part of a global player: the Thales group. This group operates 50 countries with its headquarters in France. Thales has a workforce of 68,000 with 25,000 high-level researchers and engineers. Of their revenues 18% (2.2 billion) is invested in R&D. Furthermore, Thales has 30 cooperation agreements with universities and research centres. Each year they produce around 300 innovations and 15,000 patents. Thales is a global technology leader in mission critical systems and is active in the aerospace, space, defense, security, and transportation markets.

Thales Netherlands is active at 4 different locations. Thales Hengelo, which houses the Dutch headquarters, accommodates the Naval and Air systems, and Security solutions & services. With 2,100 employees it's by far the biggest defense organization in the Netherlands.

The Naval division develops and produces naval missile control systems, naval sensors, radars and infrared systems designed to defend a naval ship against air threats. Air Systems produces various types of ground-based systems that provide ground forces with the surveillance capabilities. Security Solutions & Services provides integrated support to customers using Thales Nederland's products. Furthermore, they offer ground transportation solutions, critical infrastructure security systems, and simulation solutions. (Thales, 2008a; Thales corporate website; Thales purchasing intranet page)

In the continuation of this report when speaking of Thales, we refer to Thales Hengelo.

1.1.2 Purchasing at Thales Hengelo

The purchasing department Hengelo ensures supply for surface radar (Netherlands), which is a subdivision of air systems. This division is active in both the Netherlands and France, and therefore the purchasing departments in these countries collaborate closely.
Purchasing is separated in primary process procurement (direct) and general expenses (indirect). In this report we focus only on direct procurement. Direct procurement provides goods and services for surface radar. Furthermore, it indirectly supplies the business units Above Water systems, Naval Services, and Industrial services. The business unit Above Water Systems handles its own primary subcontracting, but uses consoles and sensors for command and control systems that the Purchasing department of Surface Radar provides. Naval Services and Industrial Services handle the procurement of the products that they sell directly to the customers. For their assembly activities they use printed circuit boards that are produced by Surface Radar.

Concluding, Thales uses a combination of centralized and decentralized purchasing. The underlying argumentation is that the division Naval uses the production facilities of the division Air Systems, because it is too expensive to maintain two production departments for the same parts. (Thales, 2008a; Thales corporate website; Thales purchasing intranet page)

1.2 Research area and scope

Nowadays organizations increased interest in social responsibility, the Thales group for example recently enlarged attention in social responsibility (e.g. by introducing a social annual report). Thales Hengelo recognizes too that social responsibility is getting more important. Purchasing is getting involved in this trend due to the following reasons.

Purchasing as a business function is a success factor in achieving organizations' business goals (Rietveld, 2009). Furthermore, Thales' buying volume increased (due to focus and specialisation of suppliers) and a lot of responsibilities are vertically integrated through suppliers.
Therefore, we need to create insight in what elements (competencies and capabilities in processes) in purchasing could have an effect on social responsibility. In other words; what are the important elements a purchasing organization should have so that it is able to buy social responsible.

Consequently, this thesis is build up around the two subjects: purchasing and social responsibility.

Note: Little knowledge is available about social responsibility in the defence industry, so we have decided to first focus on social responsible buying in general and then zoom into Thales itself.

1.2.1 Subjects of the report

In this section we introduce the main subjects of this report: purchasing and to be socially responsible.

Purchasing: The emerge of supply chain management (SCM) led to the recognition of the strategic role of purchasing which resulted in a evolution from pure "buying" to "procurement" or "supply management". (Paulraj et al., 2006; Ellram and Carr, 1994) "The principles of SCM have also induced the recent restructuring of procurement departments' role in managing the buyer–supplier relationships (…)". (Anderson and Rask, 2003 p. 83) In order to realize that, purchasing needed to move forward, by (1) position itself different in an organization and (2) gain different capabilities.

Purchasing capabilities: The main focus of this thesis will be on (2), which describes the level of evolution measured in maturity. Maturity is a sum of elements (e.g. formulation of a purchasing policy and an in-/outsourcing policy) that indicates the level of competences (e.g. capability of making legitimate outsourcing decisions). Scholars and researches proposed models to quantify and measure the maturity. In this thesis the different models are reviewed.

Socially responsible: As described, a topic of increased interest is Corporate Social Responsibility (CSR). Thales Hengelo, however, is primarily operating in the defense industry, which seems to have little drivers towards social responsibility due to (1) the relative "inflexible" industrial specific standards (2) the role of defense in conflicts (3) a B2B or better a business to government environment with relative small competition (the Dutch government owns a small part of Thales Netherlands and it is the primary customer).

The first point is explained by a small example.

Example of point one: When leadless soldering is used, tin whispers could form. Tin whispers are nano crystals that eventually could create a short circuit that activates the missile. In short, a missile requires such a high level of quality that errors in systems lead to unsafe situations. This could result in devastating effects. To overcome this problem, Thales is still using lead.

1.2.2 Defense, Thales, and socially responsible

Primarily due to the 1ste and 3rd reasons in section 1.2.1, defense is excluded in the environmental buying criteria of the Dutch government (senternovem). Thus, regarding to regulations and industrial standards, Thales experiences little drivers towards social responsibility. On the other hand, products for civil applications and dual use are not excluded.

Nevertheless, the *Thales Group* itself, as a market leader, pays attention to the subject. Two changes may influence the importance of social responsibility to Hengelo: (1) In a centralized CSR policy the corporate policy will be pushed towards Hengelo (the Thales group can be seen as the policy developer) (2) Different (future/local/international) regulations and industrial standards (Thales has responsibilities as a market leader) may be expected. Hence, in Figure 1.1 it is shown why Thales Hengelo expects that social responsibility will eventually become more important.

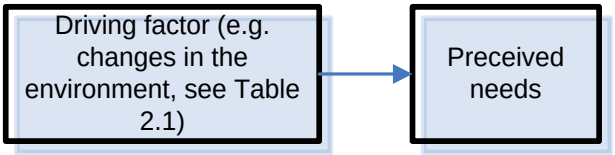


Figure 1.1 How changes ask for perceived needs

1.2.3 Scope

This thesis focuses on the elements in purchasing that are essential to buy socially responsible.

As a result, the question rises: what elements, thus level of maturity, does Thales need in order to successfully implement CSR activities? Furthermore, the purchasing department provides the opportunity for this research. For that reason, this thesis is focussed on the main research question:

What level of maturity does the purchasing function of Thales need in order to successfully apply CSR practises related to purchasing?

1.2.1 Previous research on CSR and purchasing maturity

CSR is a widely described topic in scholarly literature. Information about: drivers/enablers and barriers of CSR as well as "CSR-orientation" are described in literature. However, drivers and barriers differ between industries and nations. Consequently, *we need to gain more knowledge about these at Thales Hengelo*.

In the past, Goldsby and Stank (2000) performed an empirical research on 306 senior logistic employees and found a significant relation between the quality of logistics and environmentally responsible logistics practices. Nevertheless, as far as concerned, no research has been performed to test the (cor)relation between the quality of purchasing and CSR practices. Moreover, no conditions under which purchasing is able to buy social responsible given a certain CSR-orientation, are stated. What is of more concern is that none of the studies applied looked to the (relatively) odd and closed defense industry.

We use a maturity model that is focussed on purchasing to determine what elements a mature purchasing organization should have. A number of researchers proposed models to determine maturity profiles of the purchasing function and the purchasing organization (e.g. Schiele, 2008). Some of these models are already positively empirically tested in connection with (financial) firm performance (e.g. purchasing excellence program[1]).

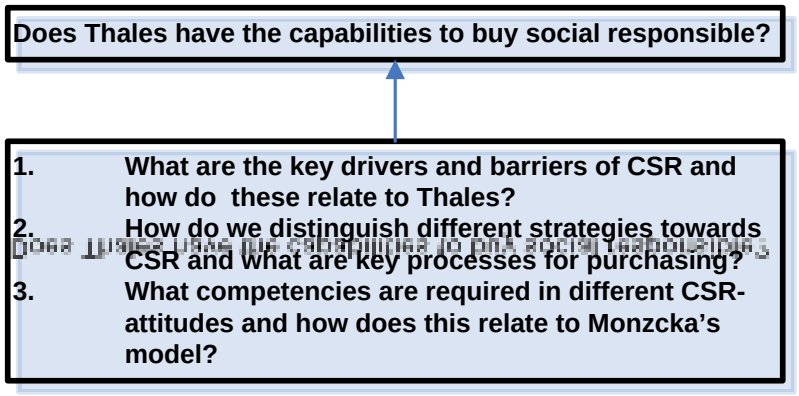
For this study we chose the Michigan State University (MSU) model of Monczka. In section 2.3.3 this choice is explained.

1.2.2 Gap in literature

Concluding from section 1.2.1, there is no minimal maturity level known in literature to be able to introduce CSR successfully in an organization. Therefore, this qualitative study aims at finding a "minimal maturity level" required so that CSR activities in the realm of purchasing can be successfully implemented.

1.3 Research question

The following research question is formulated, which has been divided into sub questions:



1.4 Research approach

This section describes the research approach we use to answer to the research questions as stated in section 1.3.

This study aims at combining theories to create a model, which we apply to the current practices within Thales. In a research, the quantity of data that can potentially be composed is vast; therefore the stronger the research focuses, the easier it is to identify possible cases and to draw research protocols. When executing case-based research it is common that the research question will evolve over time. And the purpose may thereby evolve from theory combining towards theory practicing. Two important steps for this are (1) collection of data (2) combining theory.

[1] http://www.purchasingexcellence.nl/

1.4.1 Collecting data

During informal interviews the scope of the research became clear. We focussed on Thales to find out what the current situation was. A large number of respondents could be used within Thales. (Formal and informal) Interviews with these respondents were recognized as a primary source of data collection. To increase validity of the interviews a number of measures were taken. It was decided to (1) interview multiple respondents (from different disciplines) and compare data between respondents (identifying confirming and conflicting statements). (2) go for semi-structured interviews (giving respondents the opportunity to give own inputs) (3) use data triangulation (second sources of information to check the statements of the respondents).

According to Eisenhardt (1989) cases can be added until results are achieved. He however does not take a time limit into account. For this study due to time limitations this approach is infeasible. Therefore it was decided to use six formal respondents. With the notion that the first respondent was used as a pilot. This pilot study is used to evaluate the collected data for usability. A pilot study does not infect the study and can even be used in data analysis (Yin, 2003).

1.4.2 Combining theory

After analysing the data, research questions are answered. So a model is formulated which gives insight in the relation between purchasing maturity and social responsibility. By applying this model we provide insights whether Thales needs improvements to buy socially responsible. Figure 1.2 gives the schematic view of the different research activities.

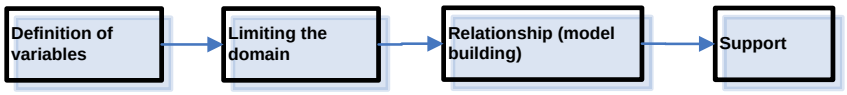


Figure 1.2 The stepwise procedure for theory combining is: definition of variables, limiting the domain, relationship (model building), and finally theory practicing (support).

1.4 Structure of the report

This thesis is organized in the region of the objectives: purchasing maturity and social responsibility. Furthermore, each chapter of this report deals with one objective. This is depicted in Figure 1.3.

Chapter 2 Reviews the current literature on purchasing and social responsibility. In order to do that, characteristics and information about social responsibility is provided. Therefore, CSR-orientation is introduced. Furthermore, different maturity models and levels of purchasing development are discussed and a maturity model has been chosen to work with.

Chapter 3 describes research that links CSR-orientation and the elements from chapter 2. This will be extensively discussed, and based on the previous chapters, we will formulate what is needed to further explore the conditions for this link will be formulated.

Chapter 4 handles the pilot study to validate the research methodology. The details of this chapter are provided by chapter 2, 3 and completed with the information provided by second sources.

Chapter 5 handles the actual study at Thales and the results from the interviews. In chapter 6, conclusions are formulated and directions for further research are suggested.

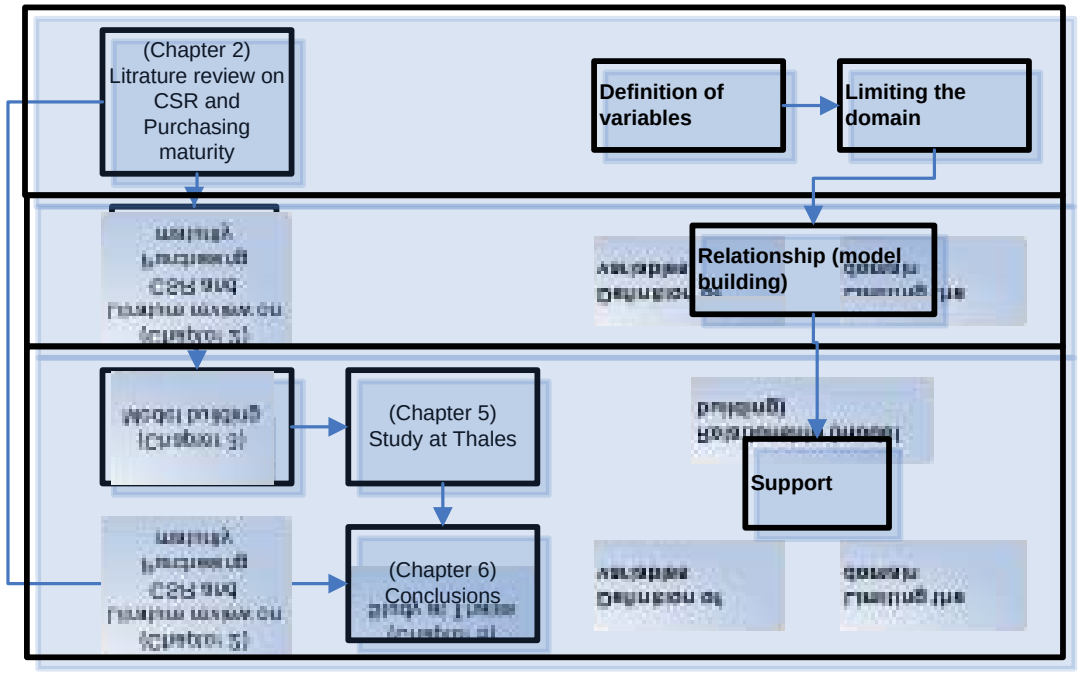
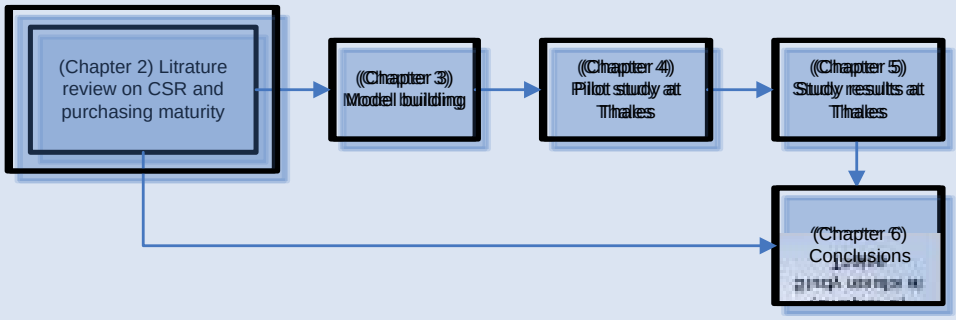


Figure 1.3 Structure of the report based on the stepwise procedure for theory combining (Figure 1.2)

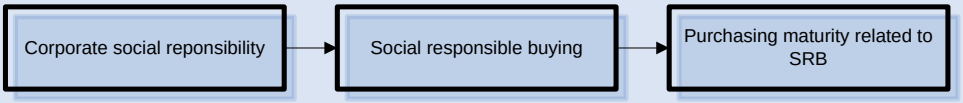
Concluding remarks

This chapter provided background information about the research. It defined the environment of the research: Thales Hengelo. Why the research took place: determine recommendations for competence improvement with respect to socially responsible buying. How we performed the research: formulate research questions and research approach. Additionally, the validity of the research has been discussed. The next chapter we discuss the results of the literature review.

Chapter 2 Literature review



This chapter examines the first body of knowledge that is required to answer the question: “What are the elements required by purchasing to buy socially responsible, given a certain CSR-orientation.”
It starts with a literature review on Corporate Social Responsibility (CSR) followed by the role of purchasing within CSR (SRB). Then, we look to the elements that purchasing should have so that it can buy social responsible (purchasing activities related to SRB). Furthermore, we have a look on the drivers and barriers of SRB. The aim of this chapter is to provide input for theory combining in chapter 3.



2.1 Corporate social responsibility

This section describes the definitions regarding corporate social responsibility and the orientation companies can have towards corporate social responsibility.

2.1.1 Definitions corporate social responsibility

What is corporate social responsibility? From Carroll (1979) we know that the idea of social responsibility found its roots during the 1930's. Although there is still a lack of a generally accepted definition today, there are numerous interpretations on CSR known in literature. McWilliams and Siegel (2001 p.117) define CSR as *"actions that appear to further some social good, beyond the interests of the firm and that which is required by law"* and that this goes *"beyond obeying the law"*. Most literature describes certain activities and ideas that are included in CSR:

- "The basic idea of corporate social responsibility is that business and society are interwoven rather than distinct entities". (Wood, 1991 p.295)
- "It must embody economic, legal, ethical, and discretionary categories of business performance" (Carroll, 1979 . p. 499)
- (Carroll, 1979 p. 497) quotes [Joseph McGuire] "The idea of social responsibilities supposes that the corporation has not only economic and legal obligations, but also certain responsibilities to society which extend beyond these obligations".
- "CSR means that an organization strives to improve profit, environment and the broad" (MVO Nederland, 2009)

For us CSR means that a company not only takes care of economic issues but also handles environmental and social issues (people, planet, and profit). In the next section we introduce two reasons for CSR.

2.1.2 Reasons for CSR

CSR could have two reasons (1) for the motivation to be "good", Figure 2.1 shows that social environmental and profit have to be balanced for the organizational performance. Or (2) strive for a better corporate performance. Figure 2.2 shows that social and environmental factors support profit. It can be argued that in the end it is always self interested to act socially responsible.

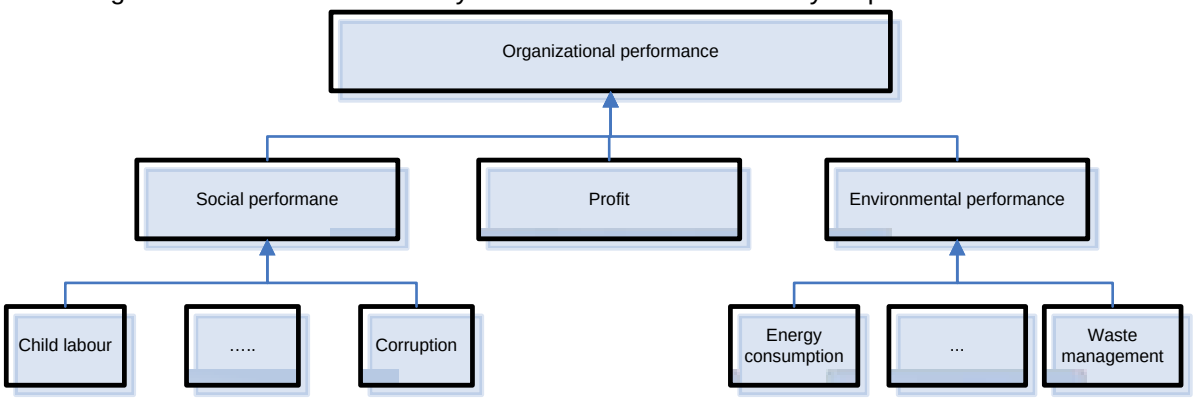


Figure 2.1 social, environmental, and profit are an almost equally important measure for organizational performance

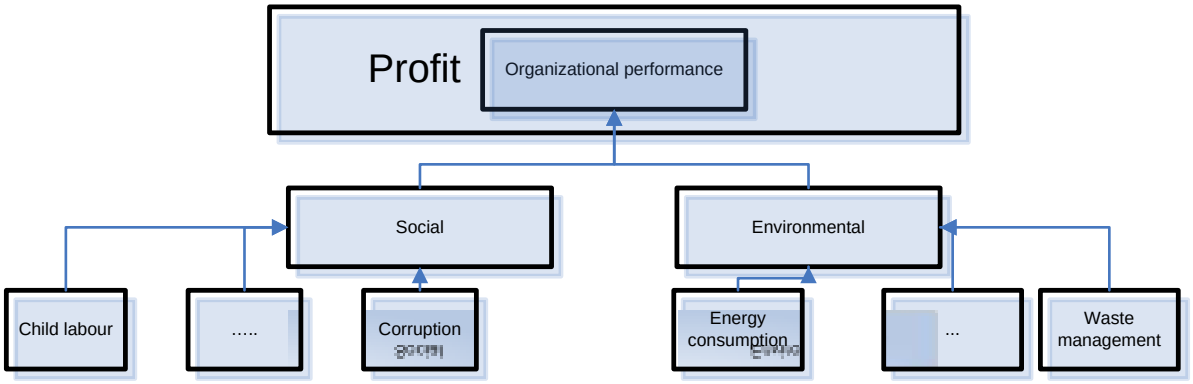


Figure 2.2 social and environmental responsibilities are used to improve the organizational performance, which is profit

Furthermore, researchers argue that CSR can be executed through different attitudes, so-called CSR-orientations. This will be explained in the next section.

2.1.3 CSR-orientation and its different characteristics

In addition to section 2.1.2 researchers distinguish CSR-orientation between two extreme positions, ranging from reactive towards a proactive approach. Reactive companies typically add minimal effort in CSR, so that they for example hardly comply with regulations. On the other hand, proactive companies will voluntary take measures to reduce their social impact. Some researchers' segmented the range from reactive to proactive in 4 or 5 steps. Still most describe three steps. We also chose these three steps. We call these three steps reactive, developing, and proactive. Literature describes the characteristics of reactive to proactive companies. In the next part of this section a small summary is provided which will be used to combine theory in chapter 3.

CSR-orientation

Reactive (lower bound) Developing Proactive

Figure 2.3 CSR-orientation

Looking at Figure 2.3 makes it possible to determine differences between organizations. For example, companies that are more committed to listen to the needs of society can be considered to have a stronger CSR-orientation than companies that do not listen to the needs of society.

Literature describes certain characteristics of CSR-orientations at different companies. Table 2.1 summarizes these characteristics found in literature.

Table 2.1 Different characteristics of different **"CSR-orientation"**

Characteristic	Reactive	Developing	Proactive
Planning horizon: *Thorensen (1999) suggests that the planning horizon affects the social performance of a company. This follows mainly from the observation that efficient planning and product development planning affect lifecycle analysis and thereby optimizing CSR and costs performance. This is a result of management choices.*	Short term (quick fixes)	Medium/long-term	Strategic (at product development level)
Integration of CSR issues in different processes and products	Enforced from outside the company (e.g. government)	Self-enforced	Voluntary
General description of the organization	Top management recognized that social responsibility was linked to success because the business was subject to heavy public and/or regulatory scrutiny.	The company engaged in CSR when cost savings or competitive advantage resulted. The company was responding to what it perceived to be a hot topic.	The founder viewed the organization as a bully pulpit for social change and a social laboratory
Policy entrepreneur: *Policy entrepreneurs are according to Drumwright (1994) employees who have the same characteristics as business entrepreneurs; however they focus their resources on instituting new organizational policies.*	Middle manager often in operations or none.	Often external relations managers.	Founder/ middle management.
Purchasing professional	Often relatively uninvolved and don't believe in CSR.	First they are resistant towards CSR but they become trusted with CSR.	High status Involved in company strategy and purchasing professionals believe in CSR.
Policy to pay more: *Drumwright (1994) states that customers are willing to pay more for products from organizations that have a reputation with respect to CSR performance. Especially in proactive companies a supplier-buyer relationship with respect to increasing social performance and buying innovative new products costs could increase. But the positive result is that companies themselves have a better CSR performance.*	No	Yes, but insist that portfolio of efforts is cost-effective	Yes
Extrinsic rewards for CSR: *Occurs primarily upon the self-fulfilling feeling CSR gives to an employee*	No	Informal	Formal
Focal product for CSR	Services	Consumption goods	Direct goods
Government regulation	Resist against	Comply	Lead (be the developer)
Specification: *Giving end-of-pipe solutions can inhibit innovations that can in time offer*	Technical end-of-pipe solutions	Evaluate possibilities with supplier	Functional (supply chain focused)

better performance. By giving functional specifications, suppliers are stimulated to come up with new products, which they have more knowledge or skills about.			
Valuation of CSR issues	Denial	Ignorance/familiarity	Expertise
Stakeholders issues	Denying the relevance of any stakeholder issue to the organization.	Implicitly acknowledge the existence of stakeholder issues, but avoiding addressing these issues.	Systematically anticipating, and addressing stakeholder demands and involve stakeholders in the monitoring process. Proactive companies try to get stakeholders' evaluation of their progress in specific issues.

Source: (adapted from Thorensen (1999), Tulder et al (2008), Carrol (1979), Wilson (1974), Mc Adam (1973), Davis and Blomstrom (1975), Porter and v.d. Linde (1995), Maignan et al. (2002), Hunt and Auster (1990), Kopicki et al. (1993), Handfield et al (1997), and Drumwright (1994))

2.2 Social responsible buying

Before the 80's, purchasing was primarily focussed on costs and little else. Recently policy makers have realized that purchasing can also improve a firm's environmental and social performance (Handfield et al., 2002). Purchasing is considered to be a critical component in CSR-orientations. The decisions of purchasing managers can affect the success of CSR strategies at each stage of the supply chain. In fact purchasers are the eyes and ears of a company on the supplier side, and therefore can attain important knowledge about the CSR capabilities of suppliers. Given that purchasing plays a major role in innovation, market research, supplier selection, and supplier development, choices in the purchasing process are therefore related to idealistic and ethical issues. Together with economic values they form the "triple bottom line" of Elkington (1997).

In literature the role of purchasing in CSR is described under the denominator; Social Responsible Buying (SRB). This section describes the definition, drivers and barriers, and effects SRB can have within companies.

2.2.1 Definitions of social responsible buying

SRB has the characteristics of CSR (Carter and Jannings, 2004), and like CSR there is no clear definition for social responsible buying. "Green" purchasing is sometimes separated and overall more popular in literature compared to social factors within purchasing. We however do not make a clear distinction between "green" and social factors in SRB. Names that are frequently used for SRB are:

- Purchasing social responsibility (Carter and Jannings, 2004)
- Corporate social responsibility in the supply chain (Maloni and Brown, 2006)
- Socially-responsible buying (Maignan, Hillebrand et al., 2002)
- Responsible procurement (Allen, 2006)
- Socially responsible purchasing and disposal (Webb, Mohr et al., 2008), and
- Ethical purchasing (Wells, 2004).

In the continuation of this report we use the following definition of SRB:

Social responsible buying is the task of purchasing within CSR. This task is performed next to "the regular" economical also social and environmental criteria in different buying decisions and processes.

2.2.2 Drivers and barriers of social responsible buying

This section starts with a brief description about drivers (sometimes also enablers) and barriers for socially responsible buying practices found in literature, related to: management commitment, value driven regulation, competition, customers, suppliers, and reputation/society. Basically drivers in Table 2.2 are the result of (1) changes in the environment of the company (market influences) and (2) internal changes (organizational influences) (Mont and Leire, 2009, and Walker et al., 2008).

We know that the triple bottom line as described by Elkington (1997) includes environmental, social, and economical factors. Furthermore, Carter and Dresner (2001), and Maignan and Ralston (2000) show us through case studies that there is a difference between the drivers and barriers between different countries and industries (e.g. government regulation is different between countries (Hall, 2000)). Sometimes a change in the environment can result in a driver but also in a barrier. An example is a change in management commitment. If management commits itself to SRB then this forms a driver, however, when there is a lack of management commitment this forms a barrier towards SRB.

Section 2.2.2.1 describes drivers towards SRB and 2.2.2.2 describes the barriers towards SRB.

2.2.2.1 Drivers towards SRB

Literature describes several drivers towards SRB, we describe these drivers below.

Management commitment: According to a lot of literature, *management commitment* is in fact a driver for a company to implement SRB practices. New et al., (2000) for example states that personal commitment of individuals (founder and owner) is positively related to "green" supply chain practices. Top management commitment and leadership are key drivers of organizational change and the implementation of new activities and programs in this case buying from minority business enterprises (MDE). Carter et al. (1999) and Carter and Jennings (2004) suggest that this does indeed have a direct effect on whether purchasing managers implement SRB. "Top managers can influence SRB by initiating, requiring, and supporting SRB programs; corporate leaders can also strongly impact SRB by influencing organizational culture through their own examples" (Carter and Jennings, 2004 p. 168). Drumright (1994) found out that "policy entrepreneurs" are a driver for SRB. These entrepreneurs do not necessarily have to be at top management level but could also be employees that are personally affected to SRB practices. However, just addressing these human recourses only are not enough (Handfield et al., 1997). Top management support is needed to pursue a success.

Employees: Literature describes that there is no clear relation between employee values and the implementation of SRB, Carter and Jennings (2004) therefore state that SRB programs can be established regardless of employees' values. However, there is a positive relation between employees and values when employees are chosen to manage or develop SRB efforts (Hanna et al., 2000). In line with Drumright (1994) they claim that managers should identify values of employees to point managers who spreadsheet SRB activities. Therefore we conclude that employees in some companies could be seen as drivers.

Value driven: Carter and Dresner (2001); and Handfield (1997) notice the *reduction of costs* as a driver. But the success of this driver is dependent on the difference between long term and short term horizons in which costs have to be reduced (Carter and Dresner, 2001). Long term involves life cycle analysis, which is quite a broad sense and short-term costs reductions are narrower. Furthermore, Carter and Carter (1998) noticed that practitioner's think that environmental responsible products have bad qualities but also states that when total quality management is taken into account this proposition is not correct. Mont and Leire (2009); and Walker (2008) Also consider investors who are increasingly interested in firms that include human rights in their purchasing policies especially pension funds (Sparks, and Cowton, 2004), although it differs between industries (Whitehouse, 2006). Another driver in order to reduce costs is the reduction of residuals (Handfield et al., 1997; Porter and van de Linde, 1995; and Young, 2000). Residuals[2] will always exist. Reduction (including reuse) or elimination of waste and disposals throughout the supply chain creates value (Young 2000). Especially upstream in the supply chain when disposal costs are lower and reuse value is higher. During inbound, transportation, receiving, and inspection the waste that occurs are damaged materials, defective materials, waste and worn-out/obsolete materials, administrative waste. Regulation used to be a driver to reduce waste, but in the recent years waste became more expensive. And companies realize that waste has to be reduced (revenue, cost-avoidance, volume) separate from regulations.

Performance-driven: The aim of organizations that had improvements in environmental performance was not driven by environmental compliance or policy entrepreneurs, and sometimes even not apparent to customers. This was often the result of a focus on cost reduction, waste elimination, and quality improvements. (Handfield et al. (1997))

[2] By-products, Scrap, Damage/defects, Outdated/obsolete, Use/spent equipment, and waste (land filling) (Anderson, 1961)

Regulation: A lot of research suggests that legislation and regulation is a driver for companies to be socially responsible (Handfield et al., 1997; Carter and Jennings, 2004; and Walker, 2008). Especially when the regulation resulted from a national disaster (Hall, 2000). On the other hand Carter and Carter (1998) suggest that government regulations are not a significant driver for organizations to apply socially responsible practices. One of the main barriers of government regulation, which is also the case in the Netherlands (Senternovem) is that those regulations often employs "end-of-pipe", reactive solutions to prevent pollution (e.g. buy a hybrid car) instead of proactive form that focuses on outcomes and stimulates innovation to archive those outcomes (e.g. transportation should reduce pollution with 10%) (Porter and v. d. Linde, 1995; and Carter and Dresner, 2001). Reactive regulations don't fit all businesses and can be expensive or unusable while proactive companies seem to have more "success" in green supply projects (Carter and Dresner, 2001). The Lack of legislation and legal uncertainty are also seen as barriers (Mont and Leire, 2009). Handfield et al. (1997) suggests that firms themselves must be proactive toward environmental regulations. When a company could see upcoming regulation it can be a driver to be proactive ahead of regulations. This does not mean that regulation is not good. Regulation is an effective driver for legal component rather than a discretionary component.

Reputation: An important driver is the reputation of the company (or marketing/public opinion reasons) (Roberts, 2003; Maignan et al, 2002; and Elkington, 1994). The reputation of companies is build up over a lot of years so avoiding negative publicity and thereby maintaining the reputation are seen as an important driver for SRB. In the recent years a lot of examples showed us that the power of the media newer should be underestimated, therefore this could be seen as a driver (Mont and Leire, 2009). Organizations are in a growing trend accountable for errors in ethics of suppliers and other practices, and therefore forced to include non-economic buying criteria into their purchasing process. Furthermore, Drumwright (1994) suggests that customers purchasing decisions are dependent on the environmental reputation of a company.

Customers: Carter and Dresner (2001) add to this that customers can be both a successful and an unsuccessful driver. The first applies when customers looked to the broader aspects of supply chain environmental improvements while the latter focussed on short-term fixes of the customer without taking the broader system into concern.

Competition: Competition has been recognized as a driver for innovation towards SRB practices. (Walker, 2008) Competitors who have high environmental standards may be able to set industry standards and therefore have an advantage. SRB practices therefore may not be undertaken in a desire to "save the world" rather than to improve a competitive advantage with a result of improving a firm's financial performance (Drumwright, 1994; and Porter and van de Linde, 1995).

Suppliers: It is not proven whether suppliers are drivers of SRB, or not. (Walker et al., 2008)
The problems, job loss, negative publicity, and high costs of switching suppliers also occur when SRB is implemented in a company. This is caused by the lack of knowledge about the consequences of switching suppliers.

2.2.2.2 Barriers towards SRB

Next to drivers, literature also describes several barriers towards SRB.

Management commitment: According to Mont and Leire (2009) a lack of top management commitment is fatal towards the implementation of CSR into supply chains. Mainly because they provide the resources needed by purchasing managers and decide to what extend socially responsibility is implemented, and how proactive these managers need to be. This is in line with Lantos (2001) who states that the top management is one of the most important shapers on organizational culture, which is an influence of SRB within a company. (Lamming and Hampson, 1996)

Value-driven: An important barrier to bring social factors into the supply chain process are additional costs (Walker et al., 2008), especially in the short run arise costs. (Mont and Laire, 2009)

Regulation: as been described before, Porter and van de Linde (1995) see regulation as a barrier, because it can inhibit innovation.

Communication: Even though it is not proven to be direct beneficial towards supplier performance, but working together with suppliers can be accountable to build trust and increase commitment in the relation, which increases organizational learning in the supply chain en thereby improving supplier

performance resulting in reduced costs. There are problems with checking performance beyond the first tier suppliers. Not that those companies don't know how to do this, it's more that they don't have enough resources to do it. Auditing is recognized as barriers, because it consumes resources from the companies and external auditing companies are cheap but there is a lack of quality. One technique to overcome this problem is to reduce the number of suppliers, and build more long term cooperative relationships with the suppliers who you keep aiming at meeting SRB criteria, but this leaves small companies with no chance. (Mont and Laire, 2009)

As suggested before, we can say that being social responsible often results from value or (firm) performance improvements, rather than being motivated by purely being "good". A conclusion from section 2.2.2.1 and 2.2.2.2 is that the drivers and barriers fall under the umbrella of economic motives. Automatically it's interesting to see what the consequences of CSR can be for a firm as has been investigated by Weber (2008).

Table 2.2 summarizes the drivers and barriers from literature.

Table 2.2 Literature review on the drivers and barriers of SRB

Change in environment	Driver/enables	Barrier
Management commitment	(New et al., 2000): **positive commitment of former and owner** (Carter et al., 1999; and Carter and Jennings, 2004): **top management commitment and leadership** (Handfield et al., 1997)	(Mont and Leire, 2009; and Lantos, 2001) **a lack of top management commitment**
Employees	(Hanna et al., 2000): **manage SRB** (Drumright, 1994): **but with support of managers**	
Value	(Carter and Dresner, 2001); and (Handfield, 1997): **reduction of costs** (Mont and Leire, 2009);and (Walker, 2008): **investors interests** (Handfield et al., 1997; porter and van de Linde, 1995; and Young, 2000): **reduction of residuals**	(Walker et al., 2008): **additional costs** (Mont and Laire, 2009): **especially in the short run arise costs**
Performance	(Handfield et al., 1997): **focus on performance (quality) improvements**	
Regulation	(Handfield et al., 1997; Carter and Jennings, 2004; and Walker, 2008): **especially when it resulted from natural disaster**	(Porter and van der Linde, 1995; and Carter and Dresner, 2001): **if regulation forces end of pipe solutions** (Mont and Leire, 2009): **Lack of regulation**
Reputation	(Roberts, 2003; Maignan et al, 2002; and Elkington, 1994): **public opinion** (Mont and Leire, 2009): **power of media** (Drumwright, 1994): **customer decisions are based on the reputation**	
Customers	(Carter and Dresner, 2001):	

	customers look to sustainability	
Competition	(Walker, 2008): **ability to set industrial standards has been shown to increase competitors advantage**	
Communication		(Mont and Laire, 2009): **especially in buyer-supplier relationships**

2.2.3 Expected effects of social responsible buying

Now that we have a better look on the definitions, drivers, barriers of SRB, this section describes the effects SRB can have for a company. In line with the effects described in Figure 2.1 and 2.2, Weber (2008) introduced the SRB impact model, which is shown in Figure 2.3, where monetary and non-monetary benefits are stated, resulted from an empirical study. In the continuation of this report this model is only used as a source of information.

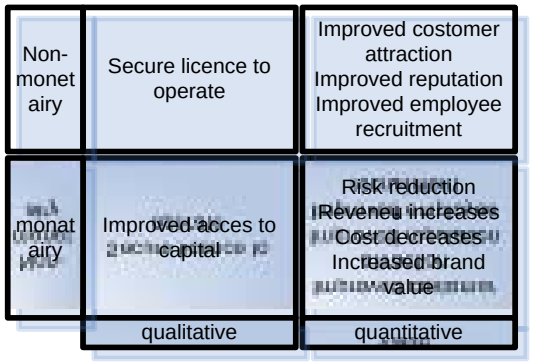


Figure 2.3 SRB impact model of Weber (2008)

Monetary benefits include direct financial effects as well as benefits that do not directly lead to cash flows but can nevertheless be measured in monetary terms. Non-monetary benefits refer to benefits that are not directly measured in monetary terms but nevertheless influence company competitiveness and the financial success of a company. Companies can assess non-monetary benefits using quantitative indicators e.g., changes in repurchase rates or qualitative indicators e.g., evaluating customer attitudes. Non-monetary benefits can thus further be systematized with regard to the nature of indicators to measure the respective benefits, which can be quantitative or qualitative.

2.3 Purchasing maturity related to SRB

Thus far we introduce corporate social responsibility and different orientation levels towards CSR. We described the role of purchasing within CSR as SRB. We also described drivers and barriers towards SRB; management commitment, regulation, industrial standards, customers, suppliers, and reputation. Furthermore, we described the monetary and non-monetary effects of buying social responsible. This section describes which model literature describes to measure the maturity levels of a purchasing function.

2.3.1 Effects of maturity on performance

Measuring the competences of purchasing organization within literature is known as purchasing maturity. All the competences of a purchasing function together form a maturity profile (Schiele, 2007). In the past decades, increased complexity of products resulted in an increased purchased volume and therefore, using suppliers as an extension of the organization increased the importance of the purchasing function. Therefore, the strategic role of purchasing changed (Anderson and Rask, 2003; Ellram and Carr, 1994).
According to Schiele (2008), a better performing purchasing function can result in a better performing firm. This is based on a 14-company case study where “more mature organizations” had a significant positive correlation with cost savings (with an average of 7%).

In Figure 2.4 we can see that an organization with more competencies has a higher maturity. Through this maturity, it's expected to be able to absorb activities "better". Lane et al. (1990) defines this as *absorptive capacity*.
Ellram et al. (2002), concludes that because of the absorptive capacity, best practices in purchasing are better absorbed in above average organizations, compared to below average organizations. It is expected that this also counts for best practices in SRB.

Options are open that a common cause will be responsible for the absorptive power resulting from higher capabilities. For example, a company that had a better director, and therefore is better led could have better capabilities and can learn more, resulting from the director. This has not been discussed by these authors and considering the small time span for this thesis; common causes are out of the scope of this report.

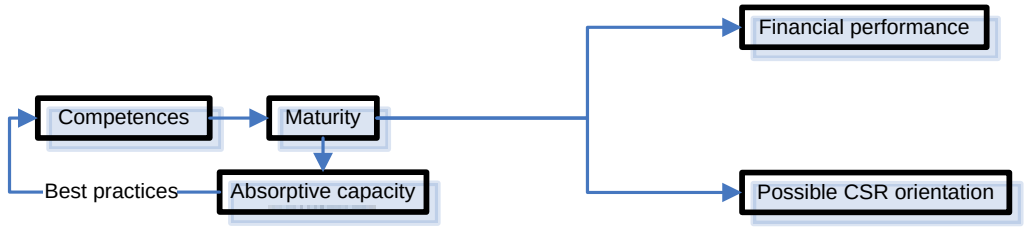


Figure 2.4 Relation between maturity, absorptive capacity, and possible CSR-orientation

2.3.2 Effects of maturity on absorptive capacity

According to Schiele (2008) the absorptive capacity perception indicates that there is a "minimum maturity point" an organisation needs to have achieved in order to benefit from the introduction of best practices. This research aims at finding a minimal maturity level, for which SRB can be achieved. The maturity level at which firms are able to profit from new knowledge is the "minimum maturity point" (Figure 2.5).

With low maturity, the basics have to be established first. This might mean defining processes or hiring trained personnel. Highly mature organisations can try to absorb best-practice knowledge immediately since they have sufficient absorptive capacity. Failing to consider the point of minimum maturity and attempting to "leapfrog" development could result in the situation described by Ellram et al. (1994). They found that firms with poor financial results were introducing the largest number of best practices but were apparently not profiting sufficiently from them. Understanding the minimum maturity point of an organisation, below which there is no financial benefit from introducing best practices, is an important managerial task. To end, organizations should absorb best practices that require the maturity level of the organization, otherwise, the costs of absorbing are higher than the benefits.

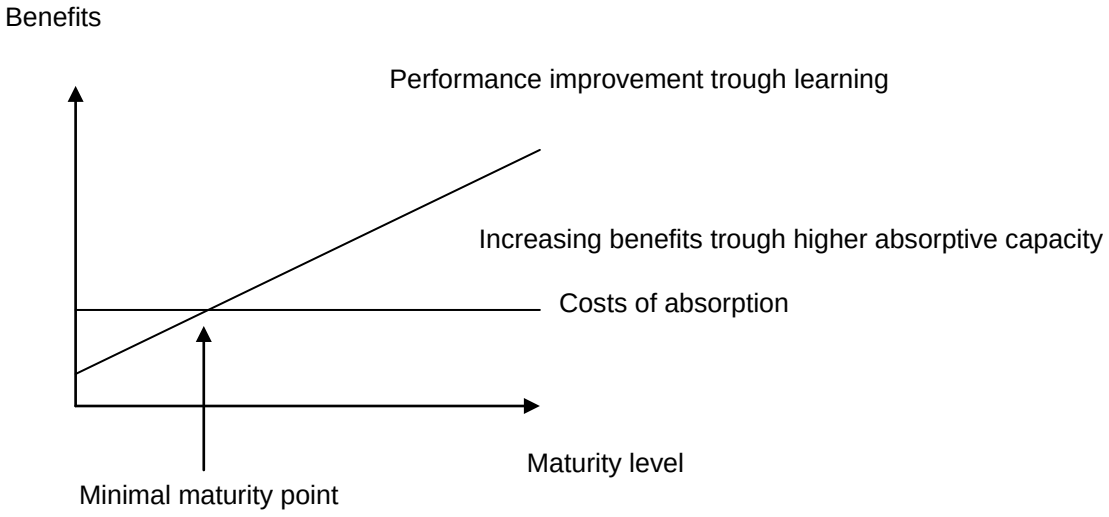


Figure 2.5 There is a "minimal maturity level" for which below SRB best practices have no benefits.

We now define the maturity model that we are going to use in this research. From this model we are going to subtract the competencies required by purchasing to be “mature”.

2.3.3 Maturity models

A *maturity model* determines maturity scores for different processes. Together these scores form a *maturity profile (e.g. a radar diagram)*. A *maturity profile approach* enables organizations to ensure that: (1) conditions under which a certain level is reached are predetermined (2) a maturity profile shows other entities in a glance the results and therefore are easy communicable, consequently it (3) shows actions for improvement (Schiele, 2008).

Purchasing has adopted these models in a variety of forms, but all these approaches differentiate maturity in among stages, where an organization moves from one stage to a higher stage in order to develop towards greater superiority (Van Weele and Rietveld, 2000). Furthermore, Reck and Long (1988) argue that skipping stages is associated with great difficulties and therefore it is an evolutionary process. However, it can happen that an organization already fulfils the needs of higher maturity levels but not yet of a lower level, and therefore, with improving this lower level it can happen that the company raises multiple levels at once. In addition, it is not necessary for every organization to score maximum points on each discipline.

Since 1989 different models to determine purchasing maturity are available. Table 2.3 shows a number of purchasing maturity models available in the literature. A few of these models are empirically tested to financial performance. Excluded in the table are the models that focus on one single purchasing task. From this shortlist we determine the model that we will use.

Table 2.3 Purchasing maturity models

No empirically maturity-performance tested	Empirical maturity-performance tested
Bhote (1989), Freeman and Cavinato (1990), Chadwick and Rajagopal (1995) Reck and Long (1988), Cammish and Keough (1991), Keough (1993), Burt and Doyle (1994), Barry et al. (1996)	MSU (Monszka, 1993), Schiele (2008), Cousins et al. (2006), Paulraj et al. (2006)

Source: (adapted from Schiele, 2008)

In Table 2.4 only empirically tested models are further considered. This table handles the comparison which is based on the 5 main elements that describe maturity, additionally we also considered its relation towards social responsibility. These elements are:

- Procurement planning: This concerns the planning of procurement activities. Often the first steps in purchasing process (e.g. material specification, market research).
- Organizational structure of purchasing: (hierarchical) Position of purchasing, organizational visibility, ideal organizational forms (e.g. commodity teams).
- Process organisation: defining a sourcing strategy, supplier management systems, supplier evaluation/development systems.
- Human resources and leadership: Skill level, purchasing involvement in development teams
- Purchasing controlling: Performance measurements, methods and tools.
- Connection to SRB.

Table 2.4 Maturity model comparison

	Paulraj et al. (2006)	Cousins et al. (2006)	Schiele (2008)	MSU model Monczka (1993)
Scope	General purchasing	General purchasing	General purchasing	General purchasing
No. of stages	3	4	4	10
No. of items for assessment	42	24	111	140
Planning	x	x	✓	✓
Structural organisation	x	x	✓	✓
Process organisation	x	x	✓	✓
Human resources	x	✓	✓	✓
Controlling	✓	✓	✓	✓
Connection to SRB	None	None	None	Integrity
Collaborative supply relation	✓	✓	x	✓

Source: (adapted from Schiele, 2007) x =not present in model ✓ =present in the model

2.3.4 Michigan State University model

A frequently used model to determine the maturity is the Michigan State University (MSU) model (Purchasing excellence, 2004). Since it is commonly used (e.g. purchasing excellence benchmark program) the maturity scores of several companies in the Netherlands are already determined. This model has the following advantage over other models (Faber, Lammers, and Peters, 2007).

- The MSU model is a set of checklists, which have to tag off before getting to a final conclusion. It is not a model, which forces the user to one unique solution. It stimulates thought and creativity. And therefore, it is adjustable to social responsibility.
- Monczka needs information from many different departments and this will ensure that more people than just the purchaser will support the outcome. Some other models could tempt users to jump to conclusions and rely on partial information. And purchasing especially in relation to social responsibility should be cooperative towards other parts of the organization. Additionally, by using a broad scope of department's validity increases.

Thus far, we described why we chose to use the MSU model, these motivations are now summarized:

- It is empirically tested with financial performance,
- It is well known and used throughout the world,
- It handles the five main elements that describe maturity,
- It handles integrity,
- It is the most exhaustive,
- It is not a model, which forces the user to one unique solution,
- Finally, it needs information from many different departments and a broad scope of department's increases validity.

Monzcka states 8 strategic and 6 enabler processes to create a maturity profile. Every process of the model contains ten different stages. Ranging from 0 (the lowest, as if it does not occur in the organization) to 10 (as if, best in class). If a score of 10 has been given, the competences for this process are present in the purchasing organization. A proper maturity profile follows from the strategy of the company. For example, if the company depends on innovations, it is more likely to have a higher score on "develop and manage supplier relationship" than a following company which is prize focussed. This MSU model is shown in Table 2.5. A detailed description of all the maturity stages is given in Appendix 1.

Table 2.5 The 8 strategic and 6 enabler processes of the MSU model (purchasing excellence, 2004)

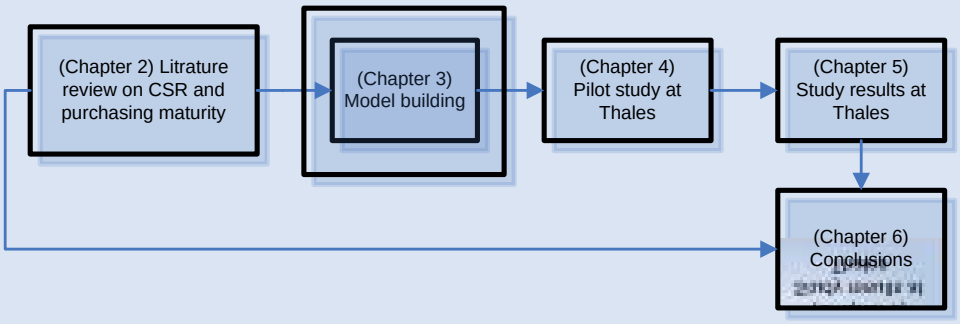
8 strategic processes	Stage
In sourcing and outsourcing	0 1 2 3 4 5 6 7 8 9 10
Commodity Strategy Development	0 1 2 3 4 5 6 7 8 9 10
Establish and leverage a world class supply	0 1 2 3 4 5 6 7 8 9 10
Development and manage supplier relationship	0 1 2 3 4 5 6 7 8 9 10
Supplier involvement in new product/process development	0 1 2 3 4 5 6 7 8 9 10
Supplier involvement in order realization process	0 1 2 3 4 5 6 7 8 9 10
Supplier development and quality management	0 1 2 3 4 5 6 7 8 9 10
Strategic costs	0 1 2 3 4 5 6 7 8 9 10
6 Enabler processes	
Establish globally integrated and customized strategies and plans	0 1 2 3 4 5 6 7 8 9 10
Develop organization and teaming strategies	0 1 2 3 4 5 6 7 8 9 10
Globalisation	0 1 2 3 4 5 6 7 8 9 10
Develop a purchasing and Supply Chain Measurement	0 1 2 3 4 5 6 7 8 9 10
Develop and implement enabling IS/IT Systems	0 1 2 3 4 5 6 7 8 9 10
Human resource development and training	0 1 2 3 4 5 6 7 8 9 10

In the continuation of this report we use the MSU model of Monzcka to determine purchasing elements and maturity levels.

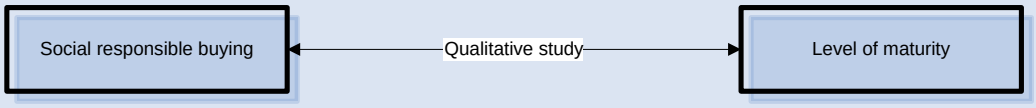
Concluding remarks

The aim of chapter 2 was to define CSR and the role of purchasing within CSR. Then we introduced CSR-orientations, which stated different characteristics of several strategies towards CSR. Then, elements essential for a quality purchasing organization needed to be defined. A maturity model describes competences required by high quality purchasing organizations. In the following chapter we relate the purchasing elements required to buy social responsible to the MSU model.

Chapter 3 Design of MSU model applicable to SRB



This section couples the information that has been gathered in the literature review. So now we can determine what level of maturity is required, given a certain CSR-orientation.
Although the level of purchasing maturity and SRB can be seen as two separate subjects, we believe that maturity has influence on SRB abilities. As shown in chapter 2, Monzcka's model describes competencies that should be present within (high) mature organizations. An organization that feels needs to buy social responsible should also possess certain characteristics before they will ever be able to do it (chapter 2). Therefore, this chapter links these two subjects to each other and provides further knowledge needed to answer the research question: "What level of purchasing maturity is required in order to be able to adopt CSR practices within purchasing?" Therefore it states the relations that we can expect from the literature. Additionally, pieces that are missing will be added (e.g. important processes to buy social responsible). We hope that eventually researchers and practitioners can benefit from coupling these areas.



3.1 Relation between SRB and level of maturity

This section describes the relation between purchasing maturity and elements that we can expect by combining the two subjects from the previous chapter.

Figure 3.1 again shows the proposition that resulting from the capabilities an organization carries; it is able to buy social responsible. So if an organization wants to buy socially responsible on a higher level, it should carry more capabilities and therefore posses a higher maturity.

But an organization not always knows what level of CSR-orientation suits the organization best, furthermore, some organizations never thought about SRB.

Therefore, certain preconditions (steps to take) are defined and will be discussed in section 3.2. These preconditions help an organization think about social responsibility and helps determining what level of CSR-orientation should be possessed (other than it is able to posses). These preconditions are graphically shown in Figure 3.1.

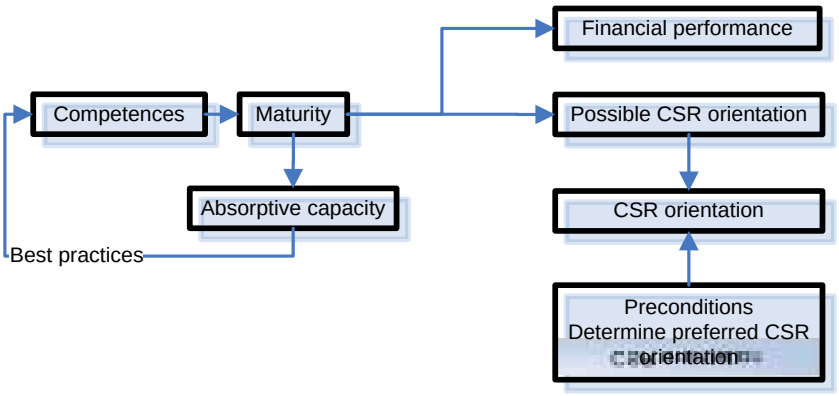


Figure 3.1 Relation between purchasing maturity and SRB

3.2 Preconditions (procedure to determine preferred CSR-orientation)

The preferred CSR-orientation follows from the corporate strategy. However, this section describes a procedure to help organizations determine their preferred CSR-orientation. Which is based on the 5 principles of Maignan et al. (2002): analyse of stakeholder pressure, estimation of potential benefits and costs, purchasing policy, choosing, and implementing a CSR-orientation. This process is shown in Figure 3.2.

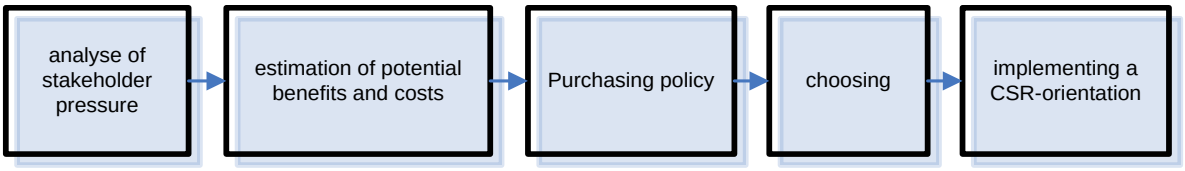


Figure 3.2 The 5 step approach to help organizations determine the preferred CSR-orientation (based on Maignan et al. (2002)

The five principles are discussed in the next part of this section.

Analyse of stakeholder's pressure: by analyzing the stakeholders, without the organization as a stakeholder, possible risks could become noticeable. These possible risks are, besides financial risks also risks to the environment and society. This can be done by listening to the society, evaluate observations and forecast possible scrutiny. By taking this step into consideration the organization knows what society and stakeholders expects from them. They know the possible harm to the environment. It gives an indication on how important and what SRB means for the stakeholders. Appendix 2 shows how organizations with different CSR-orientations analyzed stakeholders in practice. This helps an organization think about how they can do it themselves or even realizes how they did it themselves in the recent years.

Estimate potential benefits and costs: In this step different benefits and costs of SRB at the organization (as a stakeholder) are estimated. This can be done by analyzing the drivers and barriers, and estimating the expected benefits. As shown in section 2.2.2 and 2.2.3.

Now we know the benefits of SRB for our stakeholders and organization.

Purchasing policies: Furthermore, purchasing policies should follow from organizational values. Purchasing, however, should think about some SRB topics which are related to purchasing policies.

Typically Table 3.2 states topics where purchasing should think of and how organizations with different CSR-orientations did it in practice.

Table 3.2 Topics where purchasing should think of

Question	Reactive	Developing	Proactive
Is there a policy to pay more for a social responsible product?	Don't pay more for a social responsible product	Pay more, but insist that portfolio of efforts is cost-effective	Willing to pay more for social responsible product, even if the product has relatively same quality
What is the degree of integration of social issues in different processes?	Enforced	Self-enforced	Voluntary
Who is responsible for organizing social issues? Policy entrepreneur:	None or Middle manager often in operations	Often external relations managers	Founder/ top management/ middle management
What social responsible objectives are described in contracts?	Only regular objectives with little effort towards SRB objectives towards strategic suppliers	Regular objectives and SRB objectives	SRB objectives are prime objectives
On what products is social responsibility focussed?	Services	Consumption goods	Direct goods
How are employee developed in social responsible practices?	No training for employees related to SRB	Employee-SRB training	Employee-SRB training with target setting and evaluation

Source: (adapted from Thorensen (1999), Tulder et al (2008), Carrol (1979), Wilson (1974), Mc Adam (1973), Davis and Blomstrom (1975), Porter and v.d. Linde (1995), Maignan et al. (2002), Hunt and Auster (1990), Kopicki et al. (1993), Handfield et al (1997), and Drumwright (1994))

Choosing a CSR-orientation: As stated before, this question is primarily a management choice based on the SRB elements above.

Implementing the CSR-orientation: In order to implement the CSR-orientation, we should focus on the maturity levels that should be reached to enable the CSR-orientation. A model to do this will be discussed in the following of this chapter.

Recommendations for improvements follow from the difference on the maturity levels now and required for the CSR-orientation.

3.3 Coupling purchasing elements with SRB

Section 3.1 states the expected relation between purchasing maturity and SRB. Furthermore, in section 3.2, the preconditions in order to buy socially responsible are stated. In this section we formulate the important purchasing elements in SRB, so that they can be related to the MSU model. Elements are explained in this research by characteristics, competencies, and processes.

For simplifying reasons, we split the elements resulting from the CSR-orientations and the MSU model: SRB elements, which are the elements that follow from the CSR-orientations and MSU elements that follow from the MSU model, which are elements that increase purchasing maturity and

absorptive capacity in the continuation of this report. However, purchasing elements remain a combination of these two elements.

In Table 3.3 the important purchasing elements that are expected to have the most influence on SRB are linked to the reactive, developing, and proactive CSR-orientation. The SRB elements in this model are derived from the sources of the main characteristics of the different CSR-orientations (Table 2.1). These characteristics are formulated as questions. We divide the answers to these questions over the three main variables of CSR-orientations: reactive, developing, and proactive (as shown in Figure 2.3).

Table 3.3 A detailed overview of important purchasing elements in SRB

Question	Reactive	Developing	Proactive
To what extent is purchasing involved in corporate strategy development? Is this a documented and revolving process?	Purchasing is not involved in corporate strategy development	Purchasing is involved in corporate strategy development, but only as a source of information	Early involvement in corporate strategy development is ensured and results are an based component of the purchasing strategy
What level of planning horizon is used for CSR objectives?	Short term/ ad hoc social planning	Medium/long-term	Strategic
How is benchmarking performed?	Benchmark only on regular criteria. Social criteria's are not an issue	There are social criteria (as been defined by policy entrepreneur, and corporate/purchasing policy) involved but only to compare social performance, with other companies	Social performance is an important issue, take a look to the supply chain, and benchmark on the past use results to improve social performance (of supply chain)
How is market research performed?	Perform market research as usual, don't take social responsible practices in mind	Social responsible issues, (as been defined by policy entrepreneur, and corporate/purchasing policy) are taken in mind, but focus is still reactive	Social issues (as been defined by policy entrepreneur, and corporate/purchasing policy) are taken along, focus is now proactive, so look to future needs of customers, and "society" and possibilities from suppliers/supply chain
How is dealt with regulation, law and industrial standards	Comply, but resist against …	Comply, and follow	Evaluate performance, lead, or even be the developer of … (force other companies to follow)
What kind of product specifications is given to suppliers?	Technical end-of-pipe solutions	Evaluate possibilities with supplier	Functional (supply chain focussed)
What collaboration is commonly used in order to deal with social responsible objectives	Only internal	External collaboration/ Use supplier for innovative solutions	Use supply chain for innovative solutions
Is there a systematic supplier evaluation process in place?	Do not evaluate social performance/Little or no social evaluation of suppliers	Evaluate social performance, and communicate results internal/Evaluate suppliers based on historical data	Evaluate social performance, which is based on the social objectives and benchmarking, and communicate results internal and external/Evaluate suppliers based on

			historical data and expectations
Is there a systematic procedure for supplier development in place?	Supplier development measures are developed individually	The supplier development process is defined and development plans are derived from the supplier evaluations	Development process is implemented and regularly updated. Development plans are derived from the development strategy.
How many, and how are audit/assessment executed?	Selective visits at suppliers. Normal audits for itself and its vendors (to expose and identify poor CSR performers within the supply base)	Regular visits. Social responsibility audits for itself and its vendors (to expose and identify poor CSR performers within the supply base)	Social responsibility audits for itself and its vendors (to expose and identify poor CSR performers within the supply base and to help direct supplier development strategies)

Source: (adapted from Thorensen (1999), Tulder et al (2008), Carrol (1979), Wilson (1974), Mc Adam (1973), Davis and Blomstrom (1975), Porter and v.d. Linde (1995), Maignan et al. (2002), Hunt and Auster (1990), Kopicki et al. (1993), Handfield et al (1997), and Drumwright (1994))

3.4 Applying SRB to MSU

To apply the SRB elements from Table 3.3 to the MSU model we follow a procedure as shown in Figure 3.3.

First, we deduct all MSU elements from the strategic processes of MSU model (these are stated in appendix 1) and all SRB elements from Table 3.3. Then we chose for every element of the MSU model one of the three levels (reactive, developing or proactive) of CSR-orientation that fits the best, or else none. We performed the same method on all strategic processes for every stage (0 to 10) of the MSU model.

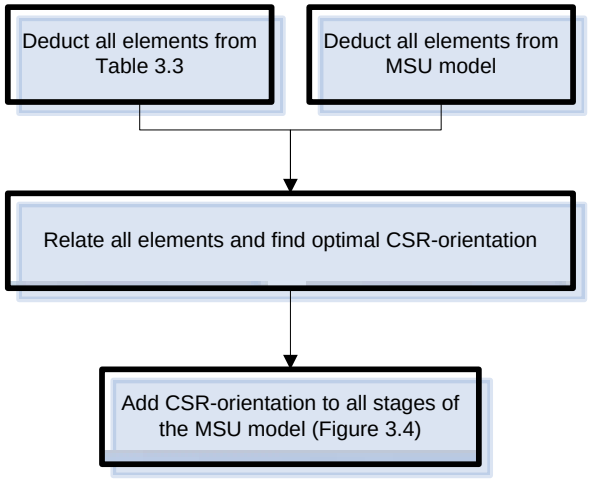


Figure 3.3 Procedure to relate MSU and SRB

An example is provided by:
Strategic process 1 “in sourcing outsourcing decision”, one example on stage 1, 2, and 3

Stage 1: An ad-hoc planning is used	This one is comparable with “What level of planning horizon is used for CSR objectives?” The answer is reactive
Stage 2 There is no proof that regulations are being followed.	This one is comparable with “How is dealt with regulation, law and industrial standards” The answer is reactive
Stage 3 Purchasing knowledge is	This one is comparable with “To what extent is purchasing involved in corporate strategy development? Is this a

used as a source of information on knowledge about potential suppliers	documented and revolving process?" The answer is reactive

The results are depicted in Figure 3.4.

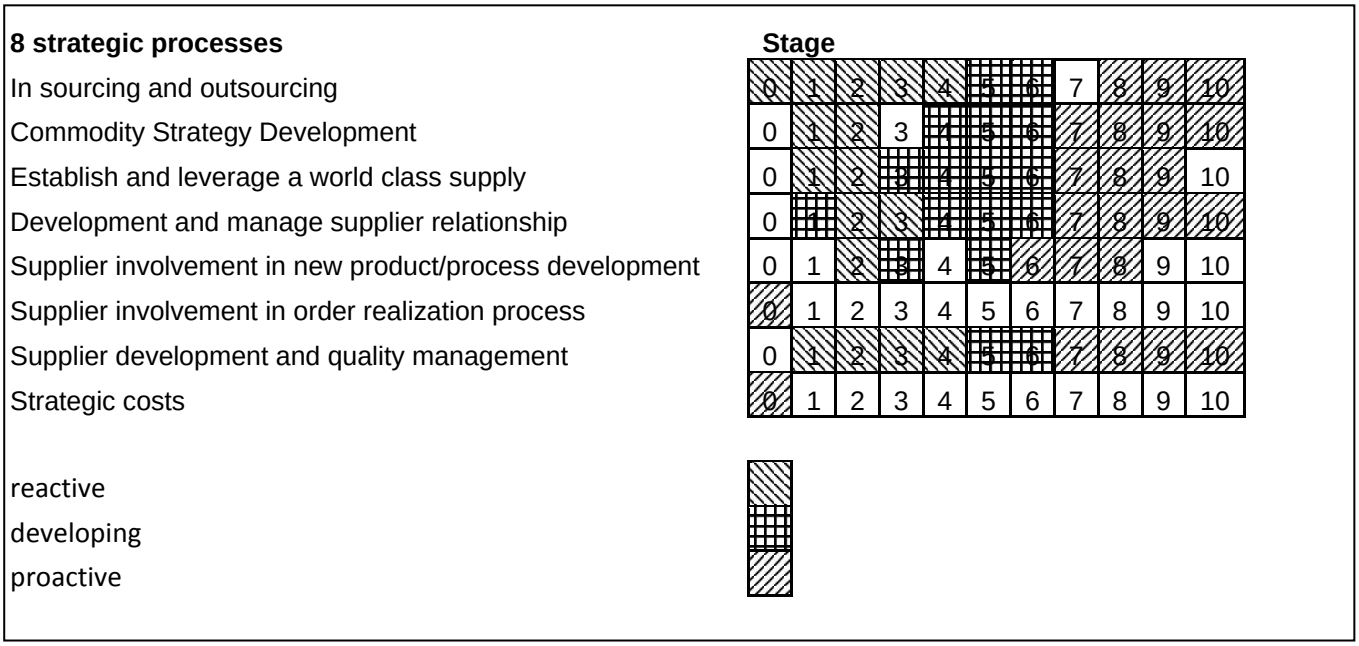


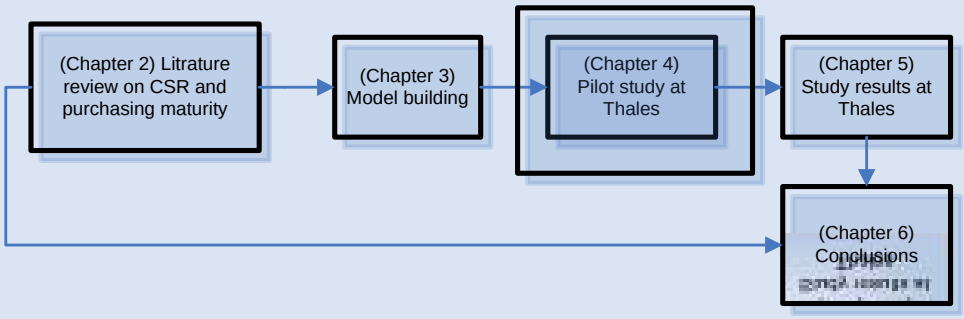
Figure 3.4 Linking the strategic processes MSU with CSR-orientations

Although some of the enablers can be defined as an enabler for SRB, it is not always possible to segment them between "reactive, developing or proactive". Therefore, we chose not to use these enablers in the continuation of this research.

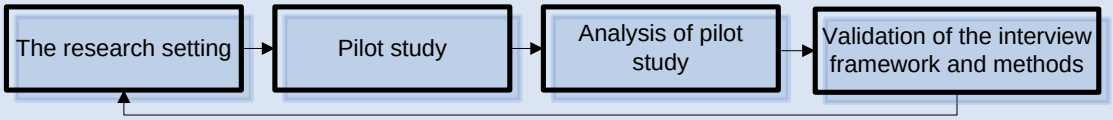
Concluding remarks

In this chapter theory is qualitatively combined which we assume to have a high validity since the information is deducted from scientific literature and the important SRB processes will be validated in Chapter 6. We are now going to put the model into practice and try to determine a preferred CSR-orientation for Thales so that based on this CSR-orientation, possible improvements can be formulated. As described before, we start with a pilot study to determine the validity of the methodology, which will increase the validity of the results. In the final chapter the model will be evaluated and limitations and implications for further research will we stated.

Chapter 4 Preparations and pilot study



In chapter one, the importance of the development of an interview framework was discussed, thus the need for a pilot study was identified. This chapter addresses the pilot study. First, based upon the literature review, an interview framework is developed. Then, the pilot study is performed. Furthermore, the methods and results of the pilot study are discussed. Based upon the findings in this pilot, adaptations to the data collecting and analysis are described.



4.1 The research setting

The theory has been subtracted from literature described the previous chapters. Moreover, it has been developed and in this chapter put into practice.

In section 1.4 the development of an interview framework was addressed. These subjects will again be handled in this chapter, but this time in detail. The next chapter handles the actual and complete study at Thales.

4.1.1 Interview framework

The importance of a semi structured interview framework has been addressed in section 1.4 and is to make sure that only usable data will be collected. Therefore, the focus of the interview has to be on topics that are closely linked to the research objective. Consequently, the input will be provided by chapter 3.

The interview framework is given by:

First, motivations for this research are validated. Therefore, a large number of drivers and barriers were subtracted from literature. By including these in the interview in specific questions we managed to address the topics found in literature. We asked respondents to rate the drivers and barriers on a "top 3" importance for Thales list. Respondents were free to add more if they found that it was desirable. Then we asked to clarify their answer. These answers are related to secondary sources to evaluate its validity. Finally, we compared the valid answers with literature to see if there were commonalities. Luckily these answers could also be used to determine the preferred CSR-orientation as described in section 3.2.

Second, important processes within purchasing at Thales that affected SRB were validated. By asking specific questions where respondents have enough freedom to come up with their own opinion. But again they needed to give a "top 3" list. Again some added one or two more. Once more we checked the validity of these topics with literature.

Third, to determine what need to be improved, purchasing elements were also handled. The questions were asked as if respondents needed to fill in the model from section 3.3. They could give answers in the range of reactive to proactive. Where 1 is reactive, 2 is developing, and 3 is proactive. But with options to give additional input, which commonly happened.

In the next section we discuss the relevance of a pilot study for our research.

4.2 Pilot study

The second observation in chapter 1 was the need of a pilot study. This pilot will be used to:

- Determine if the interview framework is correct (such as the interview length).
- Indicate whether the information provided during the interview and the information required is comparable.
- Provide additional access towards other sources.
- Develop a format for the data analysis. (E.g. which rules have to be used in order to decide which text fragments will be coded or not.)
- After the pilot interview, questions can be adjusted to increase the relevance of the answers.

The recorded interviews are developed into transcripts. Some questions and all answers (with exception of introduction and closing statements) were processed. For analysis, the coding is only used in cross respondent analysis, when the amount of data is too large to consider every interview separately.

In the next section we show the results from the pilot interview.

4.3 Analysis of pilot study

The respondent is chosen because of his involvement in the research. Moreover, he had some experiences with CSR at the university, in a NEVI course, and within Thales, were we have a CSR chapter code of ethics.

Data collection took place by means of one interview and the additional information from second sources. The length of the interviews was approximately one hour, which has been performed in Dutch.

4.3.1 Important purchasing elements to buy socially responsible

According to the respondent the processes that have the highest influence on social responsibility are specification, supplier selection, contract negotiation, and supplier evaluation.

Throughout the specification phase a purchaser and a technical specialist can determine which products will be bought. Then certain harmful materials can be excluded from the specs list. Therefore this has a lot of impact on the CSR performance of the product.

During supplier selection, selection criteria help to determine the “best” supplier. Social responsible terms can easily be implemented, so that either it’s an order qualifier or an order winner.

Throughout contract negotiations, important objectives can be discussed. Nevertheless, changes to the CSR performance will be minor. Supplementary social responsible terms can easily be implemented.

As a final point, audits are important because the performance of suppliers can be evaluated, and actions for improvement can be planned.

4.3.2 Drivers and barriers for Thales

The respondent recognizes that reputation is primarily one of the most important drivers for Thales to be social responsible. Organizations that supply the government know that reputation is primarily important for demanding governments and have a need to be careful with strict regulations.

The respondent expects that companies that are on the open stock market will have certain expectations from the investors. Investors don’t like negative stories about the company.

Furthermore, initiatives like the New York sustainability index give organizations more recognition towards their sustainable performance.

In addition, the Thales group (top management) demands it, primarily because they are industrial leaders. And they claim that industrial leaders have additional responsibilities.

On the other hand it is also expected that employees itself see it of growing importance. They are also influenced by stories about the effects of harmful handling. Summarized we can say that according to the respondent: reputation, top management and employee commitment, customers, and regulation are important.

The important barriers that he recognizes are in fact an opposite side of regulations in the defense industry. In defense, technological quality measures are such an important factor that harmful technologies cannot be excluded. For example leadless soldering is not accepted by regulations outside the defense industry, however, inside the defense industry leadless soldering is accepted. This brings us to our second barrier: technological restrictions. As opposed before, technological restrictions lead to barriers towards social responsibility. If for example Thales does not want to use leadless soldering, it has to proof that the other technology is still as good as the old one. But this costs a lot of money. Therefore, Thales is restricted by regulations and customers who want least with 100% quality securities even if this causes harmful practices. A second important factor is that nowadays Thales looses tenders to other organizations with less quality and with lower prices. They claim that this pressures the margin and therefore costs reductions are of primary focus. Furthermore, employees lacked a lot of training in social responsible thinking. Summarized we can say that the main barriers are: costs, lack of training, regulations, and technological restrictions.

4.3.3 Thales purchasing policy

Purchasing should according to the respondent not pay more for a social responsible product. Simplified we can say that purchasing focuses on costs reduction purely by reducing cost prices. “Management want us to reduce costs by X% a year”. However, when certain products are bought TCO is used to determine “costs”. Thales uses energy consumption and depreciation as TCO factors.

Thales corporate usually states social missions. Therefore, top management is the only policy entrepreneur that we have.

Nowadays, different social issues, especially related to child labour and environmental, are integrated in many processes. Many of these issues are enforced by Thales corporate to avoid claims.

In contracts no social issues are described.

Here at Thales SR only product essentials are bought. So CSR implementation is hard to organize.

4.3.4 Thales competences and maturity levels

We do not handle the maturity levels in this chapter but we handle them in chapter 5.

4.3.5 Conclusion of the pilot study

Based on the analysis above some observations regarding the research objective can be made. There are some triggers for Thales Netherlands to buy social responsible. But at Thales Hengelo purchasing is primarily used as a cost cutter. Compliance with regulations is an important subject for Thales, primarily because in the defense industry violating the law increases risks.

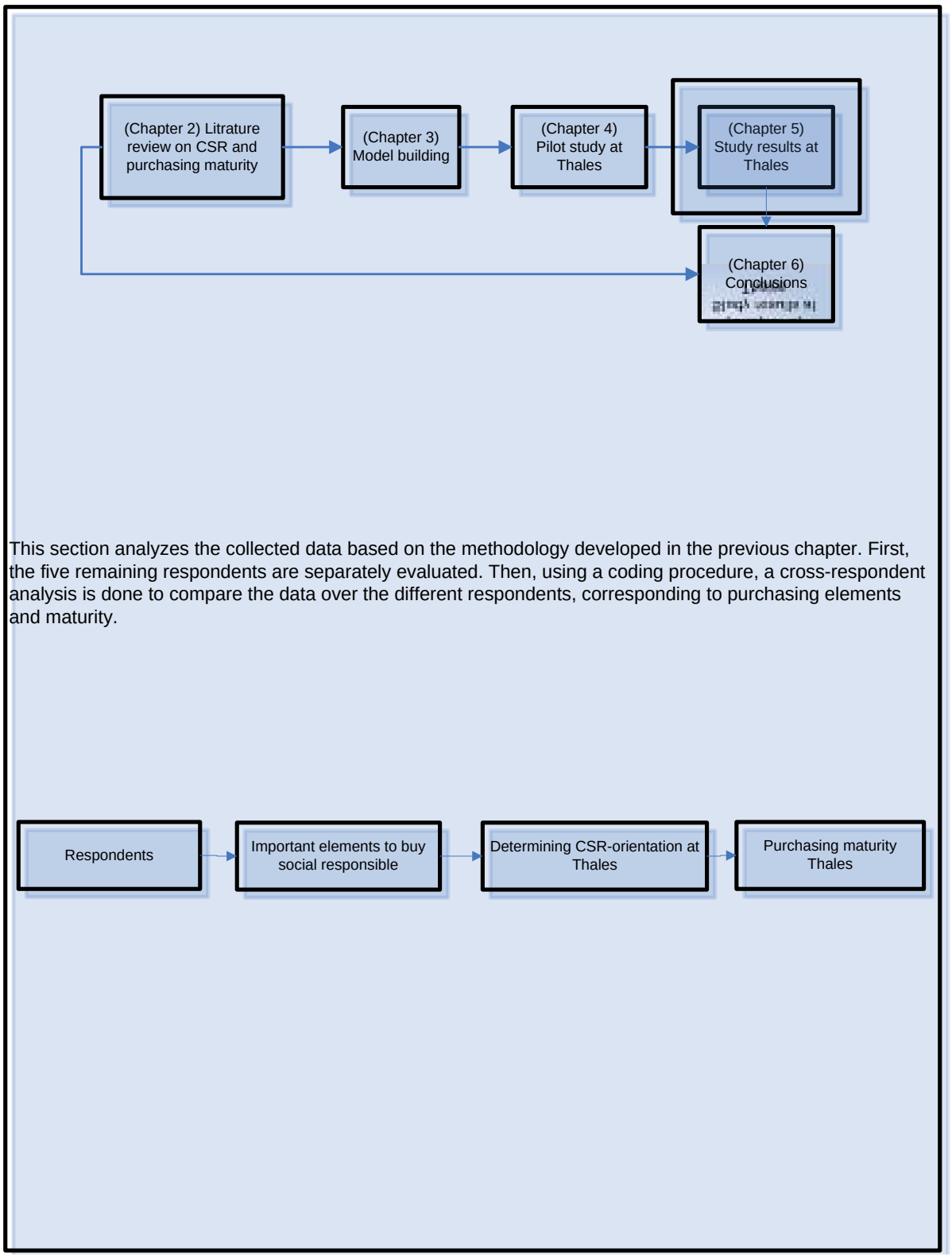
4.4 Validation of the interview framework and methods

As described in 4.2, a reason to perform a pilot was to validate whether the obtained research method was suitable to gain insight in purchasing maturity and SRB at Thales. The respondent agreed that the structure of the interview was satisfactory, but the amount of questions and therefore information needed was vast. The interview provided therefore enough background to cover the important subjects, but the respondent was also free to lead the interview, and thereby it was possible that questions were answered which were planned later in the interview. The drivers and barriers were very satisfactory answered. Next to this, the organizational competences and processes that were important in SRB were a bit short. Still valuable information could be obtained. The respondent could not answer all questions from the SRB maturity model, simply because either it varied per project, or person. In addition, when giving some background information, the respondent sometimes answered also other questions. This was very helpful because then a relation between questions surfaced and thus also gives an indication about the importance of different subjects. It shows that the framework proposed was open for initiative.
Furthermore, regarding the workload the data collection methods (interviews and additional data from documentation), six interviews were found to be an attainable goal. The knowledge and responsibilities of candidates will be the main criterion for interviewee selection in the follow-up studies.

Concluding remarks

In this section, an interview framework was developed. Furthermore, a pilot study was conducted to validate the methods of data collection and analysis. This pilot consists out of an interview, which data was studied and analyzed. A number of conclusions are drawn from this pilot. The use of the interview framework was useful to collect data from the interviewee. Some adjustments are made to further optimize the framework. The data collected from the case can be analyzed and shows promising insights. Furthermore, we expect that the interviews were found to be suitable for cross-analyzes. Together this proves that the research methodology as outlined in chapter 1 functions as is was expected to do. It allows the respondent to lead the interviews (rather than the interviewer), but enables the interviewer to cover a number of important purchasing and organizational topics. Because general topics are brought in to the conversation if they are not addressed by the respondents themselves the risk of leading the respondent is minimized. The fact that certain topics are seen as important by a respondent may not seem to be as important by others, which confirms this claim. Because no important adjustments in research design or methods are made, the results from the pilot study can be used in the cross respondent analysis.

Chapter 5 Purchasing maturity and SRB at Thales Hengelo



This section analyzes the collected data based on the methodology developed in the previous chapter. First, the five remaining respondents are separately evaluated. Then, using a coding procedure, a cross-respondent analysis is done to compare the data over the different respondents, corresponding to purchasing elements and maturity.

5.1 Respondents

The pilot case is described in the previous chapter and is not addressed here. The remaining five respondents will be evaluated. The respondents vary from the purchasing director, to a sales manager. The sales manager (respondent D) is added to secure a broad scope. However, the purchasing specific maturity levels are not discussed with him, so that he is not added in the maturity overview (section 5.4). Thus, the scope for the other sections ranges from the strategic decisions on the supply side as well as the customer side. An overview of the respondents and how these respondents relate to Thesis and why they have been chosen to participate is given in Table 5.1.

Table 5.1 Respondent overview

Respondent	Description of the respondent
Respondent A	This respondent was chosen because he is the purchasing director; he has knowledge about different strategic choices Thales has made. Furthermore, he performed his MBA Thesis within the scope of corporate social responsibility at a railway organization.
Respondent B	This respondent was chosen because he is the operational manager of Thales Hengelo surface radar, with 15 years of purchasing experience and 7 years of experience within Thales. In the past he was a tactical purchaser.
Respondent C	Was chosen because he is the tactical manager of surface radar, his team is responsible for tactical purchasing processes (specification, supplier selection, and contracting).
Respondent D	Was chosen because of his insight in Thales customers. He is the Bids and Captures director; he has insight in the demand side of Thales. Who are the customers and what are their wishes (supplier selection process from the customer) will be discussed with him. He was recommended by respondent A.
Respondent E	This is a quality manager, also responsible for audits. Furthermore, he has the responsibility to translate CSR to surface radar. He has insight in the purchasing processes.
Respondent M	Respondent of the pilot study.
Secondary sources F	Sometimes the annual reports, procedures and informal meetings will be used in order to verify certain qualitative and quantitative data.

In addition, the position of the respondents in the organization is depicted in Figure 5.1.

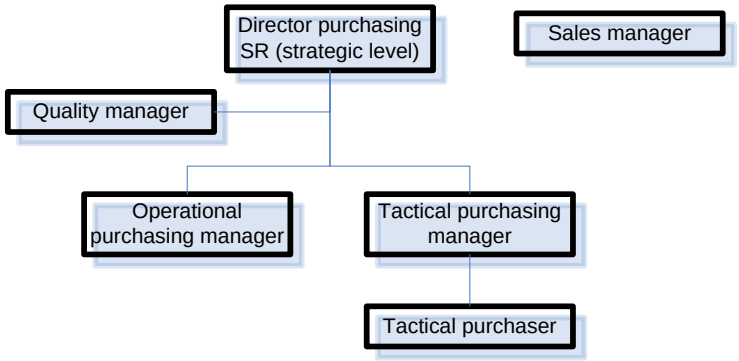


Figure 5.1 organizational structures of the respondents at Thales Hengelo.

5.2 Important purchasing elements to buy social responsible

As been stated in section 2.4 the important purchasing processes that are influenced by buying socially responsible are: *planning, supplier selection, supplier evaluation and development, specification, policy development, and regulation.* We validated section 2.3 with the opinion and examples of situations of the different respondents within Thales.

Specification: Respondents claim that during specification environmental regulations are taken along. That has been done within a cross-functional team (commodity-team). This team formulates specifications varying from technical to functional aspects. A list of harmful materials should be avoided and checked with the supplier. However, cases are known that in for example standardized

computer hardware (e.g. displays), the supplier is not willing to give away a list of harmful materials. Furthermore, the commodity teams claim that the backside of this is that investigating in harmful materials requires a lot of handling time, therefore, some don't ask for it anymore.
Note: During my previous work for Thales I recognized the objections of the commodity teams towards this subject. I made a web-based application where specifications where collected and I let the responsible guy make a choice. "Whether the product contained harmful materials or not". If they chose "yes" the list of harmful materials was mandatory to fill in. But, commodity teams claimed that this was not acceptable. Because their suppliers where not willing to list harmful materials, even though the commodity team know the product contained hurtful materials.

Supplier selection: During supplier selection the "best" supplier has been chosen from a shortlist. Different respondents claim that offset (buying in the country of the customers) and the costs of switching suppliers mean that not always the preferred supplier has been chosen. This has an influence on the social and environmental performance of Thales. Tenders for example, sometimes send out to countries with a lower than accepted political situation. Furthermore, cases are known that Thales stayed with non-preferred suppliers because otherwise the supplier went bankrupt.

During contracting suppliers should agree with purchasing conditions. In these purchasing conditions (article 17) environmental objectives are stated. At Thales prices are taken along in contracts (e.g. X% costs reduction per year). Additional conditions can be added in the contracts and in purchasing conditions.
Note: some commodity teams where not aware of article 17, this was caused by the negative externality explained as followed. Mostly the technical product manager in a commodity team formulated the specifications. Some purchasing managers just ordered the required product without any technical knowledge. Until at one moment for some cases the purchasing manager had been put offside. The technical manager often did not care about any purchasing issues, only that he had the (for him best) product at the (for him) best time.

Supplier evaluation: At Thales suppliers are primarily evaluated through about 8-10 audits per year. Thales audits it suppliers on ISO 9001, ISO 14001, and it they comply with local environmental regulations. Furthermore, it is determined whether they understand specifications and comply with the code of ethics of Thales. When they do not comply in any of these subjects the supplier is asked to handle the shortcomings but often sanctions are not taken along.

An additional subject to the processes is given by a respondent, who suggests that logistical processes are also a major process where SRB issues could be taken along (e.g. with chemicals: some chemicals should not be transported together).

In the next section we provide input for the preferred CSR-orientation of Thales.

5.3 Determination of the preferred CSR-orientation at Thales

In this section the procedure from section 3.2 is put into practice within Thales so that we can determine what preconditions are met within Thales and what we expect to be the preferred CSR-orientation.

5.3.1 Analysis of Thales stakeholders

At Thales the response to the society reduced in importance. Especially during the 70-80's Thales had to cope with anti-war groups. However these days this is not the case anymore. Thales believes that by following the much tighter regulations these days, scrutiny can be eliminated. Other example of response to society was that there were recent organizational changes where a lot of jobs were lost. To limit secrecy, create goodwill, and stay relative open to the society, Thales participates actively in the society with programs like: open days and sponsorships (e.g. events like the FBK games in Hengelo).

In the next section we evaluate the drivers and barriers for Thales.

5.3.2 Drivers and barriers for Thales

In this section the drivers and barriers for Thales are evaluated. Over several interviews we found out that:

Top management is an important driver. It recognizes that social responsibility is important; this is in line with the annual report. Management is responsible for the ethical codes; focused primarily on child labor, corruption, and the environment. However, some respondents claim that coping with ethical questions is not checked so that this could mean that it is not 100% tight. Purchasing management however is not recognized as a driver.

Another respondent claims that "Thales gets exemption to use harmful materials, not because customers like it, but just because their technology requires it." Some technologies (e.g. missile head) require such high safety measures that it's not responsible to use other technologies.

Related to regulation is the example that by walking ahead of regulation, by pushing innovative solutions towards customers could lead to a selling point or competitive advantage by forcing competitors to follow these standards.

Reputation is especially important towards governments. These are Thales' primary customers. Different countries have different interest in CSR. In Canada the environment is more important as for example India. Although some respondents consider that private markets could become important customers (in the future), they all think that this will not be a major market. Furthermore, reputation to the society is discussed.

Some *employees* follow e-learning courses and NEVI courses. The result of this is that employees become familiar with SRB, which is expected to increase interests in the subject. However, these courses are not mandatory, or not generally known by employees. Therefore, it is not always been followed.

Customers: SRB is expected to shift to the defense industry. Nowadays, as has been declared, safety and quality issues are much more important than SRB issues. One respondent expects that therefore CSR becomes a "selling point". Another thinks that by pushing CSR towards the customers can in the long term create a "competitive advantage".

Offset copes with orders that go out to countries, where the system will be delivered. This could result in orders towards countries where for example political situations are not stable. This is generally not seen as a problem. Respondent claim that helping to develop these organizations could be seen as an objective for purchasing.

Table 5.2 summarizes the drivers for Thales and 5.3 the barriers for Thales that had been recognized by respondents are summarized.

Table 5.2 Drivers for CSR for Thales

Driver	Explanation
Management	Top management makes business ethics, but there is a lack of monitoring.
Regulation	Especially in the future, tighter regulations for this industry can be expected.
Value	Waste management can reduce Thales' costs.
Competition	Walk ahead of regulations, and pushing technology towards customers can result in a long term competitive advantage.
Value	Reduce risks because risks cost money.
Reputation	Especially towards governments with high CSR standards.
Employees	Some employees increased awareness in CSR.
Customers	Thales exports to other countries with different norms. E.g. Canada finds CSR important and systems are not customized, therefore we follow the tightest regulations. Furthermore, it could become a selling point.

Table 5.3 Barriers for CSR for Thales

Barrier	Explanation
Technology (products)	Technological restrictions (e.g. missile heads); in addition, some systems are already 20 years old. And redesign is too expensive if not necessary.
Regulation	The defense industry gets exemption for some harmful materials
Customers	For some customers, price is becoming an important topic.
Value	Proof that positive environmental performance has same quality, and redesign is costly.
Competition	CSR is not a sexy subject in the industry.

Offset	Forces that orders are placed in countries that are not preferred due to political situations.

5.3.3 Thales purchasing policy

As been shown before, it is not always possible to pay more for a social responsible product. Margins at Thales are shrinking, and price is the primary selling point. Furthermore, social practices are not of major importance in the specification phase. Nevertheless, the majority respects regulations with respect to environmental. And sometimes this means that the cost price is higher than other options.

Primarily forced by regulations and from the top management social responsibility is enforced in the different processes. But often no sanctions are taken along. There are *some CSR issues involved in Thales' policy*, but mainly to avoid claims. These issues are above all related towards child labour, corruption, and the environment, which are also supported by the purchasing personnel.

In the next section the current SRB elements and maturity levels of Thales related to SRB are analysed.

5.4 Thales SRB elements and maturity levels

In Table 5.4 the results of the study are summarized. After comparing the answers of different respondents with each other complemented with documents and second sources we determined an end result based on the best suitable answer, were 1 is reactive, 2 is developing, and 3 is proactive. However, some elements are missing and no end result could be formulated.

Table 5.4 SRB maturity overview: results of the study

Question	Score					Sample quote	End result
Respondent:	A	B	C	E	M		
To what extent is purchasing involved in corporate strategy development? Is this a documented and revolving process?		2	2	2	2	"Purchasing is not a member of the MT". So not involved.	2
What level of planning horizon is used for CSR objectives?						"Is not an issue" CSR objectives are not or ad hoc planned	
How is benchmarking performed?		1	1	1	1	"Only ISO certificates"	1*
How is market research performed?		3	2	1	1	"Depends on the product, we offered internal customers camera's that were cheaper, but only on price"	
How is dealt with regulation, law and industrial standards?	2	2	2	2	2	"Thales France states guidelines which follows regulations, and sometimes a bit more"	2
What kind of product specifications is given to suppliers?	3	2	3	2	2	"The specifications are primarily technology driven, we don't see this to influence social issues"	3
What collaboration is commonly used in order to deal with social responsible objectives?		2	1	2	1	"Social objectives are not a goal in itself"	1*
Is there a systematic supplier evaluation process in place?	1		1	1	1	"We do look to CSR issues but we are restricted by technology"	1*
Is there a systematic procedure for supplier development in place?		3	1	1	1	"If supplier does not have ISO certificate, we ask them to get it"	1*
How are employee developed in social responsible practices?	2	3	1	2	2	NEVI and e-learning courses	2

Additionally, Table 5.5 summarizes the capabilities that are present at Thales in more detail.

We have indicated that a reactive level seems to fit best to Thales' situation.

It should be noted that the table shows that the elements to prosecute the reactive CSR-orientation is almost met within Thales, however, there are some weak elements (the one with the *) that need some attention. This concern: CSR objectives are not planned and that in market research and benchmarks CSR objectives are not or partly taken along. It means that Thales has the elements to buy socially responsible on a reactive CSR-orientation, although they still lack real CSR issues. However, in these elements, CSR issues could easily be implemented. So for example, they perform benchmarks, but additional CSR issues should be added.

Table 5.5 SRB elements present at Thales overview

Element	At Thales
Purchasing involved in corporate strategy development	*Purchasing in not active in the management board*. Therefore, it is not involved in policy development. Nevertheless, as a department it provides for example a SWOT analysis on the supplier side. *The respondents expect that purchasing involvement increases because Thales is expected to buy more.*
The level of planning horizon for CSR objectives	The *purchasing involvement* in product and process planning differs between projects and products. Project with early and late (none) involvements are known. CSR objectives are not or ad hoc planned.
Benchmarking and market research	Both benchmarking and market research happens basically only on price, and barely on other factors. Sometimes Thales analyse suppliers on different certificates. But this is not an order winner or loser.
Deal with regulation, law and industrial standards	Thales follows the regulations; however these could be different from regulations outside the defense industry. Defense is often excluded because of high safety demands. The same goes for the environment. You can save a milligram of lead, while accidentally shooting of a missile, could cost a lot of lives.
Kind of product specifications given to suppliers	Purchasing wants to move towards standardization, but gives both functional and technical specifications. Specifications are not seen as measures to influence social performance.
Collaboration that is commonly used in order to deal with social responsible objectives	Use supply chains for innovative solutions, but social issues are not a goal itself. Supplier selection happens by: first, look to suppliers already in the database; another supplier must have substantial advantages before they are switched. Two, new suppliers fill in a questionnaire and thereby environmental subjects and ISO certificates are tested. Purchasing is responsible for supplier selection. However, it is not that they always have the product knowledge to actively debate product specifications with suppliers.
A systematic supplier evaluation process	Supplier evaluation happens on logistical issues, quality, and financial situations on a three months basis. A new tool QLTC in now introduced where hard and soft issues are continuously evaluated. Selective visits at suppliers. Normal audits for itself and its vendors (to expose and identify poor CSR performers within the supply base).
A systematic procedure for supplier development	Supplier development measures are developed individually.
Employee development in social responsible practices	Through NEVI and e-learning courses. (not mandatory)

Figure 5.6 shows the capabilities of Thales in the MSU model.

8 strategic processes	Stage										
In sourcing and outsourcing	0	1	2	3	4	5	6	7	8	9	10
Commodity Strategy Development	0	1	2	3	4	5	6	7	8	9	10
Establish and leverage a world class supply	0	1	2	3	4	5	6	7	8	9	10
Development and manage supplier relationship	0	1	2	3	4	5	6	7	8	9	10
Supplier involvement in new product/process development	0	1	2	3	4	5	6	7	8	9	10
Supplier involvement in order realization process	0	1	2	3	4	5	6	7	8	9	10
Supplier development and quality management	0	1	2	3	4	5	6	7	8	9	10
Strategic costs	0	1	2	3	4	5	6	7	8	9	10

Figure 5.6 Current MSU maturity profile for Thales related to SRB

Figure 5.7 shows the missing MSU elements. This explains what Thales should be capable of before they are able to buy social responsible, these are primarily represented by the processes “developing and manage supplier relationship”.

8 strategic processes	Stage										
In sourcing and outsourcing	0	1		3	4	5	6	7	8	9	10
Commodity Strategy Development	0		2	3	4	5	6	7	8	9	10
Establish and leverage a world class supply	0	1	2	3	4	5	6	7	8	9	10
Development and manage supplier relationship	0	1			4	5	6	7	8	9	10
Supplier involvement in new product/process development	0	1	2	3	4	5	6	7	8	9	10
Supplier involvement in order realization process	0	1	2	3	4	5	6	7	8	9	10
Supplier development and quality management	0	1	2	3	4	5	6	7	8	9	10
Strategic costs	0	1	2	3	4	5	6	7	8	9	10

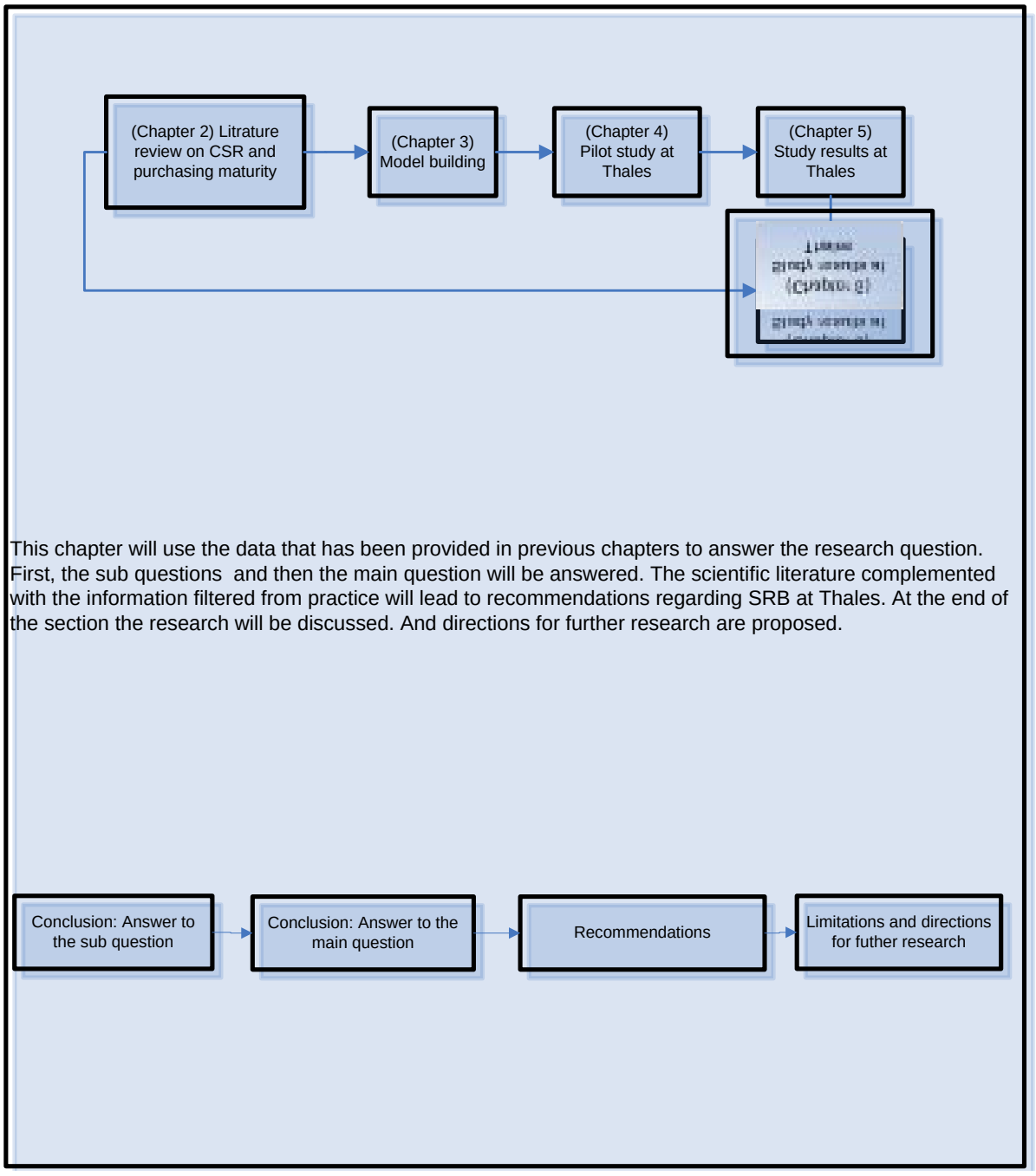
Figure 5.7 Shows the black spots where MSU elements are missing.

In short, Thales should focus on getting the MSU elements from Figure 5.7 so that they have sufficient absorptive capacity towards SRB, and are able to buy socially responsible, and should, if they follow a reactive CSR-orientation, give SRB shape with the missing and pointed SRB elements from Table 5.4.

Concluding remarks

This section describes the data analysis steps from raw data. Interview data and additional documentation is evaluated by means of one within case analyze. This analyze provides insight in the current purchasing elements that Thales Hengelo has and based on these measures, given a certain CSR-orientation, recommendations can be formulated. The analysis also shows that different respondents have different visions about processes and the role of purchasing in an organization. This is reasonable because Monzcka (2010) says that purchasing is a skills function, and that different products require different requirements. In the next chapter the results are summarized and conclusions are discussed. Then, recommendations can be formulated.

Chapter 6 Conclusion, recommendations, and directions for further research.



This chapter will use the data that has been provided in previous chapters to answer the research question. First, the sub questions and then the main question will be answered. The scientific literature complemented with the information filtered from practice will lead to recommendations regarding SRB at Thales. At the end of the section the research will be discussed. And directions for further research are proposed.

6.1 Conclusion: Answers to the sub questions

In chapter 1 we formulated the following sub questions:

1. *What are the key drivers and barriers of CSR and how do these relate to Thales?*
2. *How do we distinguish different strategies towards CSR and what key processes?*
3. *What competencies are required in different CSR-attitudes and how does this relate to the MSU model?*

In this chapter the main findings which answer the sub questions are summarized.

6.1.1 The key drivers and barriers of CSR within Thales

During the study the following main drivers were identified: *management, regulation, value, competition, reputation, employees, and customers*. Most of these drivers are in line with what we expected from the literature therefore, we suppose that the validity of these findings are high. The two most important drivers for Thales are top management commitment and regulation.

Table 6.1 summarizes the drivers for Thales and 6.2 summarizes the barriers for Thales that had been found during the analyses.

Table 6.1 Drivers for CSR for Thales

Driver	Explanation
Management	Top management makes business ethics, but there is a lack of monitoring.
Regulation	Especially in the future, tighter regulations for this industry can be expected.
Value	Waste management can reduce Thales' costs.
Competition	Walk ahead of regulations, and pushing technology towards customers can result in a long term competitive advantage.
Value	Reduce risks because risks cost money.
Reputation	Especially towards governments with high CSR standards.
Employees	Some employees increased awareness in CSR.
Customers	Thales exports to other countries with different norms. E.g. Canada finds CSR important and systems are not customized, therefore we follow the tightest regulations. Furthermore, it could become a selling point.

Table 6.2 Barriers for CSR for Thales

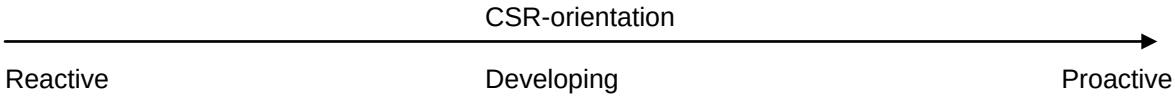
Barrier	Explanation
Technology (products)	Technological restrictions (e.g. missile heads); in addition, some systems are already 20 years old. And redesign is too expensive if not necessary.
Regulation	The defense industry gets exemption for some harmful materials
Customers	For some customers, price is becoming an important topic.
Value	Proof that positive environmental performance has same quality, and redesign is costly.
Competition	CSR is not a sexy subject in the industry.
Offset	Forces that orders are placed in countries that are not preferred due to political situations.

Considering the key drivers and barriers within Thales we conclude:

- Because of the strong market position of Thales it is expected that Thales has a leading role in CSR. However, the defense industry does not stimulate Thales to have a strong orientation towards CSR.
- The CSR regulations in specific markets create a necessity for Thales to adopt CSR practices. Therefore, regulations are being followed but adaption's that cost money are being avoided as much as possible.
- The main barrier results from technical specifications of Thales' products. And the offset regulations in markets with a low CSR standard where not described in literature, and can therefore been shown as a Thales specific barrier.

6.1.2 Key processes and strategies towards SRB

Researchers distinguish CSR-orientation between two extreme positions ranging from reactive towards a proactive orientation.



Where reactive companies typically add minimal effort in CSR, so that they hardly compliance with regulations. On the other hand, proactive companies will voluntary take measures to reduce their social impact. We segmented the range of CSR-orientations in three steps. We call these three steps reactive, developing, and proactive. Where reactive is defined as the orientation of companies that are social responsible for the business results, so they are more focussed on staying in business, and avoiding costs of unethical behaviour.

The systematic approach to determine the preferred CSR-orientations

Organizations can take additional steps to determine the suitable CSR-orientation as described in section 3.2.

The major conclusions of this procedure are:

- At Thales the response to the society reduced in importance.
- The main drivers are: regulations and top management.
- A focus for Thales is on avoiding claims and scrutiny.
- The main motive to increase interest in SRB is to increase business results.

Based on this procedure, which was applied to, and discussed within Thales, the preferred CSR-orientation is reactive.

The purchasing elements which influence SRB?

The important elements of purchasing that have an influence on SRB are: *planning, supplier selection, supplier evaluation and development, specification, policy development, and regulation.* We checked the literature with the opinion and examples of situations of the different respondents of Thales. Because of the commonalities between literature and the main conclusions we can say that the validity is high. At Thales the following additional purchasing elements were identified: contracting, and logistics.

Considering the key processes and strategies towards SRB we conclude:

- Companies can have 3 different SRB-orientations: reactive, developing, and proactive. Table 3.2 shows the different SRB elements which define the level of CSR-orientation.
- The purchasing elements that have most influence upon SRB are: specification, market research, supplier selection, and supplier evaluation. Contracting and logistical subjects are partly and not described by literature and due to their expected relevance these elements can be added.
- Considering the market orientation of Thales and the preconditions to determine the preferred level of CSR-orientation, a reactive approach seems to be the most suitable for Thales.

6.1.3 Relationship between SRB elements and the MSU model

In chapter 2 the SRB elements were discussed. We related these elements to the MSU model and evaluated “the best possible fit” for every stage in chapter 3. The result of this is Figure 6.1, which is again shown below. This is thus the maturity level that an organization should have, so that it has enough absorptive capacity to buy social responsible, at a certain level.

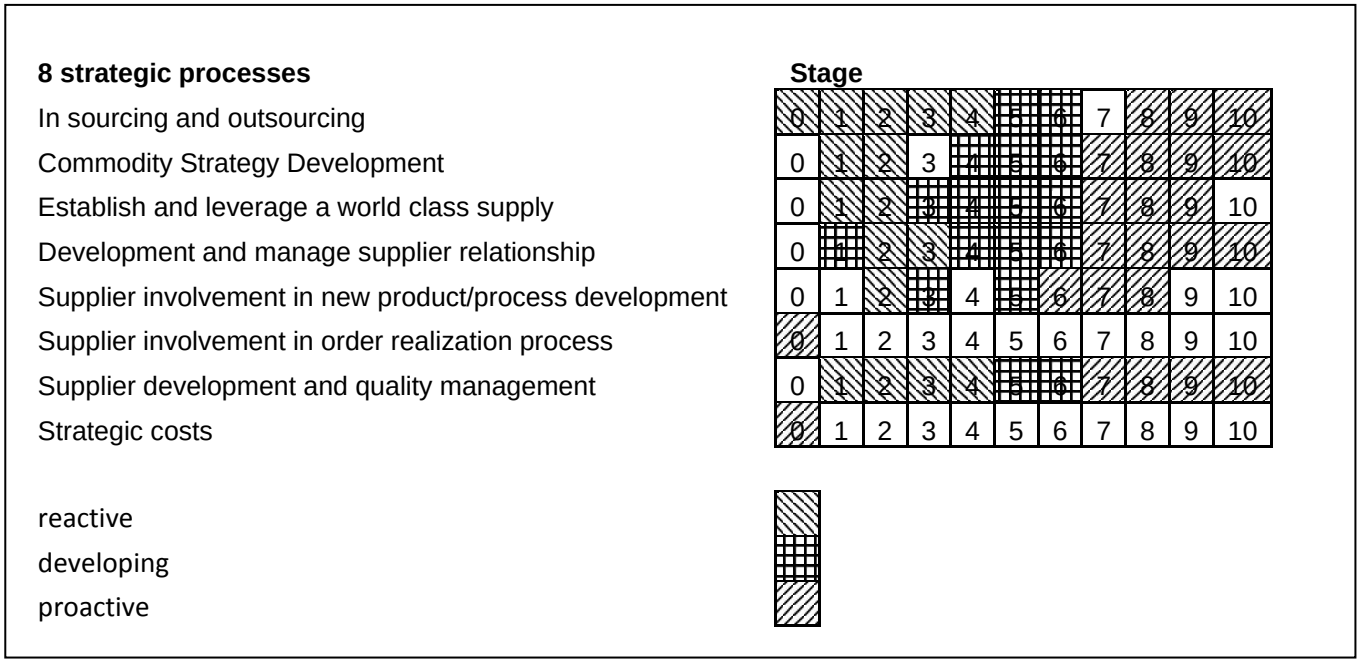


Figure 6.1 Linking the strategic processes MSU with CSR-orientations

Although some of the enabler processes of the MSU model can be defined as an enabler for SRB, it is not always possible to segment them between "reactive, developing or proactive". Therefore, we chose not to use these enablers in this research.

6.2 Conclusion: Answer to the main question

In chapter 1 we formulated the following research question:
Does Thales have the capabilities to buy social responsible at the preferred CSR-orientation?

This section summarizes the main findings and recommendations through which we accomplish this objective.

In interviews, secondary literature, and informal meetings the SRB elements of Table 6.3 were not sufficiently found to be present at Thales.

Table 6.3 insufficient SRB elements overview: results of the study

Element	At Thales
The level of planning horizon for CSR objectives	The *purchasing involvement* in product and process planning differs between projects and products. Project with early and late (none) involvements are known. CSR objectives are not or ad hoc planned.
Benchmarking and market research	Both benchmarking and market research happens basically only on price, and barely on other factors. Sometimes Thales analyse suppliers on different certificates. But this is not an order winner or loser.
Collaboration that is commonly used in order to deal with social responsible objectives	Use supply chains for innovative solutions, but social issues are not a goal itself. Supplier selection happens by: first, look to suppliers already in the database; another supplier must have substantial advantages before they are switched. Two, new suppliers fill in a questionnaire and thereby environmental subjects and ISO certificates are tested. Purchasing is responsible for supplier selection. However, it is not that they always have the product knowledge to actively debate product specifications with suppliers.

A systematic supplier evaluation process	Supplier evaluation happens on logistical issues, quality, and financial situations on a three months basis. A new tool QLTC in now introduced where hard and soft issues are continuously evaluated. Selective visits at suppliers. Normal audits for itself and its vendors (to expose and identify poor CSR performers within the supply base).
A systematic procedure for supplier development	Supplier development measures are developed individually.

We have indicated that a reactive level seems to fit best to Thales' situation. Therefore, Thales also needs fill in the gaps (black spots) so that they have enough absorptive capacity, and therefore are able to buy socially responsible, which Figure 6.2 shows.

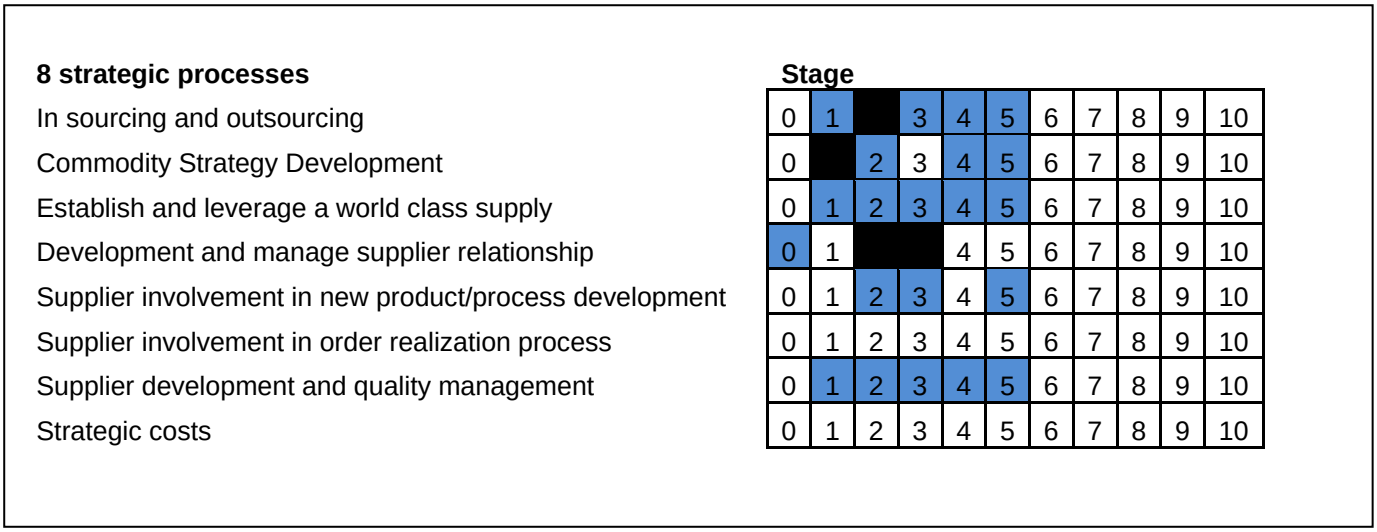


Figure 6.2 Shows the black spots where MSU elements are missing.

In short, Thales should focus on getting the MSU elements from Figure 6.2 so that they have sufficient absorptive capacity towards SRB, and are able to buy socially responsible, and should, if they follow a reactive CSR-orientation, give SRB shape with the missing and pointed SRB elements from Table 6.3.

6.3 Recommendations

The recommendations presented in this section are the result of several iterations of literature studies, discussions with academic staff, and validation sessions with Thales. In section 6.3.1 recommends that the purchasing policy to buy socially responsible should follow from the organizational policy. In section 6.3.2 the recommendations from the main conclusions are stated. From section 6.3.3 to section 6.3.4 are not directly related to the scope of the thesis. However they follow from the knowledge gained resulting from this Thesis, and can be seen as positive externalities. They may enable purchasing improvement programs and SRB.

6.3.1 Align purchasing policies with organizational policies

During many informal meeting with experienced purchasing managers and academics, we recognized that social responsibility is one of the many additional subjects of buying "good". And it will increasingly be introduced in many processes. By already mentioning and anticipating on SRB an organization can be prepared for future changes in the business. In fact it could be an industry innovator on CSR. In our vision it could disrupt other organizations that lack these skills, and therefore, by being an innovative organization, Thales could be able to stay ahead of competition. To embed SRB policies within purchasing department the purchasing policies should be expended with SRB elements. This enables that purchasing policies are in line with organizational policies. In short:

- Include SRB policies within purchasing policies as stated by the organizational policies and check ethical subjects on performance.

6.3.2 Improving purchasing elements

The main conclusion regarding the maturity of Thales and the elements it needs to improve is related to supplier development and relationship.

To gain absorptive capacity, and other SRB elements we recommend:

- Create a process to indentify suppliers that are performing below the level that the Thales Group has stated. Formulate supplier improvement programs and evaluate suppliers based on these processes and programs.
- Include SRB criteria in market research, benchmarks, and contracts.
- Product lifecycles within Thales are long and changing products is expensive. Therefore including social statements early in the planning process is recommended. Changing products in the early part of the lifecycle could be cheaper.
- Use the supply chain for innovative solutions, and move as much as possible towards standardization. Standardized products are easily interchangeable. Therefore, if for example a less energy consuming product enters the market it's effortlessly implementable.
- Demand suppliers to help listing harmful materials, if there are any of them. Some entities (for example firefighters) also need this information for safety reasons.
- Purchasing should feel more responsible to debate opportunities in the product specification phase, and should understand more technical requirements. Thereby, increasing the power of the purchasing department.

6.3.3 Improve purchasing performance by using the MSU model

A perfect externality follows from the use of a benchmark model to measure purchasing maturity. A higher maturity is correlated to a higher purchasing performance. A maturity profile shows other entities in a glance the results and therefore are easy communicable, consequently it shows actions for improvement. Since, purchasing within Thales is primarily used as a cost-cutter we recommend:

- Use the MSU model regularly as a benchmark to determine maturity, show improvement opportunities, and use MSU as a starting point for long term purchasing improvement programs. Monzcka claims that benchmarking once a year is fine, Philips does it every year for all purchasing employees and links it with objectives uses this to judge personal performance. For example, every purchasing manager should next year have an level 7 maturity on process 1.

6.3.4 Learn personnel how to deal with social responsibility and show the benefits

A third important conclusion is the lack of knowledge that employees have about SRB. For example, even though it is not clear whether SRB increases or decreases costs, employees already empathic believe that SRB is related to costs. By realizing the opportunities SRB can have for an organization a mindset could be created which enables socially responsible practices. Therefore we recommend:

- Communicate with other business functions (e.g. technical managers) and personnel the facts and opportunities SRB can have, so they become more familiar with the opportunities it creates.
- Make courses mandatory and use this to judge personal performance.

6.4 Discussion

This section describes the final part of this thesis and discusses the limitations and directions for further research.

6.4.1 Limitations of this Thesis

Since we tried to integrate SRB and MSU model in chapter 3 the following observations were made: Although we tried to relate these two practices qualitatively, there is still room for improvements. We included the important SRB elements that were argued in literature, which were discussed with academics, in the MSU model. However, a limitation of this research is that the validity of the model could be improved by checking the 2 subjects quantitative. In the ideal situation it would be a natural experiment, where a group of companies which are socially responsible show what their maturity is. And a group of companies that try to be social responsible but can't and determine what their maturity is. And see if any statistical conclusions and (causal) relations can be formulated.

Furthermore, in the 5 step procedure to determine the preferred CSR-orientation there is also room for improvements. Since we know how the preferred CSR-orientation should look like, we still didn't manage to determine it quantitative. So it's interesting to find out if there is an empirical method to determine on what level SRB should be executed.

We collected the data for the interviews through personal surveys. And there is a good reason to be skeptical towards the data. There is often a vast gulf between how people say they behave and how they actually behave, and how they should behave. These behaviors are known as declared preferences and revealed preferences. Furthermore, when it costs almost nothing to fib a reasonable amount of fibbing is expected. The fibs may even be subconscious, with the subject simply saying that she expects the surveyor want to hear. But when you can measure the revealed preference, or the actual behavior you are getting somewhere. This is what is still partly missing.

6.4.2 Directions for future research in the academic field of SRB maturity

New in this research is the implementation of SRB in the MSU model in Figure 4.1. To come to this implementation, we performed a qualitative research which combined the two fields of research. Furthermore, we had a look upon how this applied to Thales. However, what should be interesting is an empirical research to test the relation considering SRB and purchasing maturity. As explained in Section 6.4.1.

Another interesting field of research would be to link the enablers as stated in Table 2.5 with the different levels of CSR-orientations. In this research we found that current scholarly literature lacks a description of this.

An in-depth study to the procedure of determining the preferred CSR-orientation is welcome. This will also improve the validity of future implementations of this theory.

6.4.3 Directions for future research at Thales

To make sure that Thales is profiting from the use of the MSU model it should determine if Thales is able to, and if not, how they could be able to determine the real maturity levels. For example, measure the gap between the real maturity levels and the maturity levels provided by respondents.

Determine the financial consequences of SRB practices for Thales or organizations in the defense industry.

6.5 Final statement

During my research the legitimate of SRB for Thales became weaker. Although I know that the top management in France was interested in CSR I assumed that this also was the case for Thales Hengelo. However, I noticed that a lot of colleagues were not aware of the results of SRB (only on the increasing costs part). There is a based reason to question the whole SRB subject at Thales. Not only at Thales, but business results in several industries including the defense industry, are with no doubt in my opinion always the most important. Still, making profit in an ethical way is no more than a duty for businesses around the world, and especially in developed countries. It is hard to say if financial consequences of SRB are positive or negative for Thales. But there is no doubt that purchasing in the long run still can make tremendous steps forward in increasing product quality, costs reductions, inventory reductions and so on. I found out that purchasing at Thales was not used as an innovator engine or an entity to improve quality, rather that purchasing more and more became focused on short term cost reductions. I also found out that ICT functions did not or partly worked as mentioned. However, I know that Thales is waiting for the implementation of a new ERP system. The most interesting subject of this Thesis is the whole improvement opportunity Purchasing can have at Thales.

Thales never seriously used benchmark models to look for weaknesses at purchasing, let alone indentify possible improvements..

References

Articles

Auer A., “Corporate Environmental Innovation (CEI): a government initiative to support corporate sustainability leadership”, Journal of Cleaner Production, 14, 2006, 589-600

Allen, B., *"In pursuit of responsible procurement", 2006, Summit, 9(4), 7*
Carroll, A.B*., “A Three-Dimensional Conceptual Model of Corporate Performance”, The Academy of Management Review, 1979, Vol. 4, No. 4, pp. 497-505*

Carter C.R. and Jannings M.M., *logistics social responsibility: an integrative framework journal of business logistics, Vol. 23, No. 1, 2002, 145-180*

Carter C.R. and Jannings M.M., the role of purchasing in corporate social responsibility: a structural equation analysis *journal of business logistics, Vol. 25, Na 1.200*

Carter C.R. and Dresner, *Purchasing role in environmental management: cross-functional development of grounded theory,* Journal of supply chain management, 2001, 12-27

Carter C.R. and Carter J.R., *Inter organizational Determinants of Environmental Purchasing: Initial Evidence from the Consumer Products Industries,'* Decision Sciences', 1998, Vol. 29 N. 3 659-684

Davis, K., and Blomstrom, R. L., *Business and its environment, New York McGraw-Hill, (1975), 19-66.*

Drumwright, M. *"Socially Responsible Organizational Buying: Environmental Concern as a Noneconomic Buying Criterion.", Journal of Marketing, (1994)., 58: 1-19.*

Elkington, J., *Cannibals with Forks, The Triple Bottom-line of 21st Century Business, Oxford: Capstone (1997)*

Elkington, J., '*towards the sustainable corporation: win-win-win business strategies for sustainable development', California management review, 90-100*

Gamble P. R. and Gibson D. A., *Executive Values and Decision Making: The Relationship of Culture and Information Flows Journal of Management Study Volume 36, Issue 2, pages 217–240, March 1999*

Goldsby T. J. and Stank T. P., *journal of business logistics, vol.21, no. 2, 2000 187-208 world class logistics performance and environmentally responsible logistics practices*

Green, K., Morton, B., and New, S*.,' Green purchasing and supply policies: do they improve companies' environmental performance? ', Supply Chain Management, Vol. 3, N. 2 · 1998 pp. 89–95*

Hall, J., *'Environmental supply chain dynamics', Journal of Cleaner Production, 2000, vol. 8, pp. 455–471*

Handfield, R., Walton, S.V., Sroufe, R., Melnyk, S.A., *'Applying environmental criteria to supplier assessment: A study in the application of the Analytical Hierarchy Process', European Journal of Operational Research, 2002, 141, pp. 70–87*

Handfield, R., Robert B., Walton S.V, Seegers L. K., and Melnyk S. A. *'Green Value Chain Practices in the Furniture Industry," Journal of Operations Management, (1997), Vol. 15, No. 3, pp. 293-315.*

Hanna, M. Newman, W. Johnson, P. *Linking Operational and Environmental Improvement Through Employee Involvement, International Journal of Operations and Production Management, (2000) 20, 2, 148-165*

Hunt C, Auster E. *“Proactive environmental management: avoiding the toxic trap. Sloan Management Review 1990; winter: 7–18.*

Kopicki, R. Berg M. J., Dasappa L. L. V. and Maggioni C., *Reuse and Recycling -- Reverse Logistics Opportunities Council of Logistics Management, 1993.*

Lamming, R., Hampson, J., 1996. *The environment as a supply chain management issue. British Journal of Management 7, 45–62.*

Lantos G. P*., the Boundaries of Strategic Corporate Social Responsibility 2001*

Lenzen, M. et al., *'Shared producer and consumer responsibility –Theory and practice', ecological economics, 2007, vol. 61, 27-42*

Maignan, I., Hillebrand, B., McAlister, d., "*Managing socially-responsible buying: How to integrate non-economic criteria into the purchasing process." European Management Journal* (2002). *20(6): 641-648.*

Maignan, I., Ralston D.A., *"Corporate Social Responsibility in Europe and the U.S.: Insights from Businesses' Self-Presentations"* (2000).

Maloni, M. E. and Brown, M. J. (2006)., *"Corporate Social Responsibility in the Supply Chain: An Application in the Food Industry." Journal of Business Ethics 68(1): 35-52.*

Mc adam T. (1973), McAdam,T . W. *How to put corporate responsibility in to practice. Business and Society Review/Innovation, 1973, 6, 8-16.*

McWilliams, A., Siegel, D., *'Corporate social responsibility: A theory of the firm perspective', Academy of management review, 2001, vol. 26, No.1, pp. 117-127*

Mont O. and Leire C., *Exploring socially responsible purchasing in Swedish Organizations, 2009 1-23*

Morimoto R., Ash J., and Hope C., *Corporate Social Responsibility Audit: From Theory to Practice*

Mogee M. E. and Bean A. S. *, the role of the purchasing agent in industrial innovation industrial Marketing Management 5 221-229*

Mendibil K., Hernandez J. , Espinach X. , Garriga E. , Macgregor S*. how can csr practices lead to successful innovation in smes?*

New, S., Green, K., Morton, B., 2000, *Buying the environment: the multiple meanings of green supply. In: Fineman, S. (Ed.), the Business of Greening. Routledge, London, 2000 pp. 33–53.*

Paulraj, A., Chen, I.J., Flynn, J., 2006*. Levels of strategic purchasing: impact on supply integration and performance. Journal of Purchasing and Supply Management 12, 107 • 122*

Perrini F., *Building a European Portrait of Corporate Social Responsibility European Reporting Management Journal Vol. 23, No. 6, pp. 611–627, 2005*

Porter, M.E., Van de Linde, C., *Green and competitive. Harvard Business Review September–October, 1995, 120–134.*

Roberts, S. *"Supply chain specific? Understanding the patchy success of ethical sourcing initiatives." Journal of Business Ethics 2003. 44(2-3): 159-170.*

Schiele, H. *How to distinguish innovative suppliers? Identifying innovative suppliers as new task for purchasing Industrial Marketing Management, 2006, 35, 925–935*

Schiele H., *Supply-management maturity, cost savings and purchasing absorptive capacity: Testing the procurement–performance link Journal of Purchasing and Supply Management Volume 13, Issue 4, 2008, Pages 274-293*

Sparks, R., Cowton, C.J., 2004, *'The maturing of socially responsible investment: a review of the developing link with corporate social responsibility, journal of business ethics 52: 45–57, 2004*

Tulder V, R. Wijk, J. Kolk, A. (2008) *From Chain Liability to Chain responsibility, Journal of Business Ethics*

Voss. C., Tsikriktsis. N., and Frolich. M., *'Case research in operations management', International journal of operations & production Management, 2002, Vol. 22, No.2, pp. 159-219*

Walker H., Di Sistob L., McBainc D. (2008), *Drivers and barriers to environmental supply chain management practices: Lessons from the public and private sectors, Journal of Purchasing & Supply Management 14 69–85*

Webb, D. J., Mohr, L. A., et al. (2008). *"A re-examination of socially responsible consumption and its measurement" Journal of Business Research 61(2): 91.*

Wells, D. (2004). *"How Ethical Are Ethical Purchasing Policies?" Journal of Academic Ethics 2(1): 119-140.*

Wood, D., *'Corporate Social Performance Revisited', Academy of Management Review 1991, vol. 16 No. 4, pp. 691–718.*

Whitehouse, L. *"Corporate Social Responsibility: Views from the Frontline." Journal of Business Ethics 2006, 63(3): 279.*

Wood D.J., *academy of management review 1991, vol. 16. no. 4. 691-718 corporate social performance revisited*

Van Weele, A.J., Rietveld, G., 2000. *Professional development of purchasing in organisations: towards a purchasing development model. In: WMRC (Ed.), Global Purchasing and Supply Chain Strategies. Touch Briefings, London, pp. 170–175.*

Wilson I. 1974, *Long Range Planning Volume 7, Issue 5, October 1974, Pages 2-6 Reforming the strategic planning process: Integration of social responsibility and business needs*

Yin, R. (2003) *Case Study Research: Design and Methods, Sage Publications, Thousand Oakes*

Young, R. R.: 2000, *Managing Residual Disposition: Achieving Economy, Environmental Responsibility and Competitive Advantage Using the Supply Chain Framework, Journal of Supply Chain Management 36(1), 57–66.*

e-Books

Kvale, S., 1996, *'Interviews: an introduction to qualitative research interviewing'*, Sage publications, ISBN:0-8039-5820-x

Riemsdijk, M.J. van. 1999. '*Dilemma's in de bedrijfskundige wetenschap*.' NUGI, ISBN 90232

Books

Trott, P. 1997. '*Innovation Management and New Product Development*.' Prentice Hall ISBN-13 9780273655602

Rietveld, G. 2009. '*Inkoop, een nieuw paradigma*.' SDU, ISBN-13: 9789012581240

Monzcka et al. 2010. *'Purchasing and supply chain management'* Cengage Learning, ISBN-13 9781408017449

Website

Thales corporate website:
www.thalesgroup.com
Thales purchasing intranet page:
http://tnlweb.nl.thales/~pur/index1.shtml
Thales corporate annual CSR report
http://www.thalesgroup.com/assets/0/88/220/c0b4ff86-0f8e-4362-9bbb-fe2076397d6c.pdf?LangType=2057
MVO Nederland, 2009-11-06:
www.mvonederland.nl
MSU model
http://www.inkoopportal.com/inkoopportal/download/common/msu__model1.pdf
Senternovem
www.senternovem.nl/duurzaaminkopen

Appendix 1 MSU maturity scores (in Dutch)

Strategisch proces 1: Nemen van een besluit over inbesteden (zelf doen) of uitbesteden

0	Proces is niet van toepassing voor de organisatie of het organisatieonderdeel.
1	Geen of weinig bewijs van de aanwezigheid van een gestructureerd besluitvormingsproces voor het in- of uitbesteden. Er wordt een *ad hoc* benadering gehanteerd. Er is sprake van specifieke crisisgerelateerde besluitvorming en implementatie, afhankelijk van bepaalde sleutelpersonen. Gedreven door capaciteitsoverwegingen. Weinig tot geen meetinstrumenten/prestatie-indicatoren (vooraf/achteraf). Inkoopdeskundigheid is niet betrokken of alleen bij de uitvoering. Er vindt weinig tot geen communicatie plaats met belanghebbenden. Geen bewijs dat aandacht uitgaat naar wet- en regelgeving.
2	Systematisch, multidisciplinair besluitvormingsproces over kern- en niet-kerncompetenties, gebaseerd op *interne* informatie, kosten-batenanalyses o.b.v. een beperkt aantal beoordelingscriteria en *kortetermijndoelstellingen*. Weinig bewijs van een gestructureerd implementatieproces. Er is alleen communicatie binnen het project. Er is weinig bewijs dat aandacht uitgaat naar wet- en regelgeving.
3	Als 2, maar gebaseerd op interne en *externe* informatie. Inkoop(deskundigheid) is betrokken in het besluitvormingsproces als informatiebron voor kennis over het huidige leveranciersbestand. Er is goed nagedacht over *externe samenwerking*.
4	Als 3, maar gebaseerd op huidige en *toekomstige* behoeften: beslissingen zijn duidelijk genomen op basis van de eigen strategie en met kennis van de korte- en langetermijnstrategie van de huidige leveranciers en hun aanwezige vaardigheden en kwaliteiten (eventueel aangevuld met *benchmarkstudies*). Er vindt communicatie plaats over de afdelingen heen binnen de totale organisatie.
5	Als 4, maar besluiten over in- / uitbesteden zijn ook genomen op basis van kennis over de korte- en langetermijnstrategie en de vaardigheden / kwaliteiten van *potentiële leveranciers*. Potentiële leveranciers zijn geïdentificeerd door inkoopmarktonderzoek en leveranciersbeoordeling. Er is *bewijs dat wet- en regelgeving wordt nageleefd* en er vindt *formeel afgewogen* besluitvorming plaats over het al dan niet samenwerken met geschikte externe partijen.
6	Als 5, waarbij besluiten over in- / uitbesteden duidelijk zijn gebaseerd op kosten-batenanalyses o.b.v. een *integrale* set van beoordelingscriteria. Er bestaat een duidelijk beeld van alle kosten en er is een evolutieproces van alle kostelementen voor en na in- / uitbesteden. De onderbouwing van deze objectieve analyse is vastgelegd. Er is bewijsbaar sprake van duidelijke doelstellingen. Op basis hiervan wordt gemeten. Inkoop wordt ook betrokken bij bedrijfseconomische afwegingen. Er is een uitgebreid *communicatieplan* met aandacht voor verschillende interne belanghebbenden.
7	Als 6, en er is bewijs van een gestructureerd *implementatieproces*. Duidelijk gedefinieerde uitbestedingsovereenkomsten zijn beschikbaar, die alle relevante onderwerpen afdekken. Enige taakstellingen zijn geformuleerd.
8	Er bestaat een formeel in- / uitbesteden besluitvormingsproces en een *formeel* implementatieproces. De gevolgen voor de interne organisatie zijn helder. Bovendien vindt er een evaluatie plaats van de mate waarin de wet- en regelgeving wordt nageleefd om een besluit over in- / uitbesteden te kunnen nemen. Ook wordt de besluitvorming over samenwerking met geschikte partijen geëvalueerd.
9	Als 8, maar met inbegrip van een *formeel beoordelings- / evaluatieproces* op hoog bestuursniveau van resultaten op basis van doelstellingen (inclusief analyse van de acties en de eventuele corrigerende maatregelen). Expliciete vastlegging van de resultaten. Er is ook communicatie over in- / uitbesteden met de leveranciersmarkt.
10	*Multidisciplinair, organisatieoverstijgend* besluitvormingsproces: beoordeling van de kerncompetenties op basis van grensoverschrijdend inzicht (intern, klanten, leveranciers).

Strategisch proces 2: Ontwikkelen van een strategie per inkooppakket

0	Proces is niet van toepassing voor de organisatie of het organisatieonderdeel.
1	Geen proces voor de ontwikkeling van een strategie per inkooppakket aanwezig. Respectievelijk geen of zeer beperkt aantoonbaar bewijs van het bestaan van inkooppakketstrategieën binnen de inkoopafdeling. Geen gedocumenteerde strategie. Er vinden geen of ad hoc leveranciers-marktonderzoeken plaats. Geen communicatie met direct belanghebbenden en geen bewust gebruik van inkoopmodellen voor het samenstellen van een strategie. Er is geen bewijs dat er aandacht uitgaat naar wet- en regelgeving.
2	*Multidisciplinaire* teams zijn geïnstalleerd om een strategie per inkooppakket te ontwikkelen. Er zijn functionarissen aangesteld om de doelstellingen van de teams te formuleren, de besluitvorming over de teams heen te coördineren, gedegen te evalueren of de competenties van de teams nog overeenkomen met de strekking van de strategie en om participatie van de juiste deelnemers te organiseren. Teams komen aantoonbaar bij elkaar. Het ontwikkelen van de strategie per inkooppakket is gebaseerd op intern gedefinieerde eisen aan het product. Deze informatie is onder andere verkregen op basis van reactief overleg met de *interne klant*. De focus ligt op de *korte termijn* en men denkt na over marktwerking. Inkoopstromen en risico analyseert men op basis van prijs en volume. Er is enig bewijs dat er aandacht uitgaat naar wet- en regelgeving.
3	Als 2, maar de strategie per inkooppakket is ook gebaseerd op een *gedegen begrip van de structuur en ontwikkeling van de leveranciersmarkt* (gedocumenteerd), inclusief de specifieke bedrijfssituatie, vaardigheden, prestaties en resultaten van zowel huidige als potentiële leveranciers. Tevens maakt men gebruik van inkoopmodellen voor het onderscheiden van inkooppakketten.
4	Als 3, maar ook gebaseerd op de eisen aan het inkooppakket die met de interne *klant* zijn geïdentificeerd en afgestemd. De focus van de strategie is op de lange termijn. Voor het bepalen van aanbestedingsstrategieën houdt men rekening met wet- en regelgeving. Tevens vindt er een analyse plaats van inkoopstromen en risico op basis van kosten.
5	Formeel, gestructureerd en gedocumenteerd proces voor de ontwikkeling van een strategie per inkooppakket, gebaseerd op zowel de interne als externe (klanten-) eisen inclusief een formeel evaluatieproces voor prioritering van alle relevante eisen. Voor het bepalen van de strategie gaat men proactief te werk richting de interne markt. Gedetailleerd plan van aanpak aanwezig, waarin taken, verantwoordelijkheden en data zijn opgenomen. Het kritieke pad is expliciet zichtbaar gemaakt. Beperkt aantoonbaar dat communicatie met direct belanghebbenden plaatsvindt. Nauwelijks sprake van grensverleggende doelstellingen. Wet- en regelgeving wordt nageleefd.
6	Als 5, maar de strategie is gebaseerd op *technologieontwikkelingsplannen* die binnen de eigen organisatie en met de leveranciersmarkt zijn *afgestemd* en gebundeld. Men werkt organisatieoverschrijdend samen. Verschillende innovatieve vormen van aanbestedingen zijn formeel overwogen (contractvormen, selectiecriteria).
7	Als 6, maar inclusief specifieke, meetbare, tijdsgebonden (SMART) en *grensverleggende doelstellingen*, in lijn met organisatie- en inkoopbeleid. Een analyse van inkoopstromen en risico's vindt plaats voor het proces. Gestructureerde opvolging en evaluatie van resultaten (inclusief corrigerende acties). Expliciete vastlegging van bereikte en verbeterde resultaten.
8	Als 7, voor het opstellen van de strategie werkt men intensief samen met interne markten. Daardoor ontstaat commitment. Met de belangrijkste interne en eventueel externe belanghebbenden vindt er *regelmatig terugkoppeling / afstemming* van de strategie per inkooppakket plaats. Voor de aanbestedingsstrategie houdt men rekening met de onderlinge verhoudingen en mechanismen op de leveranciersmarkt. Men evalueert de wijze waarop de organisatie wet- en regelgeving naleeft.
9	Als 8, waarbij men in het strategieontwikkelingsproces eveneens rekening houdt met *benchmarkonderzoeken.*
10	Als 9, waarbij *formele risicobeoordeling van de leveranciersmarkt* een integraal onderdeel van de inkooppakketstrategie is. Er vindt een continue evaluatie van de aanbestedingsstrategie plaats. Ook vindt er identificatie en opvolging van verbeteringen in ontwikkeling van aanbestedingsstrategieën plaats.

Strategisch Proces 3: Optimaliseren van het leveranciersbestand

0	Proces is niet van toepassing voor de organisatie of het organisatieonderdeel.
1	Leverancierssselectie is gebaseerd op prijs en beschikbaarheid. Geen initiatieven voor optimalisatie van het leveranciersbestand of in beperkte mate gebaseerd op de kwalitatieve perceptie van de leverancierssprestatie en eenvoudige evaluatie van kosten en inkooprisico. Leveranciers worden met name onderverdeeld in strategisch en niet-strategisch. Geen bewijs dat voldoende aandacht wordt besteed aan wet- en regelgeving.
2	Er bestaat een formeel en gedocumenteerd *leverancierssselectieproces* gebaseerd op huidige eisen en capaciteiten van de organisatie. Weinig tot geen bewijs van gedifferentieerd beleid voor strategische en niet-strategische leveranciers. Er vindt ad hoc leveranciersmarktonderzoek plaats. Enig bewijs dat aandacht uitgaat naar wet- en regelgeving.
3	Als 2, maar inclusief de aanwezigheid van een *eenvoudig leveranciersmetingssysteem*, waarmee men in ieder geval kwaliteit en leveringsbetrouwbaarheid van strategische leveranciers meet. Weinig bewijs van formele communicatie over dit onderwerp richting belanghebbenden.
4	Als 3, maar met een leveranciersmetingssysteem, uitgebreid met een *eenvoudig leverancierskwalificatiesysteem,* dat het optimalisatieplan van het leveranciersbestand ondersteunt.
5	Als 4, maar waarbij het leveranciersbestand uitgebreid is geanalyseerd op basis van inkoopomzet en inkooprisico. Documentatie is aanwezig in de vorm van *analyses aan de hand van inkoopmodellen.* Weinig bewijs dat op basis van deze analyse gedifferentieerde actie richting leveranciers plaatsvindt. Er is bewijs van naleving van wet- en regelgeving.
6	Als 5, maar duidelijk aantoonbaar dat er een *gedifferentieerd managementproces van het leveranciersbestand* plaatsvindt. Dit gebeurt op basis van analyses aan de hand van inkoopmodellen. Gedocumenteerde bewijsvoering van differentiatiestrategieën en acties richting leveranciers.
7	Als 6, maar tevens is een *geavanceerd leveranciersmetingssysteem* aanwezig. Dit systeem dekt zowel de lopende producten af, als het innovatieproces voor producten en processen. De criteria zijn gewogen in lijn met het organisatiebeleid, multidisciplinaire betrokkenheid en objectieve metingen. Bewijs is aanwezig dat de aanpak resultaat heeft en doelstellingen worden gerealiseerd. Deze informatie wordt gecommuniceerd richting leveranciers en met regelmaat worden verbeterprogramma's doorgesproken. De volgende informatie is beschikbaar voor alle strategische leveranciers en hoofdbetrokkenen over de huidige eisen en vaardigheden: status van het leveranciersbestand, leverancierssprestaties en verbeteringsacties.
8	Als 7, en er bestaat een formeel gedocumenteerd leverancierssselectieproces gebaseerd op toekomstige behoeften. Tevens vinden er *regelmatige beoordelingen* plaats van alle strategische leveranciers (bijvoorbeeld beoordeling van capaciteiten en actualisatie van het leverancierssprofiel) met als doel een duidelijk begrip te krijgen en te houden van de leverancier en zijn huidige en toekomstige mogelijkheden en vaardigheden (in relatie met de huidige en toekomstige behoeften en eisen van de eigen organisatie). Evaluatie van de naleving van wet- en regelgeving.
9	Als 8, maar inclusief de mogelijkheid tijd en middelen te besteden aan fundamenteel *leveranciersmarktonderzoek* (uitgaande van goed begrip van organisatie-eisen en het leveranciersbestand). De planning en uitvoering van inkoopmarktonderzoek zijn bewijsbaar gedocumenteerd.
10	*Gedifferentieerde strategie per inkooppakket* aanwezig (tenminste score 7 bij element 2) teneinde het leveranciersbestand te kunnen optimaliseren en de prestaties van het juiste aantal en type leveranciers te maximaliseren.

Strategisch proces 4: Ontwikkelen en managen van de leveranciersrelatie

0	Proces is niet van toepassing voor de organisatie of het organisatieonderdeel.
1	In het inkoopbeleid is een formele *definitie* aanwezig met welke leveranciers men een strategische relatie dient op te bouwen. Formeel proces aanwezig om de *criteria en doelstellingen* voor iedere relatie vast te stellen in overeenstemming met het inkoopplan en organisatiedoelstellingen. Geen bewijs dat voldoende aandacht wordt besteed aan wet- en regelgeving.
2	Gedocumenteerd en gestructureerd proces aanwezig *om potentiële (strategische) leveranciers te identificeren, beoordelen en selecteren* op basis van gedefinieerde criteria (zoals onder 1. gedefinieerd). Weinig bewijs voor het bestaan van gestructureerde communicatiekanalen en gemeenschappelijke formulering van doelstellingen. Enig bewijs dat er aandacht uitgaat naar wet- en regelgeving.
3	Als 2, waarbij (indien relevant) voor de meeste strategische leveranciers overeenkomsten aanwezig zijn, inclusief documentatie dat men werkt aan een *leveranciersrelatieprogramma.*
4	Als 3, waarbij *senior management* van beide zijden betrokken is bij het opzetten en managen van de relatie. Er vindt functiescheiding plaats en inkoopdeskundigheid is apart betrokken in de relatie. Leveranciersrelaties vormen af en toe een agendapunt van het managementteam en gemeenschappelijke verbeteringsprogramma's (met leverancier) staan in de kinderschoenen. *Communicatie* tussen de verschillende niveaus in de organisatie is formeel georganiseerd.
5	Als 4, waarbij (indien van toepassing) de strategische leveranciersrelatie is geïntegreerd in het *'Product Proces Innovatie (PPI)'* proces. Er is bewijs dat wet- en regelgeving wordt nageleefd.
6	Als 5, waarbij *gemeenschappelijke taakstellingen* zijn geformuleerd voor huidige projecten. Er is sprake van gemeenschappelijke definiëring van doelstellingen en er is een gemeenschappelijk planningsproces. Geen bewijs dat strategieën voor de toekomst zijn afgestemd.
7	Als 6, waarbij de integrale kosten en processen gemeenschappelijk zijn geanalyseerd. Open-boekbeleid om kostenopbouw en -calculaties te delen over de gehele *waardenketen*.
8	Als 7, waarbij duidelijk aantoonbaar een *gemeenschappelijke (met leverancier) ambitieuze verbeteringsagenda* is opgesteld op basis van benchmarking. Continue beoordeling van de relatie in het licht van de beoogde doelen. Er vindt evaluatie plaats van de naleving van wet- en regelgeving.
9	Als 8, waarbij een gemeenschappelijk (met leverancier) *opleidings- en trainingsprogramma* is geformuleerd. Aantoonbare realisatie van taakstellingen en verbetering van resultaten.
10	Als 9, waarbij er formeel sprake is van afstemming en wederzijdse *toekomstplannen* op het gebied van technologie, doelstellingen en strategieën. Informatie over toekomstige producten en technologiebeleid wordt openlijk gedeeld.

Strategisch proces 5: Optimaliseren van product-/procesinnovatie en -ontwikkeling

0	Proces is niet van toepassing voor de organisatie of het organisatieonderdeel.
1	Niet of in mindere mate aantoonbaar dat leveranciersintegratie in product-/procesinnovatie (PPI) een thema is. Geen of beperkte aanwezigheid van *PPI-beleid en procedures*, waarin (indien aanwezig) de rol van inkoop en leveranciers wordt beschreven / vastgelegd. Geen bewijs dat er voldoende aandacht wordt besteed aan wet- en regelgeving.
2	Als 1, waarbij er *expliciete besluitvorming* plaatsvindt over een innovatie- of ontwikkelingsproject. Inkoop is aantoonbaar vanaf de (voor-) ontwikkelfase van een project betrokken in PPI. Enig bewijs dat aandacht uitgaat naar wet- en regelgeving.
3	Als 2, waarbij er een goede kennis is van de leveranciersmarkt en waarbij de selectie van de leverancier nadrukkelijk is gebaseerd op de onder *proces 2* gedefinieerde *vereisten* en in lijn is met het beleid en het project. Alleen indien noodzakelijk vindt er verdergaande beoordeling van de leveranciersprocessen plaats. Er is expliciet aandacht besteed aan het naleven van wet- en regelgeving voor het optimaliseren van PPI.
4	Als 3, waarbij een formeel *besluitvormingsproces is ingericht ter vaststelling van de wijze en tijdstip van betrokkenheid van de leverancier* in PPI. In beperkte mate is sprake van taakstelling en contractering (tenminste geheimhoudingsverklaringen en regeling van intellectueel eigendomsrecht).
5	Als 4, waarbij duidelijke *projectdoelstellingen* zijn geformuleerd (inclusief tijd, kosten en kwaliteit) die zijn vertaald in *inkoop- en leveranciersdoelstellingen*. Ontwikkelingscontracten zijn aanwezig waarin de doelstellingen voor de leverancier zijn geformuleerd. Controle op het naleven van wet- en regelgeving voor het optimaliseren van de product- en procesinnovatie en -ontwikkeling is in de procedures verankerd.
6	Als 5, waarbij regelmatige vergaderingen zijn gepland. De projectdoelstellingen zijn over de verschillende niveaus van de organisatie en *over de grenzen van de verschillende disciplines* heen gecommuniceerd en vastgelegd (meer dan alleen de productfunctionaliteiten). Indien relevant is ook de fysieke aanwezigheid van de ontwikkelaars van de leverancier in de eigen ontwikkelafdeling georganiseerd.
7	Als 6, waarbij de *leverancierssprestatie wordt gemeten en afgezet* tegen de verwachtingen. Relevante corrigerende maatregelen worden gepland en geïmplementeerd. Er bestaat een *geavanceerd leveranciersmeetsysteem* voor de leverancierssprestatie in PPI (dit omdat innovatieve zaken moeilijk meetbaar zijn). Aantoonbare realisatie van taakstellingen en verbetering van resultaten.
8	Als 7, waarbij men een 'open-boekbeleid' voert voor wat betreft het *delen van kennis en ontwikkelingsplannen.* Optimalisatie van het naleven van wet- en regelgeving door analyse en evaluatie van de procedures.
9	Als 8, waarbij met *elkaar verbonden interne/externe informatiesystemen* (bijvoorbeeld EDI, databases) de informatie-uitwisseling faciliteren om kosten en tijdverlies te voorkomen. Er bestaat een formeel *evaluatieproces* met leveranciers voor de beoordeling van ontwikkelingsprojecten en vaststelling van toekomstige verbeteringsprogramma's.
10	Als 9, waarbij een overzicht van strategische leveranciers beschikbaar is per technologiecluster op basis van uitgebreid leveranciersmarktonderzoek, continu onderzoek van relevante bedrijfstakken en discussies over de richting van gemeenschappelijk technologieonderzoek.

Strategisch proces 6: Integratie van leveranciers in het orderrealisatieproces

0	Proces is niet van toepassing voor de organisatie of het organisatieonderdeel.
1	Leveranciersintegratie in het orderrealisatieproces (ORP) is niet of nauwelijks aantoonbaar. Er is sprake van *interne optimalisatie van het behoefteplanningsproces.* Er is een formele interne communicatiestructuur waarin interne multidisciplinaire teams betrokken zijn om de behoeftebepalende vraag af te stemmen met de leveranciers.
2	Als 1, waarbij er een geautomatiseerd (productieplannings- en) coderingssysteem aanwezig is om de *interne informatie-uitwisseling* te optimaliseren.
3	Als 2, waarbij er aantoonbaar *taakstellingen* zijn geformuleerd voor bijvoorbeeld verkorting van de doorlooptijd als onderdeel van het inkoopplan (alleen intern bediscussieerd).
4	Als 3, waarbij *aantoonbaar (strategische) leveranciers zijn betrokken* in het behoefteplanningsproces. Met deze leveranciers worden de (geautomatiseerde) voorspellingen uitgewisseld. Leveranciers worden ook betrokken bij het proces om operationele inkoop te optimaliseren.
5	Als 4, waarbij een actief proces bestaat om onder meer het aantal logistieke processtappen, het aantal facturen en de voorraad te reduceren.
6	Als 5, waarbij er aantoonbaar *teams met leden van de zijde van de opdrachtgever en de leverancier* zijn samengesteld om bijvoorbeeld voorraadniveaus, besteltijden en doorlooptijden te verminderen en het intern administratieve proces te optimaliseren. Er bestaan een actieplan, implementatieplan en een evaluatieproces van de resultaten.
7	Als 6, waarbij een informatiesysteem aanwezig is, dat uitwisseling van informatie mogelijk maakt over de gehele waardeketen heen inclusief de *klant* (bijvoorbeeld via EDI). Tevens wordt het evaluatieproces gedocumenteerd.
8	Als 7, waarbij de krachten over *de gehele waardeketen heen* (contractanten / klanten) gebundeld en geïntegreerd zijn ter verbetering van bijvoorbeeld planning, voorraadniveaus en facturering.
9	Als 8, waarbij duidelijk aantoonbaar is dat men de *kwaliteiten en vaardigheden in de totale waardeketen maximaal benut* door een optimaal ontwerp van systemen en processen en het gebruik van e-tools en andere innovatieve vormen.
10	*Benchmarking* van de complete waardeketen, resulterend in verbeteringsprogramma's op wereldklasseniveau.

Strategisch proces 7: Het verbeteren van de leverancierssprestaties en het bewaken en vergroten van de kwaliteit

0	Proces is niet van toepassing voor de organisatie of het organisatieonderdeel.
1	Geen of beperkte aanwezigheid van een leveranciersverbeteringsprogramma. Ad hoc leveranciersverbeteringsacties zonder of in zeer beperkte mate gestructureerde opvolging van verbeteringsacties. De strategische leveranciers zijn aan de proceskant voor contractering getoetst op relevante aspecten (waaronder ISO, AQAP, audits).
2	Als 1, waarbij er een formeel systeem aanwezig is voor *eenvoudige meting van de leveranciersprestaties.* Nauwelijks (aantoonbaar) sprake van terugkoppeling van deze resultaten, voorzien van analyse en correctieve actie, naar leveranciers.
3	Als 2, waarbij ad hoc op basis van slechte prestaties (slechte kwaliteit, te late leveringen) met leveranciers wordt gecommuniceerd: *reactieve leveranciersverbetering*.
4	Als 3, waarbij een *formele klachtenprocedure* is opgesteld om zo efficiënt mogelijk interne klachten naar leveranciers te communiceren. Er bestaat (aantoonbaar) een werkend systeem, dat *de corrigerende maatregelen van de leverancier* (op basis van de klachten en de leveranciersmeting) opvolgt.
5	Als 4, waarbij men *leveranciersbezoeken* organiseert ter evaluatie van de leverancier en op gestructureerde wijze organisatiestrategie en inkoopdoelstellingen communiceert. Voorts zijn er bij een aantal strategische leveranciers audits uitgevoerd.
6	Als 5, waarbij de opdrachtgever aantoonbaar *bij alle strategische leveranciers audits en processtudies* heeft uitgevoerd om de huidige en toekomstige bekwaamheden van deze leveranciers volledig te kunnen beoordelen. Deze informatie wordt gedocumenteerd, regelmatig geactualiseerd en effectief gecommuniceerd met de belangrijkste betrokkenen.
7	Als 6, waarbij een *procescontrolesysteem* overeengekomen is met strategische leveranciers. Er is statistisch bewijs van de stabiliteit / bekwaamheid van deze leveranciers of er is bewijs dat correctieve maatregelen zijn gepland. De klachtenprocedure wordt geëvalueerd.
8	Als 7, waarbij men *proactief* werkt aan *leveranciersontwikkeling*. Met name steekt men veel energie in de belangrijkste inkooppakketten en leveranciers. Er zijn medewerkers aanwezig in de organisatie die specifiek voor leveranciersontwikkeling zijn getraind. Ter plekke worden leveranciersbeoordelingen uitgevoerd (bijvoorbeeld quick scans).
9	Als 8, waarbij geavanceerde kwaliteitsmeetsystemen beschikbaar zijn. Zo worden de *kosten van 'non quality'* gemeten en zijn targets gedefinieerd en gecommuniceerd met de betreffende leveranciers en de belangrijkste betrokkenen. Er is sprake van een officieel zogeheten *'nul fouten programma'* voor kritische leveringen. Aantoonbare realisatie van taakstellingen en verbetering van resultaten.
10	Als 9, waarbij leveranciersbeoordelingen en *gemeenschappelijke/wederzijdse trainingen* worden georganiseerd om van elkaar te kunnen leren en om een gemeenschappelijk verbeteringsprogramma vast te stellen (inclusief taakstellingen en opvolging).

Strategisch proces 8: Strategisch kostenmanagement

0	Proces is niet van toepassing voor de organisatie of het organisatieonderdeel.
1	Geen kostenverbeteringsprogramma's of alleen eenvoudig inkoopprijsmanagement met focus op (prijs-) onderhandeling en volume-effecten. Er wordt geen rekening gehouden met specifieke wijze van financiering.
2	Als 1, waarbij het *Total Cost of Ownership* (TCO)-principe wordt gehanteerd (bijvoorbeeld bij leverancierselectie). Verder gebruikt men de TCO-procedure formeel voor belangrijke producten en/of 'speciale' inkopen/projecten (bijvoorbeeld kapitaalgoederen).
3	Als 2, waarbij tevens een stimuleringsprogramma bestaat voor medewerkers en multidisciplinaire teams om kostenbesparingsideeën te genereren *(interne programma's).* Weinig aanleiding te veronderstellen dat leveranciers in de formulering van ideeën betrokken zijn. Communicatie is intern gericht.
4	Als 3, waarbij leverancierscontracten clausules bevatten die leveranciers *stimuleren of forceren om ideeën en targets voor kostenreductie te genereren* (bijvoorbeeld efficiency targets). Beperkt bewijs van gemeenschappelijke brainstorms (tussen leverancier en inkopende organisatie) met als doel kostenreductie.
5	Als 4, waarbij men duidelijk aantoonbaar *taakstellingen* (budgetten) hanteert voor kosten bij PPI voor alle projecten. Uitgaande van een marktconforme prijs rekent men terug naar een maximumprijs die mag worden betaald voor een bepaalde dienst of goed.
6	Als 5, waarbij men structureel gebruik maakt van verschillende *kostenmodellen* om leveranciers te selecteren en kostenstructuren te verbeteren. De inkoopprijs is (aantoonbaar) minstens marktconform. Kosten analyseert men met behulp van kostenmodellen die rekening houden met de specifieke kenmerken van financiering.
7	Als 6, waarbij evident is dat er *gemeenschappelijke* brainstormsessies plaatsvinden (tussen huidige leverancier en inkopende organisatie) met als doel kostenreductie. Aantoonbare acties en resultaten. Analyse van de kosten, rekening houdend met specifieke kenmerken van de wijze waarop financiering in de not-for-profitsector plaatsvindt.
8	Als 7, waarbij er een *gestructureerd en formeel georganiseerd stimuleringsprogramma* bestaat voor leveranciers om besparingsideeën te genereren.
9	Als 8, waarbij multidisciplinaire teams met betrokkenheid van leveranciers en (externe) klanten systematisch werken aan integrale kostenverlaging. Taakstelling-, meet- en opvolgingsmechanisme is aanwezig. Aantoonbare realisatie van taakstellingen en verbetering van resultaten.
10	Als 9, waarbij een formeel, gestructureerd en gedocumenteerd besluitvormingsproces voor kostenverbeteringen aanwezig is, dat de gehele *waardeketen* afdekt en waarbij alle betrokken leveranciers en (externe) klanten in ogenschouw zijn genomen.

Appendix 2

Table analyse of stakeholders

Question	Reactive	Developing	Proactive
What is the response to society and alternative responses to social pressure?	No response/ Withdrawal	Listen to society/accepting	Evaluate observations and forecast possible scrutiny/Problem solving
How are social issues valuated?	Denial	Ignorance/familiarity	Expertise in topic

Appendix 3 interview questions

I give the scope of the research.

I give the research question.

Give a short overview of experiences you had with social responsible buying?

What are the top 3 drivers and barriers for Thales towards social responsible buying? Why?

Drivers

1
2
3

Barriers

1
2
3

What processes are affected by social responsible buying? Why?

What 3 competences are required in order to buy socially responsible? Why?

1
2
3

Kruis bij elke vraag aan welke het beste bij Thales past? En bedenk waarom? Zijn hier bewijzen voor?

	Reactive	Developing	Proactive
Planning and strategy development:			
To what extent is purchasing involved in corporate strategy development? Is this a documented and revolving process?	Purchasing is not involved in corporate strategy development	Purchasing is involved in corporate strategy development, but only as a source of information	Early involvement in corporate strategy development is ensured and results are an based component of the purchasing strategy
Corporate Strategy/Policy: Are social responsible issues involved?	The company does not internalise environmental issues nor develop business strategies to deal with social questions	Top management recognized that social responsibility is linked to success because the business was subject to heavy public and/or regulatory scrutiny	The company has a formally stated social mission, it is likely that they include environmental and social objectives and strategies in their corporate objectives and strategies
To what extent is purchasing involved in product/project planning? Is this a documented and revolving process?	Product or project planning is seldom known by purchasing	Purchasing is involved in product/process planning	Early involvement in product/process is ensured and results are an based component of the purchasing strategy
What level of planning horizon is used for CSR objectives?	Short term/ ad hoc social planning	Medium/long-term	Strategic
Where are the CSR requirements and	Demand is derived	Demand is derived	Demand is derived

demands derived from?	from: forecasts, market research and benchmarking, valuation of social issues, response to society, regulation and law	from: forecasts, market research and benchmarking, valuation of social issues, and response to society	from: forecasts, market research and benchmarking, valuation of social issues, and response to society
How is benchmarking performed?	Benchmark only on regular criteria. Social criteria's are not an issue	There are social criteria (as been defined by policy entrepreneur, and corporate/purchasing policy) involved but only to compare social performance, with other companies	Social performance is an important issue, take a look to the supply chain, and benchmark on the past use results to improve social performance (of supply chain)
How is market research performed?	Perform market research as usual, don't take social responsible practices in mind	Social responsible issues, (as been defined by policy entrepreneur, and corporate/purchasing policy) are taken in mind, but focus is still reactive	Social issues (as been defined by policy entrepreneur, and corporate/purchasing policy) are taken along, focus is now proactive, so look to future needs of customers, and "society" and possibilities from suppliers/supply chain
Stakeholders issues	Denying the relevance of any stakeholder issue to the organization; denying that the firm has stakeholders responsibilities	Implicitly acknowledge the existence of stakeholder issues, but avoiding to address these issues.	Systematically anticipating, and addressing stakeholder demands involve stakeholders in the monitoring process. Proactive companies try to get stakeholders' evaluation of their progress in specific issues.
What is the response to society and alternative responses to social pressure?	No response/ Withdrawal	Listen to society/accepting	Evaluate observations and forecast possible scrutiny/Problem solving
How are social issues valuated?	Denial	Ignorance/familiarity	Expertise
How is dealt with regulation, law and industrial standards?	Comply, but resist against …	Comply, and follow	Evaluate performance, lead, or even be the developer of … (force other companies to follow)
Is there a policy to pay more for a social responsible product?	Don't pay more for a social responsible product (as been defined by policy	Pay more, but insist that portfolio of efforts is cost-effective	Willing to pay more for social responsible product (as been defined by

	entrepreneur, and corporate/purchasing policy)		policy entrepreneur, and corporate/purchasing policy), even if the product has relatively same quality
What is the degree of integration of social issues in different processes?	Enforced	Self-enforced	Voluntary
Innovation			
What kind of product specifications is given to suppliers?	Technical end-of-pipe solutions	Evaluate possibilities with supplier	Functional (supply chain focussed)
Supplier selection			
Is supplier selection carried out systematically, and according to requirements profile and selection criteria? Is the selection process well defined, logical and documented?	Supplier selection process is only partly described	Selection process is defined and applied, it occurs based on requirement profiles and selection criteria. It is all-irascible documented.	Selection process is based on complete application of insights and decisions through the company. And continuously adjusted to the latest requirements.
Who is responsible for supplier selection?	Purchasing is not or little involved.	Purchasing is a source of information and supports the process	Purchasing is part of the cross functional team that is in charge of supplier selection
What collaboration is commonly used in order to deal with social responsible objectives	Only internal	External collaboration/ Use supplier for innovative solutions	Use supply chain for innovative solutions
What is purchasing professionals attitude and involvement?	Resistant, Often relatively uninvolved in initial buying decision	Still resistant but involved.	High status Involved in company strategy, open attitude
Who is responsible for social responsible objectives in the company?			
Who is responsible for organizing social issues? Policy entrepreneur (are found to have many of the same characteristics as business entrepreneurs, but invest their resources in instituting new organizational policies)	None, or Middle manager often in operations	Often external relations managers	Founder/ top management/ middle management
Process organization:			
Supplier evaluation			
Is there a systematic supplier evaluation process in place?	Do not evaluate social performance/Little or no social evaluation of suppliers	Evaluate social performance, and communicate results internal/Evaluate suppliers based on historical data	Evaluate social performance, which is based on the social objectives and benchmarking, and communicate results internal and external/Evaluate suppliers based on historical data and expectations
Supplier development			
Is there a systematic procedure for	Supplier	The supplier	Development

supplier development in place?	development measures are developed individually	development process is defined and development plans are derived from the supplier evaluations	process is implemented and regularly updated. Development plans are derived from the development strategy.
How many, and how are audit/assessment executed?	Selective visits at suppliers. Normal audits for itself and its vendors (to expose and identify poor CSR performers within the supply base)	Regular visits. Social responsibility audits for itself and its vendors (to expose and identify poor CSR performers within the supply base)	Social responsibility audits for itself and its vendors (to expose and identify poor CSR performers within the supply base and to help direct supplier development strategies) “The purchasing organization regularly surveys its suppliers’ practices relative
How is social information sharing/communication organized?	Inter organizational (only internal)	Internal and external with suppliers	Supply chain/NGO's
What social responsible objectives are described in contracts?	Only regular objectives with little effort towards CSR objectives towards strategic suppliers	Regular objectives and CSR objectives	CSR objectives are prime objectives
On what products is social responsibility focussed?	Frequently support essentials	Frequently consumption supplies	Frequently product essentials
Human resources and leadership:			
How are employee developed in social responsible practices?	No training for employees related to CSR	Employee-CSR training	Employee-CSR training with target setting and evaluation