Motivations behind Sustainable Purchasing¹

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Abstract: Sustainability issues in purchasing are receiving greater attention. Literature is rapidly growing, with several research programs being initiated to investigate the topic. This study presents the results of a research project which aims to reveal and structure the motivating forces leading companies to make efforts in sustainability purchasing and the means used to attain achievements in some fields of sustainability. Results presented in the literature are scattered in terms of the fields of sustainability: most of the studies focus only on green or corporate social responsibility issues and there is a lack of exploratory models. Sustainability in purchasing is addressed in a comprehensive way including green, social responsibility and corporate growth issues. After presenting the results of a literature review, theoretical development was undertaken to create a framework in which it is possible to describe the means of sustainability applied and the motivating forces behind them. This framework serves as the basis for an empirical investigation among Hungarian companies. Empirical results confirm the usefulness of the theoretical framework: the number and the characteristics of sustainability activities were determined by the particular types of motivation – to avoid negative effects, to achieve compliance with expectations and to attain positive effects.

Key words: purchasing, sustainable development, environmental management, corporate social responsibility, empirical research

1. INTRODUCTION

Literature on sustainability is rapidly growing, since widespread research activities have been carried out in recent years to investigate related management practices and to build models to structure knowledge acquired. This paper focuses on a specific field of management by outlining sustainability issues in purchasing and supply chain management. It points out that companies are also customers but the way they carry out their buying activity is quite different from the way final consumers purchase their products. In any economy, purchasing by companies represents substantial buying power, and is concentrated in far fewer hands than in consumer markets. As a consequence, a relatively small number of companies are capable of motivating a wide range of suppliers and this could promote the spread of sustainable practices. The aim is to investigate:

- What motivates purchasing to be more sustainable, and
- How motivation factors relate to applied sustainability means.

This paper will be organised as follows. The literature review in Section 2 is followed by Section 3 which identifies and groups drivers and means of sustainable purchasing management; Section 4 considers the motivations for sustainable procurement and suggests a research framework. In Section 5, the methodology of the study is presented. Section 6 outlines the findings of the study. Finally, Section 7 outlines the conclusions and attention is drawn to limitations of the research and future research directions.

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2. Understanding of Sustainable purchasing in the literature

Purchasing has increasingly assumed a pivotal strategic role and has been subjected to theoretical and empirical scrutiny (Chen et al. 2004, Ellram et al. 2002). However, until recently, most purchasing drivers have been identified as being value-for-money factors such as price, cost, quality performance and other issues in procurement decision-making which have historically been regarded as contributing directly to profitability. As consideration and awareness of the notion of sustainability becomes widespread there is an increasing need to find ways of managing the scope and range decision-making variables.

Much American and European research has been published on sustainability issues in purchasing. Many research projects have been completed in this field, most focus on a singular aspect of the topic and the concept of sustainable purchasing is understood differently. Sustainable purchasing integrates long-term strategic, environmental, and social issues. It is thus part of the sustainability concept that purchasing should support the steady growth and sustainable development of the firm. In this understanding the role of purchasing is twofold: to ensure a reliable supply of the goods and services required over both the short and long term, and ensure efficiency of operations (Young and Kielkiewicz-Young 2001). There exists another group of authors whose work is related to another element of the sustainability concept: environmental issues. Their investigations cover topics such as green purchasing strategy (Azzone et al. 1997, Min and Galle 2001) or how to make purchasing tools greener (Noci 1997, Schlegelmilch et al. 1996, Vachon and Klassen 2006). The third strand in the literature highlights social responsibility issues in purchasing (Boyd et al. 2007, Carter 2004, 2005, Drumwright 1994, Malomi and Brown 2006). The above-mentioned literature is closely related in content to the general literature on sustainability although, since the authors focus on individual elements of the sustainability concept, the results are hard to compare.

The research aim was to build a comprehensive approach to unite the three elements of long term development and competitiveness, environmental concerns and social aspects. The following literature review first describes the means of sustainable purchasing and then the drivers or motivations for sustainability management. The research framework was prepared based upon these results.

3. MEANS OF SUSTAINABLE PURCHASING - LITERATURE REVIEW AND THEORY BUILDING

The broad understanding of sustainable purchasing covers a wide range of activities and knowledge within organisations. As the purchasing and supply management literature rarely connects the three elements of the broad definition of sustainable purchasing, the description of means in relevant literature is not comprehensive.

3.1. Corporate growth and competitiveness

The literature on corporate growth is substantial (Reinhardt 2000, Dyllick and Hockerts 2002, Park and Jang 2010). Studies have an overall business perspective and typically do not address functional issues (marketing, production, purchasing). However, growing recognition of the purchasing function has resulted in a substantial number of publications. These studies put an increased focus on the issue of how purchasing adds strategic value and contributes to corporate success. A wide-ranging review of documented sources was undertaken by Zheng et al. (2007), leading to the identification of 42 core studies on the topic. Most of these 42 studies investigate the issue of the strategic relevance of purchasing, although only a few directly address the issue of the role of purchasing in promoting the long-term competitiveness of an organisation. As a consequence, the role of strategic purchasing is well documented: it is to build cross-functional, interorganisational relationships. As Chen et al. (2004) explain in their research model, strategic purchasing can engender competitive advantage by enabling firms to (a) foster close working relationships with a limited number of suppliers; (b) promote open communication among supply-chain partners; and (c) develop long-term strategic relationship orientation to achieve mutual gains.

3.2. Green purchasing

In the last few decades, green movements, institutions and government regulations (and supporting initiatives) have caused companies to improve their environmental performance. To respond to this growing

concern for green issues, firms have carried out a great number of environmental programs ranging from reducing emissions to air as well as the introduction of eco-auditing frameworks.

The increased responsibilities of purchasing in this context are well documented in the literature, as a number of investigations have been carried out with the aim of obtaining an overall picture of green purchasing strategies (Holt 2004, Min and Galle 1997), connecting corporate competiveness of the firm with green purchasing activities (Carter et al. 2000, Mebrau 2001) and cross-national comparisons (Carter et al. 1998, Arnold et al. 1999). The results published in these articles are based on empirical investigation, which requires evaluation and description of green purchasing. Min and Galle (1997) provide the most comprehensive model, in which they develop a classification of green purchasing activities: source reduction (recycling, reuse, source changes and control) and waste elimination (biodegrading, non-toxic incineration, scrapping and dumping). However this model does not follow the latest development of the purchasing and supply profession, e.g. supplier development.

In developing a research framework, it was proposed that the role of purchasing in environmental context is threefold:

First, as purchasing and supply management is responsible for the obtaining of a wider range of products and services, purchasing is thus involved as a contributor to environmental projects and applied purchasing tools (specification preparation, supplier evaluation, etc.). For example when purchasing equipment, as part of a purchasing decision, it may be checked to see how much energy the equipment consumes. So the environmental attributes of the product to be purchased receive emphasis.

Second, purchasing is recognised as *a process itself*, which may have green attributes. For example, the purchasing department uses recycled paper to print contracts.

Third, purchasing – as a boundary spanning function – has a role when *communication with the potential supply base* is highlighted. The purchasing process may involve (as part of the supplier evaluation) not just product attributes, e.g. which parts of the product can be recycled, but also the environmental aspects of the operations of the supplier, e.g. air pollution created during the manufacturing process.

3.3. Social responsibility in purchasing and supply management

Purchasing managers span the boundary between the firm's internal functions and its external stakeholders, including suppliers and third parties. So purchasing is advantageously positioned to affect firms' involvement in socially responsible activities. Literature in the field of purchasing and supply management has started to investigate issues related to social responsibility. However, only a few of these investigations are based on a comprehensive understanding of Purchasing Social Responsibility (PSR); most of them focus on a single element, e.g. ethical issues in purchasing.

Boyd et al. (2007) lists three elements: social labels, socially responsible investments and codes of conduct. Several further pieces of research (Koplin et al. 2007) were based upon Carter and Jennings' (2000) model, which is based upon empirical investigations of US organisations, and which identified six categories – namely environmental management, safety, diversity, human rights, ethics, community and philanthropic activities. This model of Carter and Jennings is comprehensive and has been internationally tested and verified to be an appropriate base for further theoretical and empirical investigation.

3.4. A research framework for identifying the applied means of sustainable purchasing

As it may be seen, literature on the content of sustainable purchasing is quite complex. In the case of economic development and PSR it was easy to find appropriate approaches and suitable classifications. In case of social responsibility the model of Carter and Jennings (2000) mentioned above has been adapted with a minor modification. The case of green purchasing required some theory building, since the existing models do not support the measurement of corporate involvement in green purchasing activities.

4. MOTIVATION FOR SUSTAINABLE PURCHASING, LITERATURE REVIEW AND THEORY BUILDING

The question of why organisations choose to adopt socially responsible or green practices has become an increasingly important topic in research papers. As in the case of the fields of sustainable purchasing, the research aim also required identifying a structured model of motivation.

4.1. Literature on motivations for sustainable procurement

A range of drivers and barriers is identified in the literature. However, the investigations have a different focus (as it was mentioned, the studies typically concern green purchasing or corporate social responsibility (CSR) in purchasing, and just a few refer to sustainability issues in a comprehensive way), the identified elements are very similar. A significant body of research indicates that legislation and public policy are major motivations for companies' sustainability efforts (Carter and Dresner 2001, Min and Galle 2001, Walton et al. 1998). Customer expectations, fierce competition and other market-related effects are also found to be important in driving sustainability (Handfield and Baumer 2006). High importance is given to cooperation with stakeholders and to compliance with their expectations (Reeve and Steinhausen 2007, Vachon and Klassen 2006). It is also highlighted that the role of individuals might be of importance (Drumwright 1994).

In addressing the question of motivation, researchers have put forward a variety of models and concepts on how to structure the motivating forces. Walker et al. (2008) undertook a large-scale literature review and, based on these results, they identify the drivers of green supply chain management according to their source as being either internal (organisation-related) drivers or external drivers (regulation, customers, competitors, society and suppliers). The model is validated by case studies from the public and private sector. Another study aiming to provide a structured answer to the question of why organisations choose socially responsible practices was prepared by Worthington et al. (2008). Based on information gathered from literature and case studies of US and UK firms, they analyse what drives the sample organisations to engage in developing supplier diversity initiatives. The research framework of this investigation is also based upon literature results. They use the general (not specifically purchasing-related) literature of sustainability to build their model. They identify four influencing factors: legislation/public policy, economic opportunities, stakeholder expectations, and ethical influences. Both author's models of influencing forces are comprehensive, relevant and provide a logical structure of identified factors. However both of them were willing to describe organisations' practice in a structured way and be able to identify similarities and differences of samples (private and public sector and UK and US firms). Unfortunately literature does not provide such a model, which helps to explain how the motivation forces drive the actions of purchasing experts to develop and use sustainable means and solutions. To investigate this relationship, such a model is required, which provides a good ground to investigate the motivation forces.

4.2. Research model for motivation for sustainable purchasing

The investigation of the relationship between sustainability means and motivation required a structured model of motivations. Three groups of motivating forces were identified: the avoidance of negative effects, compliance with expectations, and achievement of positive goals.

Avoidance of negative effects may motivate procurement to be "more sustainable" in many ways. Government legislation may include elements that will be sanctioned if they are not complied with. Negative publicity resulting in loss of sales is another example. In these cases the aim is to somehow avoid the negative reactions of stakeholders. These motivations have the effect that companies (managers) act only if they feel endangered.

Compliance with expectations means that there is an initiative for the purchasing function or for the organisation which must be satisfied. Here, the means are given; an initiative of the owners such as

developing a code of conduct but may also stem from competition e.g. other competitors already have ISO 14000 certification.

Positive achievements mean that acts (or form of activities) are carried out as activities supporting sustainability, but companies and their stakeholders realise positive benefits. This positive benefit is often linked to the financial performance of the firms e.g. good public relations in the context of increasing sales.

Purchasing and supply function is motivated in all three ways. But the manner in which they motivate managers is significantly different:

- In cases of avoidance of negative effects, managers will only act if they feel the risk. This may provoke creative solutions but it is not likely that such a response will create more enthusiasm than required to avoid the negative effect.
- Compliance with expectations is a bit similar, only the solution is more or less given. It does not require further action beyond that necessitated.
- Positive motivation is that which indicates creative solutions and long-term commitment to achievements.

These motivations are present in organisations simultaneously.

5. RESEARCH METHODS

In an effort to shed light on the relationship of motivation and means of sustainability specified earlier, an explorative study was conducted using interviews in 13 organisations. Of these 13 organisations, three were public and ten were private organisations. The private organisations (except for two) are owned by multinational firms. Four out of the ten private firms operate in the manufacturing sector (pharmaceutical, chemical, beverages) while six operate in the service sector (bank, telecommunication, hotel chain, restaurant chain). Companies were ensured anonymity to encourage openness of responses. All the organisations operate in Hungary. Organisations were selected that have corporate initiatives in the field of environmental policy or CSR but preferably both of these.

The interview protocol was developed on the basis of the literature review and research framework presented above. Semi-structured interviews were conducted with at least one manager in each organisation. Participants were senior purchasing managers. Secondary data were collected (such as environmental policy, codes of conduct, etc.).

The interview took the following form:

- Identification of company organisational background
- Identification of participant's understanding of sustainability
- Examination of objectives and responsibilities of the purchasing organisation
- Questions regarding green purchasing
- Elicitation of information on the topic of social responsibility in purchasing e.g. involvement in community activities, safety issues, diversity, legal issues, human rights and ethics, etc.

After completing the interviews, two experts identified activities undertaken by the purchasing organisation and validated the motivation aspects (drivers) for the applied activity.

6. CASE RESULTS

To investigate the motivating forces behind sustainable purchasing and the activities and the relationships around them, the research framework described above was employed. As mentioned in the research methodology section, two experts validated each interview by identifying the activities mentioned in the

interview, classifying the motivation 'type' for the activity, and the source of motivation. In total, 90 activities were identified arising from 13 interviews. The following results are based on the statistical analysis of these 90 activities. The research framework described above has been used to structure the analysis. Firstly the three elements of sustainability were reviewed – corporate growth and competitiveness, environmental concerns and social aspects – then the types of motivation were identified (avoidance of negative effects, compliance to expectations, positive achievements) and finally the connection between the type of motivation and elements of sustainability were describe.

6.1. Green, CSR, and growth means of purchasing

As the investigation was built on a comprehensive approach, the interview covered the three elements of sustainability: corporate growth, environmental aspects, and social responsibility.

6.1.1 Corporate growth and competitiveness

The interview responses suggest that the most important expectations purchasing should encompass to takes two forms. First is supply reliability, e.g. avoiding interruptions in production supply, etc., while the other is to meet expected financial demands, e.g. costs, budget, earnings before interest, tax, depreciation and amortisation (EBITDA). (In theory, both can be connected to sustainable management although the interview results reveal that this seldom happens or just in certain projects. Performance indicators motivated the purchasing management to consider short-term optimisation, e.g. focus on the current year EBITDA effects only. Only four interviews, all of them in private firms, were identified where activities to protect the environment were undertaken in order to achieve some cost reduction. Supply reliability in the long-run as an important factor of purchasing performance was mentioned only twice, mainly when the possibility of supply interruptions due were identified as a real risk. This implies that factors described in the literature were not identified as explicit goals.

6.1.2 Environmental aspects

As part of the research framework, green issues in purchasing were analysed at three levels. In 13 interviews, 31 activities were identified. (An activity might belong to two level.) The 31 identified activities reflected that the interviewed organisations pay attention to involving environmental concerns in the buying decision (18 activities, 11 interviews) and to make the purchasing process greener (16 activities, 10 interviews). However, the solutions mentioned do not vary between companies (typically being compliant with law, recycling of paper, re-collection of electronic garbage). The organisations interviewed pay much less attention to the processes of the supplier (6 activities, 4 interviews). However, some creative ideas on this topic arose here, e.g. giving an environmental award to suppliers.

6.1.3 Social responsibility

Six aspects were reviewed in the interviews: local communities, diversity, ethics, legal issues, safety, and human rights. The interviews revealed a much more variable picture than was expected. The number of activities mentioned was relatively large, and more creative and unique solutions were found. The results were as follows (see Table 3.1).

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	No. of activities according to the six topics	No. of interviews in which an activity topic was mentioned
Local communities	10	8
Diversity	4	4
Ethics	8	8
Legal issues	8	7
Human rights	4	4
Safety	8	8

The six aspects of social responsibility appeared divided into two groups: four aspects (local community, ethics, legal issues, safety) were mentioned almost the same number of times and two aspects (diversity, human rights) were covered less frequently. The same number of mentions within the two groups may be accidental; however the difference between the two groups is important. It is not possible to manage diversity and human rights through purchasing means; however they are important issues to society. Because of the characteristics of the supply base they necessarily represent a challenge. The following examples describe the most common reasons for this. Minority groups (small firms, minority-owned businesses) are not represented on the supply markets, so it is neither possible to discriminate, nor to support them. The other example is that most of the supply base which is managed by the interviewed purchasing managers, is located in the European Union or the United States, where child labour, as an example of a human rights issue, is strictly and effectively forbidden. Low-cost country suppliers, e.g. China and India, are managed or qualified by headquarters. Human rights and diversity are frequently raised in international literature on social responsibility as important issues; however the results suggest that this finding is only valid in a low-cost country context. However, results reveal that the contribution of purchasing to other fields of social responsibility is also important.

6.2. Motivation types

The most frequent driver was 'compliance' (38 mentions), followed by 'avoidance of negative affects' (30); the least frequently mentioned driver was 'positive achievements' (22). To analyse these results, the source of motivation was identified (in certain cases more than one source was identified). The relationship between the type of motivation and the source of motivation is described in Figure 3.1.

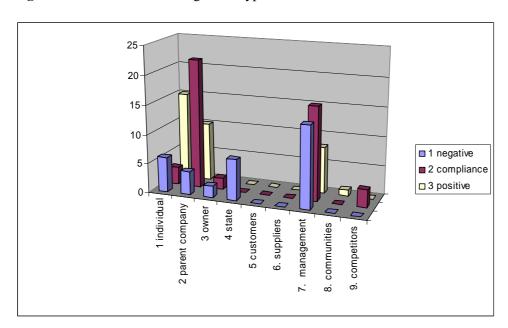


Figure 3.1 Activities according to the type of motivation and the source of motivation

In most cases, motivation to act in a sustainable way originates from the parent company, higher management or from the individual. In the case of 'avoidance of negative affects' the role of management was the highest and government was a second major driving force (mainly due to environmental and safety regulations). In case of 'compliance to expectations' the parent company and higher management was the most frequent source of motivation. In the case of positive motivation, the role of the individual tended to be the strongest while the role of the parent company and management were relatively strong (data is distorted as positive motivations were ascribed to only three firms only).

To sum up these findings, the purchasing managers (organisations) promoted sustainability either in those situations when the parent company and the management were determined to incorporate purchasing (and the supplier relationships) into the sustainability policy of the firm (the way to achieve it may be very different) or when the individual was strong enough to act on his or her own will and had taken the opportunity to promote sustainability. By analysing the role of potential stakeholders it is evident that purchasing managers try to satisfy the expectations of the parent company (they represent the owners) and

the management. However, it was much less evident why so little motivation stems from other stakeholders of purchasing (customers, suppliers, local communities, etc.)

6.3. Relationship between the types of motivation and fields of sustainability

Analysis of the activities of sustainable purchasing according to the fields of sustainability and type of motivation revealed the following results (see Table 3.2).

	Development	Environment	Social	Total
			responsibility	
Avoidance of negative effects	7	6	15	28
Compliance with expectations	7	17	14	38
Attaining positive effects	3	8	13	24
Total	17	31	42	

Table 3.2 Activities according to type of motivation and field of sustainability

In the case of contribution to long-term corporate competitiveness and growth, avoidance of negative effects and compliance with expectations were the most typical drivers. The dominating motivation for greener purchasing was compliance with expectations; however, there were several examples for the other two types of motivations as well. In the case of social responsibility, the roles of the three types of motivations were more or less equal.

7. CONCLUSION AND IMPLICATIONS FOR FURTHER RESEARCH

The results described above indicate that the interviewed organisations undertake a number of sustainable purchasing initiatives. The motivational background for these initiatives provided explanations for the frequency of the use of certain sustainability-related activities. This provides support for the applicability of the research framework developed.

Summing up the results of the interviews, the following conclusions can be drawn:

- 1. In most of the cases the motivating force falls into the category of 'avoiding negative effects' or 'compliance with expectations'. Based upon the described research model this explains why companies have a few initiatives but do not do more and that the identified activities were routine and undertaken without much creativity.
- 2. Sustainable purchasing does not necessarily offer a public relations advantage. It is not possible to gain customers this way. On the other hand, organisations and their purchasing representatives consider conventional competitive priorities as a priority; as a consequence, companies did not even possess data on disadvantaged or minority suppliers.
- 3. The most colourful and creative activities were indicated in the field of social responsibility. This was partly due to the fact that it is a broad field. However, the role of positive motivation (here, the role of the personal motivation of purchasing staff) was most important.
- 4. Local sustainability-driven purchasing patterns and behaviour are missing and as a consequence, managers default to international norms which address global challenges (such as child labour) but do not deal with local problems.
- 5. While each organisation interviewed had an environmental and a CSR policy, the three public organisations focused mainly on arranging their purchasing process according to public procurement law and they hardly incorporated any elements of sustainability into their purchasing processes.

Some implications for further research have emerged. It would be of practical and theoretical interest to identify and develop locally-based sustainability focused purchasing patterns. Industry background apparently influences sustainability practice, which is further worth investigating. Public and private organisations take different approaches. As these approaches are affected by government legislation comparison of such international approaches could raise useful information.

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