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The process of global purchasing: Critical success factors and supplier impact

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Abstract

Inward internationalisation receives more and more attention in recent literature. This article contributes to this developing domain by providing a holistic description of the underlying processes of one aspect of it: global purchasing/sourcing¹. By means of case study research, carried out in eight companies, drivers and inhibitors of globalisation are highlighted, elements of an international sourcing program and their critical success factors are revealed. From this, a preliminary process model is developed, giving insight in the initiation and implementation stages of global sourcing. Attention is also given to the role of the suppliers and the impact on them.

Introduction

Historically, governments have been focusing on export in order to improve their balance of payments. Even in modern times they pay much more attention to the export side than to the import side. Academic research initially followed this approach, which led to many theories and empirical studies explaining export success (e.g. Cavusgil and Zou 1994; Evangelista 1994; Zou and Cavusgil 2002; Zou and Stan 1998). A similar profound effort to explain global purchasing success is still lacking to our knowledge.

The research of internationalisation processes, see Weisfelder (2001) for an overview, has also taken an “outward” internationalisation perspective. More recently however, the belief has grown that the involvement of import can contribute greatly to the internationalisation performance of a company (Korhonen 1999; Welch and Luostarinen 1993). More and more research attention is oriented towards developing descriptions and explanations of the so-called “inward” internationalisation side.

Problem statement and literature review

This article contributes to the developing domain of inward internationalisation by providing a holistic description of the processes underlying purchasing. The rapid development of technology and e-communication, as well as the growing need for competitive cost-structures

¹ In this paper international purchasing, sourcing and buying will be used as synonyms.

on a global scale, have made global sourcing one of the major trends in purchasing at the beginning of the new century (Carter and Narasimhan 1996; Carter et al. 2000; Trent and Monczka 1998). As such, it has become a rather popular research subject (Kotabe 1998; Petersen et al. 2000). Not only academic journals, but also industry-linked journals have acknowledged the importance of global sourcing (e.g. Home Textiles Today, Chemical Market Reporter and Chain Store Age).

So far, however, the literature of global purchasing is in a developing stage. Firstly, empirical research on global sourcing is somewhat fragmented. Subjects range from global sourcing of services (Kotabe et al. 1998), global purchasing coordination (Faes et al. 2000; Rozemeijer 2000) to import stimulation (Leonidou 1998). Most attention however has been paid to factors leading to increased global sourcing, such as the international image of the company, increased price pressure, shorter product life cycles, supply and service reliability and focus on core competences (Liu and McGoldrick 1996). Limits to global sourcing have also amply been reported in literature (Birou and Fawcett 1993; Min and Galle 1993). They range from additional total cost elements such as additional logistic costs and import duties to communication problems due to cultural and linguistic diversity.

Secondly, the literature on global purchasing presents somewhat conflicting evidence. Whereas Birou and Fawcett (1993) for instance highlight the importance of long-term relationships for global international sourcing success, Petersen et al. (2000) don't take this element into consideration in their model explaining the effectiveness of global sourcing strategies. Further, whereas the highest perceived product quality is indicated as one of the major capabilities that allow companies to compete worldwide by Trent and Monczka (1998), inversely only a small part of the respondents of a survey executed by Rexha and Miyamoto (2000) indicates the search for better quality products and services as a driver for global sourcing.

Finally, several authors (Meredith Smith 1999; Rexha and Miyamoto 2000) have proposed typologies of local and global sourcing, based on different variables such as detail of specifications, impact of technology, logistics availability and the cost of the product. However, to our knowledge, only limited research has been done on these typologies. So further testing is certainly recommended.

From this review, it is evident that the dynamic nature of the global purchasing process is somewhat neglected. Both the engine, setting the entire process in motion, as well as the drivers and inhibitors behind it, rarely get any attention in the research on the process of growing internationalisation. We want to initiate to fill up this gap in literature. We feel that

this is an extremely relevant subject indeed as all forecasts predict that the global purchasing activities will firmly increase. Hence, a shrewd coordination of the company resources in order to deal with this complex environment is absolutely necessary (Trent and Monczka 1998). Therefore, this study is also relevant to practitioners if contingency approaches can be developed. With the disappearance of ever more trade barriers, the purchasing world really becomes a global village. Finding one's best way in it to develop the best supply chain approach has and will indeed become indispensable.

The IMP Group has studied links between marketing and purchasing over the last 25 years (Ford 1997). The international dimension, however, has not received ample attention (notable exceptions are Johanson and Mattson 1988; Welch and Luostarinen 1988). The concepts of co-evolution and interdependence (Ford 1998) are used as additional conceptual lenses in this study. In fact, we pay attention to the role of network partners (particularly suppliers) in this specific globalisation process. We furthermore derive how suppliers might react to globalisation efforts of their customers.

Thus, the objective of this paper are:

1. Develop a preliminary model of the initiation and implementation process of global purchasing;
2. Present a model applicable for the practitioner by describing the most relevant drivers and inhibitors of the initiation stage and offering insight into the further implementation issues of the global sourcing process;
3. Gain insight into the role of suppliers and network partners in this process.

The structure of the paper is as follows. First we describe the methodology of this study. Then the case companies are described. In the third section our model of global purchasing is introduced. Next, we reflect on the stages in the process of global purchasing and the role of and impact on supply networks. Finally, reflections on the limitations of the study, the contribution to theory and implications for practitioners are formulated in the conclusion.

Methodology

In this paper, the evolving inward internationalisation process of companies is approached from a holistic perspective. We focus on the contingencies, which have a profound impact on this process and on the underlying dimensions.

Although research based upon a profound literature study has its merits, we believe that qualitative research for this venture is most suitable as it is still in an exploratory stage. In fact, such a methodology enables the formulation of research propositions in order to trace out an appropriate questionnaire for a survey on a much larger scale and for a more in-depth analysis at a later stage.

Scholars have pinpointed the poor representation of qualitative research in international business publications (Werner 2002) and have attributed this mainly to the lack of methodological rigor (Yeung 1995). Therefore, attention was paid to the robustness of the multiple case study methodology using methodological prescriptions from Eisenhardt (1989), Miles and Huberman (1994) and Yin (1994). As we want to present a closer study on the internationalisation of purchasing – our basic unit of analysis is the global purchasing process of case companies – as it is enacted and perceived by its managers and as it is exemplified by their experiences of real events. A detailed analysis of such cases may indeed reveal underlying motives, structures and sub-processes, which in a further study could merit closer scrutiny (Yin 1994).

We study internationalisation processes consisting of events and intertwined sub-processes (Pettigrew 1997). We followed largely Fredrickson's (1983) strategy process research guidance focussing on the following six items: 'motive for initiation', 'concept of goals', 'relationship between means and ends', 'concepts of choice', 'analytic comprehensiveness' and 'integrative comprehensiveness'. The quality of this multiple case study rests further on the following principles: theoretical sampling, triangulation, and iterative grounded theory.

Theoretical sampling

In this study, eight case studies were selected, capable of describing as rich an experience as possible in inward internationalisation. Inherently different branches of industry were selected: electronic components, pharmacy, metal treatment and clothing. In three of these sectors, more than one case has been selected to highlight and enhance contrasting tendencies and experiences, when observed. The consumer industry cases were added as they are supposed to behave in an atypical way. Some companies were selected because we wanted to contrast European case experience with tendencies in companies of US origin. Another selection criterion of the cases was the size of the company. We focused on so-called 'mid-sized multinationals' as the process of internationalisation in such companies is not yet finalised and managers will recall much more facts. In big global companies, such processes

are supposed to be initiated longer ago and managers who are still knowledgeable about the details might be more difficult to find.

Triangulation

Data source triangulation was aimed at to enhance the internal validity of our study. In some companies, two respondents were interviewed. In other companies, two interviews were done with the same manager. Managers were also asked to give feedback on the transcript, and as far as possible, company documents were used in addition to the interviews.

Data collection was carried out by means of two waves of interviews with who was believed to be the best-informed person, identified during the case-selection process. After the first interview, a transcript of the interview was sent back to this person who was asked to comment on our summary and to clarify points, if necessary.

After the first interview, a thorough comparison was also made between the obtained results and the existing literature. The results of this comparative analysis formed the basis of a second wave of interviews. In the second interview with the same interviewees in six cases we aimed to investigate the dynamic aspects of the global sourcing process. The interviewer deliberately tried to lead the interviewee to areas left open in the first stage or still to be debated about. Two cases were added as theoretical replications after the two rounds of interviews for the first six cases. Here, two managers were interviewed on the same day (December 2002).

Interviews in both waves lasted between one and two hours and a half. The interviews were not tape-recorded, but extensive notes were taken. To facilitate the conversations and for ease of comparison, a topic list was used in the first wave. During the second wave, a modified topic list was used, highlighting the elements which needed more clarification after the first interview.

These findings were, whenever possible, complemented by secondary materials on the companies and their global sourcing effort, such as independent consultants' reports, headquarter audits and communications, effectiveness measurement reports and board meeting transcripts with relevance to the process under study. Due to the confidential nature of some of these documents, they could sometimes only partly be reviewed and scrutinised.

Iterative grounded theory

As can be seen, data collection and data analysis are highly iterative in nature. Theory building is the result of a spiralling process from cross-case analytic results to existing

literature and back. Orton (1997) refers to this methodological approach as iterative grounded theory. Theoretical frames used here are internationalisation theories from international business theory (Weisfelder 2001), the concept of key success factors from strategic management and marketing theory (Cavusgil and Zou 1994; Grunert and Ellegaard 1993), global sourcing challenges and issues as presented in the purchasing literature (e.g. Monczka and Trent 1991) and the concept of co-evolution and network interdependence from the IMP literature (Ford 1998; Gadde and Håkansson 2001).

A short note on the case companies

Case studies have the advantage over surveys that one can obtain a lot of new in-depth information that otherwise never would have been revealed. As table 1 points out, the background of the companies varies considerably. However, all companies have one thing in common: a high percentage of the value of their purchases is internationally sourced. In what follows, the eight cases will be addressed as company A till company F. Table 1 offers some key information about these companies. For reasons of confidentiality, the names of the companies have been omitted.

*** Insert table 1 about here ***

Company A, which has an American origin, focuses its activities on the production of chemical and pharmaceutical components. It has set up a purchasing matrix structure where one plant acts as the lead buyer for the other production sites of the company. Their major objective in international sourcing is to reduce total sourcing costs.

Company B is a German manufacturer of specialized electronic components. Sourcing efforts are coordinated, using internal benchmarking. As with company A, the main objective from the international sourcing efforts is a minimal total cost.

The industry in which company C is situated in is metal treatment. By means of a formalized worldwide purchasing structure, this company mainly wants to find competent worldwide suppliers. It has its roots in Spain, France and Luxemburg.

Company D has a matrix like structure with category buying. This Dutch company is situated in the electrical components industry and their main objective of international sourcing is to find competent co-developers and co-designers.

Electrical components is also the industry in which company E of Dutch origin is operating. It also has a matrix structure and its main aim is to find internationally competitive

suppliers that can deliver worldwide. With company B, it sources the highest percentage of their purchasing volume internationally (90%) in our sample.

Company F, is active in metal treatment. With a highly decentralized organizational structure, the plants have a large purchasing autonomy. This Belgian based company buys globally in order to find sufficient worldwide capacity.

Company G is a German textile company on the edge of global sourcing proficiency with a China project pending. Their major driver for internationalisation is cost control.

Company H is an American textile and hi-tech tissues group which seeks to tap innovations from the global supply market as well as interesting prices. They have a very professional and globally coordinated view on global purchasing.

Towards a model of internationalisation

The information obtained from these cases can be divided into five parts. These are: 1) drivers of international sourcing, 2) inhibitors of international sourcing, 3) key features of an international sourcing program, 4) critical success factors, and 5) measures of effectiveness for these elements.

Drivers of internationalisation

Numerous drivers can be defined, all of which have a potential impact on the internationalisation tendency within companies, as described by some authors (e.g. Liu and McGoldrick 1996). Our aim is not to indicate them once more, but to identify the most relevant ones observed. Table 2 shows how the eight companies experience these drivers.

*** Insert table 2 about here ***

Going global in purchasing is a necessity for all of the companies in this research. The specific structure of the industry and markets they operate in, combined with their internal organization structure, points out that worldwide sourcing is becoming an essential part of their business strategy. The main trend in purchasing seems to be the centralization of the purchasing efforts, as indicated by companies A, B, C, E and H.

The presence in foreign markets reveals new opportunities for diversification and enriches one's supplier portfolio. Companies A and D for instance firmly state this factor. The international reputation of the companies A, D, E and H, as indicated by their worldwide brand equity and awareness, further induces them to source internationally as well. All

companies state in one way or another that looking for international partners is key to survival. Some companies (B and E more specifically) have highly specialized suppliers. If, for some products there are only a few suppliers available worldwide (for example ceramic products, mainly found in Central Europe), global sourcing becomes a necessity. Company C states it this way:

“Global sourcing has become essential for us. Our raw materials are only found in a few places worldwide. Besides, we are faced with the globalisation from both our supply and sales markets. Moreover, we belong to an international group...”

Many companies acknowledge the impact purchasing results can make on the company profit. The purchasing managers of the visited companies feel a lot of pressure to reduce costs. International purchasing can help in that respect. Company G posits it this way:

“At a trade fair a conversation with a manager from a chemical giant clarified that we could break the near-monopoly situation for nylon and nylon-like materials of the present supplier. Using Southern European suppliers would result in savings of 10-15 %”

There is however no uniform approach towards cost reduction methods. Company B, for instance, focuses on hedging against extra costs, whereas company D tries to control the cost related to the non-conformance of products. Company H uses its global leverage and forces affiliates to buy from the same cheapest source from an overall group perspective.

Companies have become aware that they have to focus ever more on their core competences. Otherwise, the system becomes too complex, cumbersome and costly to operate. Outsourcing, also on an international scale, can then be an excellent solution, as illustrated by companies B, D, E, F and H. They have excellent R&D centres, design their products and may set the production specifications, but most of the manufacturing and assembly operations are outsourced. This is in contrast to company G that likes to keep as much as possible under its own control.

In times of rapid technological evolutions, where the product life cycles of products ever become shorter and shorter, it is a necessity to keep up with the latest developments. Combined with the urge for a shorter time-to-market, companies, which are capable of anticipating competition, create real competitive advantages. Companies D, E and H are examples of the kind. Therefore, they need suppliers who can comply with rapidly changing technological and qualitative demands on a worldwide scale. Suppliers help in obtaining the latest technological developments which sustain the case companies' differentiated market positions.

Inhibitors of internationalisation

As discussed above, many factors clearly have a positive impact on companies and act as drivers towards globalisation. However, some elements temper the effectiveness of this process. Mechanisms of adaptation and application will have to be implemented to safeguard the benefits expected from internationalising. If companies do not cope well with these difficulties, they become inhibitors for the globalisation effort. The elements most relevant for the selected companies are shown in table 2.

A first category of elements a company has to deal with are the additional costs of global sourcing, such as the costs associated with exchange rates (indicated companies B and C) and the problems related to the transportation of goods (as for most companies in our sample). Many companies have experienced such 'hidden' costs in global purchasing, also due to insecurities and errors in the areas of logistics, management time and distributors' margins. Company B mentions in this respect:

“Transportation costs, queuing time and controls at the borders makes it more difficult to source from Eastern European countries with e.g. Italy. Therefore, these the sooner these countries become member of the EU the better.”

Most firms are well aware of the specific challenges involved in a global supply structure. Company A indicates the problem that buying together on a voluntary basis does not work properly. The same observation led company H to enforce many aspects of global purchasing. Company E stresses the fact that the knowledge of purchasers in new plants is limited. Both companies tackled these problems by installing a more centralized purchasing structure. In this respect, good coordination between plants is indispensable.

Some companies also use the latest methods in sourcing. In this respect company C has begun using reverse auctions, after experiencing difficulties with intermediaries. Companies G and H stress the important and increasing role of e-communication in an international purchasing environment. As stated by a manager from company H:

“The time pressure is high. E-communication has brought real benefits to us, specifically when coordinating among our affiliates which are spread all over the world. Everybody is much faster aware of the developments and complaint handling also becomes more effective.”

Quite some companies refer to personnel problems which slow down the process of international expansion of purchasing. Purchasing departments are often suffering from lack of people and people available often lack international experience, foreign language ability and legal insight. Additionally, all interviewees stress how much more time international purchasing requires versus local buying.

Key features of managing international sourcing programs

The international sourcing programs of the participating companies take many elements into consideration. The most important of these are: supplier research and auditing, choosing adequate coordination and communication modes, logistics, and the development of partnerships. This is in line with the model suggested by Carter and Narasimhan (1990) . A summary of the elements highlighted by the companies is given in table 3.

*** Insert table 3 about here ***

When new suppliers are needed for strategic and bottleneck products (as in the vision of Kraljic 1983), all companies have a firm selection process. Companies A and B seem to be a little more lenient with their local suppliers than with their foreign suppliers. The reason for this is the lesser importance of the majority of local suppliers, based on the volume and type of products delivered, not the bare fact of being local. In practice, the supplier approval process generally followed, is thorough screening and auditing, followed by sample deliveries and finally, when performance is rated as sufficient, by acceptance as a regular supply source. Companies B, C, D, G and H explicitly stated most of these stages. Not only the purchasing department is important in the selection and assessment of suppliers. Also the quality and logistics departments (in company F) and the quality and technical departments (in companies B and G) are involved in this process. This feature is certainly not unique to global sourcing. It is also applied in local buying, but whereas it is mandatory for international sources, it is more optional for regional buys, as stated by companies D and E.

As exemplified by company G, more stringent quality audits and quality education programs are often enforced on foreign suppliers. They grow gradually with the first negative experiences which act as triggers for more effective controls.

The way the purchasing department is organized and the way purchasing information is spread throughout the company is paramount to supply effectiveness. As mentioned earlier, companies A and E use formal buying matrices. Such a system of obligatory participation in category buying is – under a different name – also present in companies D and H and will be more prevalent in company C once the EU-group organization is more formally defined and in company G once their Chinese project has been set up and a specific coordinator will be nominated.

Choosing the right logistics and engaging in collaboration with suppliers is also relevant in this respect. Networks of relationships lead to the creation of long-lasting partnerships, as company D indicates. Particularly in high-tech industries, where most

suppliers are located internationally, this leads to close international co-design and co-development of new products, as pointed out by companies D and H. This is not necessarily the cheapest offer. The importance of good partner relations is highlighted by the interviewee of company A:

“When you say to a supplier: “you don’t have to deliver any more, because we have found a cheaper alternative”, you cannot go back later to him when it turns out that the quality or performance of the new supplier isn’t sufficient”.

Finally, international suppliers will be selected thoroughly and rated on the basis of their recorded quality, price and service performance. Only companies positioning themselves as reliable partners on these criteria can become partners in the global sourcing programs of the visited companies. As supplier base reduction is in most cases indicated to be a cornerstone of the internationalisation effort, the selection, certification and evaluation of foreign suppliers will become even more stringent (company H is actually professionalizing their approach).

Critical success factors

The abovementioned elements are adequate when used on a case-by-case basis with focus on short term internationalisation. However, in order to benefit from long-term global purchasing a number of organisational factors ought to be present, which are deeply rooted in the corporate strategy of companies. These factors fit the 7S approach advocated by many scholars . The most relevant of those critical success factors are described below and are schematised in table 3.

Purchasing departments that have the support of top management for the implementation and the follow-up of global sourcing efforts will show better results. This is certainly supported by company A, which states that purchasing is represented in the strategic management committee and by company E, where the purchasing director is a member of the board of Directors. As such, objectives, practices and initiatives can be explained clearly and cooperation of top management is not only facilitated, but also becomes visible by the backing of initiatives. Top management support is also necessary because of the extra risks and the organizational impact of global purchasing (company G). In this medium-sized company, active participation of top management in the initial stages of the global sourcing effort gave it a real boost, which provides further proof of this fact.

Furthermore, a company should have a strategic vision. Within this vision global sourcing motives must match global company strategies. In this respect, company C can be quoted as saying:

“The globalisation movements in the supply chain make a modified global supply structure necessary. This will also become more centralized.”

As global purchasing implies many changes, staff must be trained in applying new skills and in thinking global. Specifically, companies D and G mentioned this as a key success factor and further more adapted their assessment system to these new needs.

By using the principle of open communication internally as well as externally, a company can easily identify problems and find swift solutions for it. E-procurement can among others be a helpful tool in this respect, identifying for instance maverick buying. When, in company A, someone from a subsidiary wants to order from a supplier a certain product, a signal is automatically given when this is not the preferred supplier with whom the company has a supplier contract. Because of this, performance is greatly improved. Open communication also implies clearly explained strategies and monitoring performance of buyers.

Good communication among divisions are also thought to be a key success factor. In company F, the price setting decisions are under the authority of the purchasing department, in close consultation with the sales department. Co-development of components with international suppliers, as in companies D, G and H, is done in teams of engineers and buyers and the lead buying of company C also involves teams of users in the different production sites. Whatever the composition of the team might be, global sourcing clearly necessitates open and detailed cross-divisional communication and cooperation.

Successful implications of the program in a number of pilot projects is another factor that might improve the performance of the global sourcing efforts. Thus, company B uses the principle of mutual benchmarking, hoping that one successful story will stimulate the appetite of participants for more to come. In company G, the success of their Eastern Europe project incited moving to China. Learning from one project spins off on the next projects and as such gradual learning occurs.

Another factor mentioned by the international sourcers in this study is cultural empathy (including overcoming language barriers). Foreign suppliers often have other managerial cognitive frameworks, and understanding these is a necessary step towards fruitful cooperation.

A last factor that was most evident from the cases G and H is the importance of supply networks and partners in major international ventures. In fact, partners can help doing market research, share information, give advice (e.g. technical, legal) and might share risk.

Measures of effectiveness

In order to evaluate the effectiveness of their international purchasing projects and programs, companies have developed a set of criteria. They are summarized in table 4.

*** Insert table 4 about here ***

One of those measures is total cost improvement. It will mainly be based on the performance measurement of suppliers, being among others formalized in companies F and G. Their system is composed of three elements: the price of the products, their quality and the performance of the delivery service. The results of the assessment lay the foundations for the reduction of the number of suppliers. Suppliers that score extremely bad are notified and if they don't comply, excluded. Company B also takes into account qualitative measures (i.e. the more informal way communication with suppliers is done).

The reduction of the number of suppliers (a key overall objective in all companies) can be further realised with the globalisation of purchasing, as indicated by companies A, C, D, G and H. The general trend by these companies is to have only a few suppliers, while avoiding single sourcing though. Although, when firms expand quickly, more suppliers are needed, because new foreign production plants don't always have the same sourcing needs as existing plants. Company F fears that the number of suppliers will increase, in spite of efforts to reduce its supplier base. As such, supplier base reduction requires a continuous effort of the purchasing organization. Company H is convinced that a coordinated international purchasing effort should contribute to it.

Results can only be achieved if international sourcing programs are effectuated throughout the various company plants. Implementation of formalized structures, as can be found in companies A, C, D, E and H, increase the chance of success.

Due to the increased technology and the shorter product life cycles, the number of components and elements tends to become larger and larger. Company A tries to stop this by investigating whether it is possible to manufacture new products with components already bought for existing products. Company F aims at enhancing standardisation of components by specifying their functionality first and their design later. Companies D and E do likewise, whereas company A sticks to very stringent specifications. Overall, an international supplier who helps to standardise is valued higher than a supplier which deviates.

For standardised products, the leverage and routine products according to the Kraljic (1983) matrix, foreign suppliers only have to be competitive in terms of price/quality. With respect to new supplies the technological lead will be key. Some companies (especially H)

stress the importance of innovative supply partners in maintaining their own competitive advantage.

The process of internationalisation of sourcing

Most companies have experienced a gradual gain in involvement. In an opportunistic way, they engaged in their first international project. They managed, in a trial and error process, to get positive performance out of this project. This gave them the necessary confidence and experience to add new projects, often involving more players and suppliers from countries further away from headquarters. This way, this gradual learning process on inward internationalisation is completely analogous to the outward internationalisation process as explained by the Uppsala school and similar 'stages' models (Johanson and Vahlne 1977; 1990). With increasing experience, companies adapt their purchasing organisation structures (more coordination/centralisation via lead buying programs, see Faes et al. 2000) and refine their purchasing planning and implementation processes.

It seems that the eight cases described here are also in line with the purchasing literature (Carter and Narashimhan 1996; Carter et al. 2000) which recognizes global sourcing to be one of the major trends in purchasing. In fact, the blending of global purchasing with supplier base reduction, partnership development, co-development and supply coordination is prominent in our case study results.

Although drivers like cost pressure and shortening product life cycles and technology have previously been mentioned (Birou and Fawcett 1993; Liu and McGoldrick 1996; Trent and Monczka 1998), our focus on the process aspects of global sourcing has also revealed important inhibitors, which often caught the lesser part of the attention, such as hidden costs, specific structural challenges and human capabilities.

Successful cases gradually build up confidence in the effectiveness of the company to deal with global purchasing. These cases highlight both the high risks and rewards involved in this process. Neutralizing the inhibitors is an important element herein. The apparent interplay between both drivers and inhibitors then becomes of particular relevance as global sourcing is clearly a strategic venture.

An integrated and structured approach to international sourcing must thus be undertaken. Critical parameters of this program, such as top management commitment, are revealed in literature as well, as discussed by Petersen et al. (2000). The contribution of this paper is merely to offer an integrating framework of how a company can and will realize

benefits from global sourcing. This complements the stepwise approach advocated by Monczka and Giunipero (1984).

Suppliers and supply networks play a key role in the internationalisation processes of their customers. Our case studies support this statement in two different key stages of this process. First, in the infant and start-up phase they provide an indispensable basis for any action whatsoever. Case G illustrates this clearly. Initially, low cost material suppliers from Southern Europe triggered the company to establish their first foreign sourcing agreement. A machine supplier from Switzerland entered also in the international network. A Spanish supplier integrated itself best in the network and learned most of it. This supplier improved its quality and showed commitment. Later in the evolution of the internationalisation process of company G, other suppliers participating in supply networks shared vital information with G on legal aspects, potential partners, cultural values etc. That way, some suppliers managed to follow company G in its big 'China sourcing project' presently under 'construction'. Supply networks play a key role in the internationalisation process. As such this is a clear example of interdependence (Ford 1998). This study also shows that the concept of co-evolution (Ford 1998) is valid in the area of globalisation strategy, where network partners reinforce each other's international commitment. We get the feeling suppliers often define their role and value too narrow. Helping the customer to further its international purchasing expansion might be a sound approach for customer bonding and export expansion (and resulting scale advantages) also for the supplier.

Second our research shows the high value of global networks in several supporting activities of the value creation process. Once global sourcing practices become more established, the interplay in global supply networks continues to play a role in the constant innovation efforts of companies. Companies D, G and H state the co-development of components in this respect. Without global network partners, the creativity dries up. Partners also help in market research and sharing risk. But also in the primary activities there can be a direct effect. For instance, a good relationship with suppliers can lead to an increase in sales, as indicated by company F. They distribute one of their products in Italy by means of one of their Italian suppliers. Also this is in line with the idea of Ford on co-evolution, who also stressed that the relationship will spin off on other business relationships each of the companies holds or initiates.

Conclusion

The key findings of this case study are displayed in figure 1. Although different companies agreed upon the same elements, generalisation is not possible yet. However, this research should be seen as the start of a more concentrated and longitudinal effort to reveal patterns of success and failure in global purchasing by contrasting case study events in different sectors of industry, market settings and cultural environments.

*** Insert figure 1 about here ***

Some intriguing aspects were uncovered that needs to be investigated in the near future. It might be for instance interesting to observe how intense training of employees in global purchasing – as supposed by company D – influences the development of international partnership relations and their overall effectively and longevity. Moreover, the question can be posed whether globalisation and centralization go hand in hand. Only by digging deeper into those aspects, practical insights can be gained, corroborated and integrated into a conceptual framework of inward internationalisation (Welch and Luostarinen 1993).

The inward internationalisation process (as also described by Monczka and Trent 1991) appears to be strongly interconnected with outward internationalisation (Johanson and Vahlne 1977; 1990). Based on this strong linkage, further research has to determine whether good coordination between the purchasing and marketing departments of an organization can lead to better performances, as both departments can learn from each other and stimulate each other to go global.

While suggesting this framework, the importance of the network pops up. All the features of an international purchasing program refer to the embeddedness of the company in a network structure and the coordination efforts herein play a mayor role. Successes in global depends as much on other partners as on the company itself.

In sum, the paper illustrates the need for a profound investigation in what drives or prevents companies to source international, considering both practical implications as well as theoretical constructs on this topic.

Table 1: Synoptic table of the six cases

	Company A	Company B	Company C	Company D	Company E	Company F	Company G	Company H
Industry	chemical	electronic components	metal treatment	electronic components	electronic components	metal treatment	textile	textile
Origin of company	USA	Germany	France, Spain and Luxemburg	the Netherlands	the Netherlands	Belgium	Germany	USA
% internationally sourced on total sourcing budget	65 %	90 %	80 %	80 %	90 %	60 %	45 %	85 %
Objectives of international sourcing	Reduce total sourcing costs	Minimal integral cost	Find competent suppliers worldwide	Sourcing based on co-development and worldwide co-design competence	Find competent suppliers worldwide	Find sufficient worldwide capacity	Mainly cost control	Creating competitive cost structure and use of innovative partners
Mode	Purchasing matrix with one plant as lead buyer	Coordination with mutual benchmarking	Formalized worldwide purchasing structure	Matrix like structure with category buying	Matrix structured with lead buyers	Decentralized purchasing structure with large autonomy	Buying per product type, moving to coordination	Lead buyers with focus on cooperation

Table 2: Drivers and inhibitors for internationalisation

	Company A	Company B	Company C	Company D	Company E	Company F	Company G	Company H
DRIVERS								
Global sourcing strategy	Purchasing centralization with lead buyer	Coordination with detailed supplier selection	Central purchasing organization	Waves of outsourcing and globalisation	Strong centralization of purchasing	Purchasing abroad due to lack of local capacity	Calculated opportunism	According to cost or competitive position
International vocation of the company	Inherent in business industry	Necessary to survive	Necessary to survive	Inherent in business industry	Inherent in business industry	Necessary to survive	Inherent to business industry	Inherent to business industry
Pressure on costs	Cost related aspects becoming more important	Hedging against extra costs	Costs important due to globalisation of supplier and customer markets	Focus on cost of non-conformance	Time-to-market costs more important than time-to volume costs	Awareness that consolidated buying might be beneficial	Large pressure for standardised products, but increasing	Important for standardised and fashionable products
Technological pressure	Less importance of technology	Non-core business technology is outsourced	Less importance of technology	High technological pressure due to short PLC	High technological pressure due to short PLC	Less importance of technology	Medium Stronger for the equipment buys	Technological pressure is increasing
Focus on core business	Few outsourcing	Selected outsourcing	Limited outsourcing	Development of emerging technologies	Focus on competence in research and development	System design with outsourcing of most manufacturing	Limited outsourcing	Growing level of outsourcing
INHIBITORS								
Extra costs incurred	Customs formalities are main problem	Exchange risks (\$, €, ¥)	Exchange risks of \$ and ¥	Not complied trade conditions	Large distance to most of the suppliers	Differences in gross and net prices	Language learning, insurance and exchange risks	Language learning, insurance and exchange risks
Specific supply structure problems	Joint purchasing on voluntary basis doesn't work	Bad internal communication delays activities	Difficulties with intermediaries	Rapid evolutions in logistics	Initial purchasing knowledge is limited	No purchasing integration between plants	Small purchasing department	E-procurement

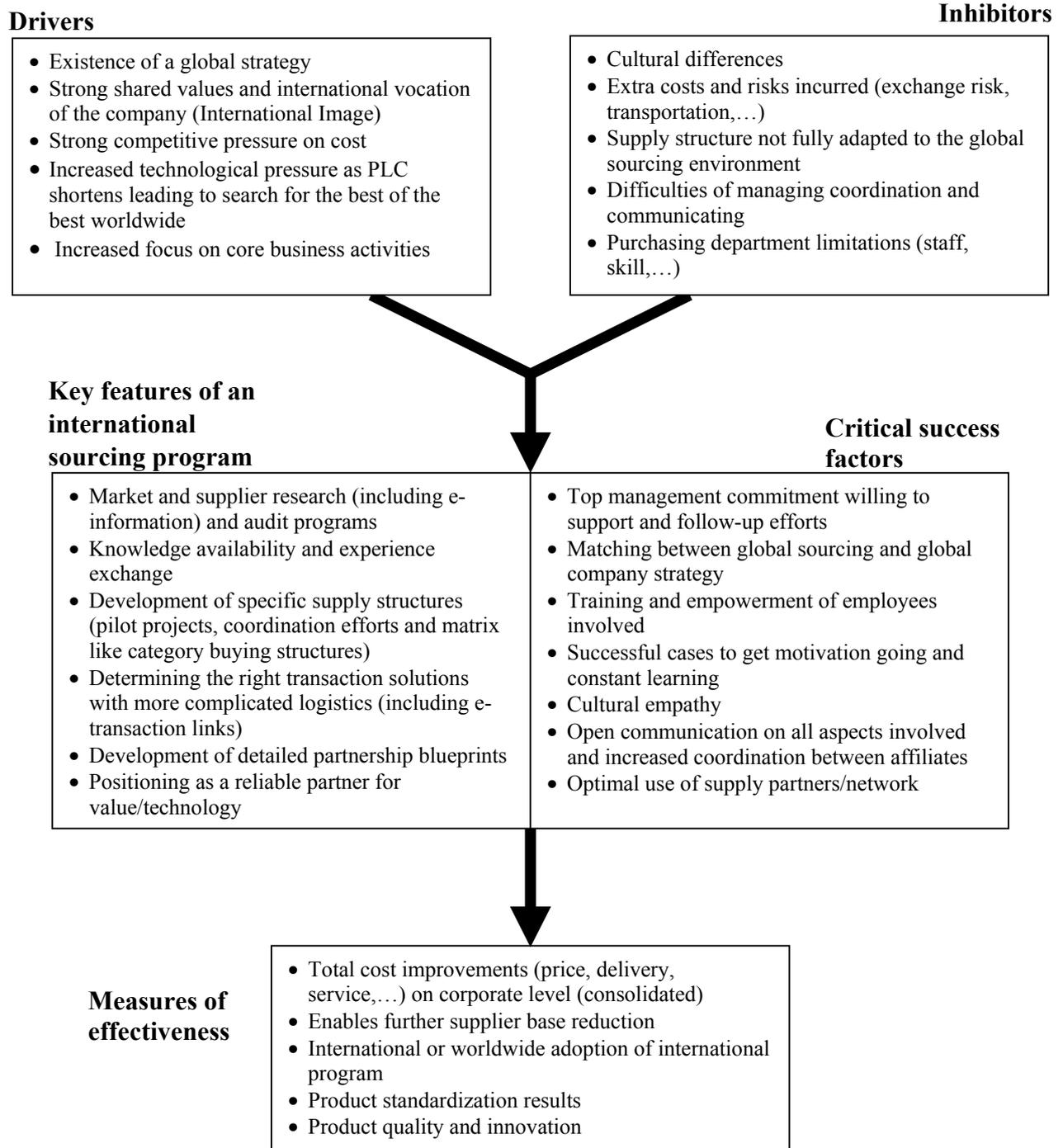
Table 3: Elements of the international sourcing program and their critical success factors

	Company A	Company B	Company C	Company D	Company E	Company F	Company G	Company H
Elements of the international sourcing program	Supplier assessment E-procurement Logistics network	Supplier selection on qualitative and quantitative level Logistic partners	E-procurement Logistics based on DDP/DDU	Co-development with competent suppliers Networks of logistics partners	E-procurement Centralization of purchasing efforts	Detailed supplier selection and assessment	Cost-benefit analysis Specific budgeting structure Team training	Group purchases by lead buyers Cost-benefit analysis Specific budgeting structure
Critical success factors	Purchasing involved in strategic management Good communication by e-procurement	Successful cases integrated through benchmarking	Global sourcing attuned to global company strategy	Training and assessment of people to think global	Purchasing represented in board of directors	Prices directly depending on purchasing department	Learning form success stories Information sharing with important partners	Learning form success stories Backing and consent from management

Table 4: Measures of effectiveness

	Company A	Company B	Company C	Company D	Company E	Company F	Company G	Company H
Measures of effectiveness	Total cost improvements Supplier base reduction World-wide applicability	Ex post and ex ante cost comparison based on qualitative and quantitative measurements	World-wide applicability Reduction of suppliers	Supplier base reduction World-wide applicability	World-wide applicability	Increase of global sourcing Degree of standardization	Cost improvements and quality of products delivered	Cost improvements and quality of products delivered

Figure 1: A preliminary process model of the internationalisation of sourcing



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