

# UNDERSTANDING EXPORT GROUPING SCHEMES AS ISSUE-BASED NETS

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## Abstract

Many Portuguese SMEs firms used export networks as an internationalization strategy. In the process of internationalization of those firms export grouping schemes have assumed an increasing role. Export grouping schemes creation and development has been widely studied. The study of collective action within export grouping schemes has been neglected. This paper aims at developing a methodological approach which takes into account that most export schemes involve a variety of actors who share common interests and are concerned with the promotion or defense of their collective interests.

**Keywords:** export grouping scheme, collective action, cooperation, issue-based net, case study.



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## **1. Introduction**

Export grouping schemes are a case of cooperative arrangements in international business. Often encompassing a collective action character, they have assumed an increasing role in the process of internationalization, especially for small- and medium-sized companies. The objective of this paper is to develop a methodological approach for the study of export grouping schemes which takes into account their collective nature. The paper is divided in four main sections. The first elaborates on the concept of export grouping scheme and puts in evidence its collective nature. The section which follows addresses the methodological approach adopted in this study. The third section analyses the Vitrocrystal case. This is an export grouping scheme aimed at increasing the competitiveness of the Portuguese crystal industry during the 90s. The last section makes clear the contribution of the concept of issue-based net as a methodological construct particularly appropriate for the understanding of cooperative phenomena.

## **2. Collective action within export grouping schemes**

Export grouping schemes are often used to deal with export marketing difficulties. Ghauri et al. (2003) classify export marketing problems in two categories: internal and external. The first have in general to do with organizational resources whose lack may have significant influence on export performance of manufacturing firms. They include the lack of suitable quality, image and design for the foreign market (Czinkota and Rocks, 1983; Kaynak and Kothtari, 1984) as well as problems stemming from poor organizational and personnel resources (Yang et al., 1992). On the other hand, external problems are associated with factors of the macro environment, the industry and the export market that may act as barriers or limitations to the expansion of the activity in foreign markets (Ramaseshan and Soutar, 1995).

The benefits of an export grouping scheme result from the coordination of activities among its members (Wilkinson et al., 1998). The benefits can be measured both in terms of efficiency (e.g., sharing of resources to hold up international marketing activities) and effectiveness (e.g. gaining greater impact from a given amount of resources allocated).

Despite their potential benefits, export grouping schemes may be difficult to emerge and develop. The process of network development also raises some difficulties. Welch and Joynt (1987) suggest two major factors that tend to determine the success of an export grouping scheme. The first determinant concerns the attitude of the members of the group in terms of solidarity, cohesion and commitment. Both the size and composition of the group are key

features. As the size expands, solidarity, cohesion and commitment tend to become more difficult. The same way, "... the greater the substitutability of different firms' products the more this is likely to promote competition instead of co-operation" (Rosson and Blunden, 1985, p. 4). The second determinant concerns the evolution of foreign market penetration activities. In this case, the key elements are the access to foreign marketing experience and know-how, the access to foreign marketing networks, and support infrastructure.

A central feature of export schemes is cooperation. According to Easton and Araújo (1992, p. 76), this "... occurs when two or more parties have objectives which are mutually dependent". As a matter of fact, Welch et al. (1996) state that such schemes assume the form of a network among firms sharing common interests regarding internationalization issues. "The logic of such schemes is that companies should be able to achieve far more impact in a foreign market by acting in combination rather than singly, with resources being pooled and costs, information and experiences being shared" (op. cit., p. 464).

However, the cooperative character of an export grouping scheme usually involves forms of collective action. A collective action arise when a variety of actors join efforts to cope with a collectively recognized issue by influencing the structure and evolution of the systems to which they belong through an increased control over activities, resources and other actors. This is clear in Wilkinson's et al. (1998, p. 493) argument that "... for cooperation to develop group members must recognize and value the potential gains to be made. However, these may be outweighed by the potential costs. They must perceive that the potential gains outweigh the costs and the contributions to be made". Using a collective action terminology, what Wilkinson and his colleagues mean is that companies will join schemes that provide them with a collective good that compensates their individual costs for the provision of the collective benefit.

Since export grouping schemes are collective actors, the methodology for their study gains an extra importance if it takes into consideration that fact. In this context, the concept of issue-based net introduced by Brito (1999) is likely to open new avenues in this front since it is particularly appropriate for the study of collective action phenomena. The roots of this concept can be found in four streams of research: collective action studies (cf. Klandermans, 2002; Ostrom, 2003), policy networks studies (cf. Marin and Mayntz, 1991; Scharpf, 1993), organization and marketing studies (cf. Nohria and Eccles, 1992; Iacobucci, 1996) and management studies (cf. Dutton and Webster, 1988; Dutton et al., 1997). The concept was later developed by other researchers who applied it to different contexts. For instance, Komppula (2000) used it to study regional tourism networks in Finland, Mustikkamäki et al. (2001) in a research on urban

networks, Mäkinen (2002) to study innovation networks and start-up companies, and Nummela (2002) to research international R&D collaboration.

In this context, the concept of issue-based net can be particularly useful for the study of export grouping schemes. An issue-based net is a form of association mainly based on cooperative relationships amongst actors who aim to cope with a collectively recognized issue by influencing the structure and evolution of the system to which they belong through an increased control over activities, resources and/or other actors. Furthermore, an issue-based net may aggregate mutual interests of various types of actors through processes of interaction and exchange - e.g. social, economic, or political - whose objective is to cope with a collective issue by changing (or preserving) the shape of the network where its members are embedded. They may or may not adopt formalized structures. Formalized issue-based nets are those created through an explicit contract, and assuming a formal structure and organization. Nonetheless, side by side with formal members, there may be other actors who relate to the contractual net in an informal way.

The emergence and development of issue-based nets may be dependent on the role played by a small number of more active actors who provide the resources necessary for the creation of the net. Despite the fact that the majority of members do little or nothing, such a critical mass (cf. Oliver, Marwell and Teixeira, 1985; Marwell, Oliver and Pahl, 1988) may be sufficient to mobilize time, money and other resources towards the production of a collective benefit. In this context, the emergence of an issue-based net is very much dependent on the strength of the relationships established among the critical mass members, rather than the size of the group.

### **3. Methodological issues**

These issues were investigated on the basis of a case study methodology. The exploratory nature of the research required an explanatory methodological approach rather than descriptive. As a matter of fact, case studies are considered an adequate methodology for exploratory and explanatory research (Yin, 1994). The research context is framed by the Portuguese crystal sector, where collective actions assuming the form of an export grouping scheme became a central issue. Dubois and Araújo (2004) advise the use of case studies in this context since methodologies relying on statistical inference cannot be used in the study of networks, as they require independence among sampling units. Data collection was mainly based on semi-structured interviews. The analysis followed the principles of the grounded-theory approach aiming at the emergence on new theoretical constructs on the basis of data analyzed (Strauss and Corbin, 1990).

In this context, the Vitrocrystal case which follows aims at putting in evidence how the concept of issue-based net can be used for the understanding of the creation and development of export grouping schemes. Vitrocrystal is a case of an export scheme made up of small- and medium-sized firms aimed at reinforcing their competitiveness by joining resources and efforts to gain an important head start in the international marketplace.

#### **4. The Vitrocrystal case study**

The Portuguese crystal sector faced a number of important challenges by the early 90s. These had to do with a number of threats that weakened its competitive position in international markets: strong external competition, especially from Eastern Europe, highly unionized labor force, and dependence from a small number of customers with high bargaining power. Side by side with these threats, the majority of firms had a low productivity and were highly product oriented, paying very little attention to marketing issues. This led to a reduced control over distribution channels, absence of strong brands, poor design, and difficulties in developing an integrated communication strategy.

##### **4.1 Creating an export grouping scheme**

The majority of companies operating in this sector were located in Marinha Grande. Located 70 kilometers north of Lisbon, this region was an industrial district with both a national and regional significance. In fact, it accounted for 80 per cent of the Portuguese crystal production, and one third of the active labor force of the district was employed in the crystal sector. Since most companies were facing strong problems of competitiveness, a number of entrepreneurs along with representative bodies and governmental departments developed an in-depth analysis of the industry value chain. As a result, a key measure was identified as crucial for the recovery: the mobilization of resources and efforts in order to increase the technical and commercial capabilities of the firms. This gave rise to the creation in 1994 of Vitrocrystal, an export grouping scheme made up of fourteen companies.

By that time, this was considered the first step to get rid of the crisis. However, two years later many things were in a standstill. The members of Vitrocrystal became then aware that other actions were needed to face the challenges of the international context where these companies were operating. Thus, some interventions in terms of brand, design, commercial conditions and new markets were searched for. It was recognized that closer relationships with the customers as

well as a higher level of product differentiation were critical success factors. An important element of this strategy was the creation of a collective brand: MGlass. Each company could use this brand in its products subject to the condition that the standards in terms of quality and design were achieved. Furthermore, there were regular inspections to the products and processes to check if the conditions were being fulfilled. In this way, under MGlass was offered a wide and differentiated product line, something that was impossible to achieve if the firms operated on their own.

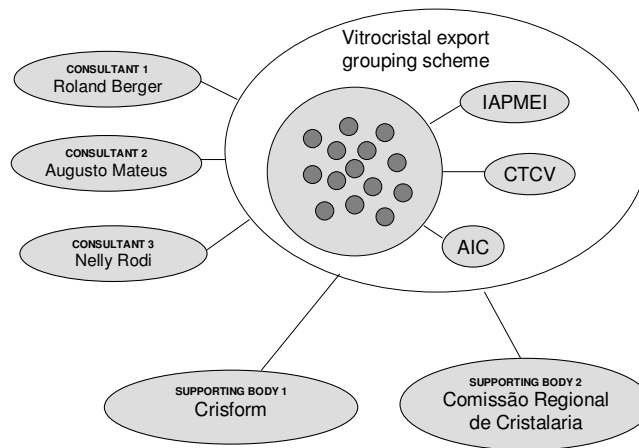
The network created around the Vitrocristal case did not include only the fourteen founding firms. This alliance also involved the trade association (AIC – Associação Industrial de Cristalaria), the technological centre for glass and ceramics (CTCV – Centro Tecnológico da Cerâmica e do Vidro) and IAPMEI, the governmental institute that supports small- and medium-sized firms. On the other hand, it was recognized that the success of the crystal industry was very much dependent on the regional development of Marinha Grande. The Glass Region was then created, aimed at articulating industrial and regional policies, and promoting a differentiated image of the Portuguese crystal products in international markets. In this way, Vitrocristal was expected to act as a vehicle for the implementation of industrial and regional policies aggregating companies, a trade association and a support technological infrastructure. Its mission was to improve the overall competitiveness of the industry on the basis of a collaborative model with a clear geographical orientation.

Considering the strategic positioning desired for the cluster, a consultant company was hired: Roland Berger & Partners. Its selection was made taking into account that Roland Berger had a significant expertise in the glass and crystal industry throughout the world, as well as close links with the most important markets. Meanwhile, the success of Vitrocristal required other measures such as the involvement of both a training centre (Crisform) and a regional body (CRC – Comissão Regional de Cristalaria) that aimed at promoting the region and its products. It was entitled of the involvement of all the driving forces of the region in order to capture a wide range of motivations that used the image of the district for managerial purposes. CRC was also responsible for checking if the production of crystal companies conformed the established standards.

In short, the network created to deal with the challenges faced by the Portuguese crystal firms in the early 90s was not confined to Vitrocristal, i.e. the export grouping scheme. The real issue-based net was made up of different kind of actors as shown in Figure 1. Formal members were the firms, AIC, CTCV and IAPMEI. In addition, there were very close relationships with other partners such as Roland Berger, Nelly Rodi (a fashion company) and Augusto Mateus &

Associados, an important Portuguese consultancy company, as well as with Crisform and CRC as mentioned earlier.

**Figure 1 – The Issue-based Net**




#### 4.2 Analyzing the Vitrocrystal case

In this way, the crystal issue-based net represented in Figure 1 was the sampling unit. Its analysis was mainly based on primary data collected through personal interviews where informants were induced to talk about their perceptions of the issue being studied. The reasons for the concentration on individual perceptions were twofold. The first reason flowed directly from the research questions. As stated before, such questions were mainly exploratory and explanatory in nature. They were exploratory mostly because of the lack of knowledge about the kind of phenomena under study. But research questions were also explanatory because, given that they were formulated in terms of 'why' and 'how', they reflected the declared purpose of understanding of cooperation in international business rather than looking for mere descriptions of facts (Yin, 1994). Within this context, perceptual data were useful for both understanding the rationale underlying such phenomena and suggesting directly theoretical constructs which could be strengthened by replication and extension (Dubois and Gadde, 2002).

Given the basic research method adopted, the sample corresponded to the crystal issue-based net. The rationale for this method stemmed from the connectedness of industrial networks which demanded that research should be carried out on a net of actors linked by both transactional and

non-transactional relationships (Dubois and Araújo, 2004). Table 1 offers a comprehensive view of the key results of the study adopting this methodology.

**Table 1 – Key Results**

<b>The Basic Collective Issue</b>		<ul style="list-style-type: none"> <li>• Increase competitiveness: <ul style="list-style-type: none"> <li>. Increase dimension</li> <li>. More competencies (design, quality standards, marketing...)</li> </ul> </li> </ul>		
<b>Structure of the issue-based net</b>		<b>Critical Mass</b>	<b>Operational Issues</b>	
<b>Formal Actors</b>	<b>Informal Actors</b>		<b>Conjoint Resources</b>	<b>Coordination of Activities</b>
<ul style="list-style-type: none"> <li>•Companies</li> <li>•AIC (trade association)</li> <li>•CTCV (technological centre)</li> <li>•IAPMEI (governmental institute)</li> </ul>	<ul style="list-style-type: none"> <li>•Roland Berger</li> <li>•Crisform</li> <li>•CRC (regional body)</li> <li>•Nelly Rodi (fashion company)</li> <li>•Augusto Mateus &amp; Ass. (consultancy company)</li> </ul>	<ul style="list-style-type: none"> <li>•The initial group of companies</li> <li>•AIC (trade association)</li> <li>•IAPMEI (governmental institute)</li> </ul>	<ul style="list-style-type: none"> <li>•Capital</li> <li>•Technological expertise</li> <li>•Time and effort</li> </ul>  <ul style="list-style-type: none"> <li>•MGlass</li> </ul>	<ul style="list-style-type: none"> <li>•Establishment of protocols (quality, standards)</li> <li>•Development of a product line with a new brand</li> <li>•Training</li> <li>•Promotion of the region (i.e. the industrial district)</li> </ul>

The sampling process did not follow a rigid pre-established sampling plan which should be respected in all circumstances. By contrast, it was developed while retaining some degree of flexibility. In other words, sampling was a dynamic process which evolved on the basis of the evolving theoretical relevance of concepts (Georges and Bennett, 2005). This reflects two key features of the sampling process adopted. Firstly, sampling and data analysis were overlapping and interwoven tasks with mutual impacts. Secondly, it also reflects the objective of avoiding what is considered one of the most undesirable pitfalls faced by many researchers: the indiscriminate collection of data and the consequent accumulation of far more information than there will be time to study (Easton, 1995).

Taking these considerations into account, the process developed in the following way (cf. Eisenhardt, 1989). Firstly, sampling was *a priori* opened to those incidents that were likely to provide the most relevant data about the phenomenon being studied. Secondly, as new categories were discovered and relationships among them were established, sampling became more focused on some incidents in order to uncover or validate such discoveries. Thirdly, some 'peripheral' informants - i.e. people who apparently were not closely linked with the issue under study but whose perceptions about such issues were likely to contribute to new and insightful perspectives



- were also deliberately included. In this regard, the experts interviewed were typical 'peripheral' informants. Finally, sampling stopped when 'theoretical saturation' was reached. This means that sampling came to an end when "... (1) no new or relevant data seemed to emerge regarding a category; (2) the category development was dense, insofar as all of the paradigm elements were accounted for, along with variation and process; (3) the relationships between categories were well established and validated" (Strauss and Corbin, 1990, p. 188).

## 5. Findings

The concept of issue-based net seems to be particularly appropriate for the study of export grouping schemes inasmuch these usually involve a collective action nature, as it happens in the Vitrocrystal case. The richness of this methodological approach has to do with its systemic and dynamic character. In fact, studying an issue-based net involves both the development of a systemic view of the whole set of situations involved with a particular collective issue, and the understanding of the dynamics of industrial systems driven by the mobilization of collective interests.

The methodological approach addressed in this paper represents a development of the case study method which involves an in-depth analysis of a small number of situations or cases. In this line, an issue-based net can be regarded as a situation or a case. The importance of this concept stems from the fact that issue-based nets represent an intermediary option between two extreme alternatives: the use of focal organizations (or relationships) as sampling units versus the adoption of the overall network as unit of analysis. Taking into consideration the difficulties associated with the second option, the use of issue-based nets as sampling units can be regarded as a practical solution for capturing the connectedness character of network analyses.

## References

- Brito, C. (1999), "Issue-Based Nets: A Methodological Approach to the Sampling Issue in Industrial Networks Research", *Qualitative Market Research: An International Journal*, 2 (2), 92-102.
- Czinkota, M. and D. Rocks (1983), "The use of the multi measurement approach in the determination of company exports priorities", *Journal of Academic Marketing Science*, 11 (3), 91-283.
- Dubois, A. & L. Araújo (2004), "Research methods in industrial marketing studies", in Håkansson, H., D. Harrison and A. Waluszewski (eds.), *Rethinking Marketing: Developing a New Understanding of Markets*, Chichester: John Wiley & Sons, 207-227.

- Dubois, A. and L.-E. Gadde (2002), "Systematic Combining: An Abductive Approach to Case Research", *Journal of Business Research*, 55, 553-560.
- Dutton, J., S. Ashford, R. O'Neill, E. Hayes and E. Wierba (1997), "Reading the Wind: How Middle Managers Assess the Context for Selling Issues to Top Management", *Strategic Management Journal*, 18 (5), 407-423.
- Dutton, J. and J. Webster (1988), "Patterns of Interest around Issues - The Role of Uncertainty and Feasibility", *Academy of Management Journal*, 31 (3), 663-675.
- Easton, G. (1995), "Methodology and Industrial Networks", in K. Möller and D. Wilson (eds.), *Business Marketing: An Interaction and Network Perspective*, Boston, MA: Kluwer Academic Publishers, 411-492.
- Easton, G. and L. Araújo (1992), "Non-economic Exchange in Industrial Networks", in B. Axelsson and G. Easton (eds.), *Industrial Networks: A New View of Reality*, London: Routledge, 62-84.
- Eisenhardt, K. (1989), "Building Theories from Case Study Research", *Academy of Management Review*, 14 (4), 532-550.
- Georges, A. and A. Bennett (2005), *Case Studies and Theory Development in the Social Sciences*, Belfer Centre for Science and International Affairs, Cambridge, MS: Harvard University.
- Ghuri, P., C. Lutz and G. Tesfom (2003), "Using networks to solve export-marketing problems of small- and medium-sized firms from developing countries", *European Journal of Marketing*, 37 (5/6), 728-752.
- Iacobucci, D. (ed.) (1996), *Networks in Marketing*, London: Sage Publications.
- Kaynak, E. and V. Kothtari (1984), "Export behavior of small and medium sized manufacturer: some policy guidelines for international marketers", *Management International Review*, 24 (2), 61-69.
- Klandermans, B. (2002), "How Group Identification Helps to Overcome the Dilemma of Collective Action", *American Behavioral Scientist*, 45(5), 887-900.
- Komppula, R. (2000), *The Representative Role of an Issue-Based Net within a Regional Tourism Network*, paper presented at the 16<sup>th</sup> IMP Conference, Bath: UK.
- Mäkinen, H. (2002), "Intra-firm and inter-firm learning in the context of start-up companies", *The International Journal of Entrepreneurship and Innovation*, 3 (1), 35-43.
- Marin, B. and R. Mayntz (eds.) (1991), *Policy Networks - Empirical Evidence and Theoretical Considerations*, Frankfurt: Max-Planck Institut.
- Marwell, G., P. Oliver and R. Prahl (1988), "Social Networks and Collective Action: A Theory of the Critical Mass, III", *American Journal of Sociology*, 94 (3), 502-534.
- Mustikkamäki, N., K. Viljamaa and M. Sotarauta (2001), *Urban Networks – special or issue-based: Some reflections from Finland*, paper prepared by the Research Unit for Urban and Regional Development, Tampere: University of Tampere.
- Nohria, N. and R. Eccles (eds.) (1992), *Networks and Organizations - Structure, Form, and Action*, Boston, MA: Harvard Business School Press.
- Nummela, N. (2002), "Commitment to Issue-based Nets: International R&D Collaboration in Focus", in Larimo, J. (ed), *Current European Research in International Business*, University of Vasa, 192-210.

- Oliver, P., G. Marwell and R. Teixeira (1985), "A Theory of the Critical Mass, I. Interdependence, Group Heterogeneity, and the Production of Collective Action", *American Journal of Sociology*, 91 (3), 522-556.
- Ostrom, E. (2003), "How Types of Goods and Property Rights Jointly Affect Collective Action", *Journal of Theoretical Politics*, 15(3), 239-270.
- Ramaseshan, B. and G. Soutar (1995), "Combined effects of incentives and barriers on firms' export decisions", *International Business Review*, 5 (1), 53-65.
- Rosson, P. and R. Blunden (1985), "Northumberland Seafoods Limited", case study, Center for International Business Studies, Dalhousie University, Halifax.
- Scharpf, F. (ed.) (1993), *Games in Hierarchies and Networks*, Frankfurt: Max-Planck Institut.
- Strauss, A. and J. Corbin (1990), *Basics of Qualitative Research*, London: Sage Publications.
- Welch, L. and P. Joynt (1987), "Grouping for export an effective solution?", in P. Rosson and S. Reid (eds.), *Managing Export Entry and Expansion: Concepts and Practice*, New York, NY: Praeger.
- Welch, D., L. Welch, I. Wilkinson and L. Young (1996), "Network analysis of a new export grouping scheme: The role of economic and non-economic relations", *International Journal of Research in Marketing*, 13, 463-477.
- Wilkinson, I., L. Young, D. Welch and L. Welch (1998), "Dancing to success: export groups as dance parties and the implications for network development", *Journal of Business and Industrial Marketing*, 13 (6), 492-510.
- Yang, Y. (1992), "A market expansion ability approach to identify potential exporters", *Journal of Marketing*, 56, 84-96.
- Yin, R. (1994), *Case Study Research: Design and Methods*, 2<sup>nd</sup> Edition, Applied Social Research Methods Series, Vol. 5, London: Sage Publications.