Strategic groups analysis (SGA) as a tool for strategic marketing

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Abstract Argues in favour of the convenience of using strategic groups analysis (SGA) as a business management tool that is especially useful for strategic marketing planning. To illustrate the great versatility offered by SGA, we take as a reference the results obtained from a study of the Spanish retail grocery sector. By way of this empirical work, we analyse how SGA responds to some of the information demands considered as essential for the design of the marketing strategy of every firm (the analysis of the environment and the main alternative strategies, the attractiveness of each strategy, the analysis of rivalry, the strengths and weaknesses of firms, the threats and opportunities offered by the market, etc.). In summary, the paper shows that SGA is a powerful tool which could help managers to concentrate the activity of their firms in solid strategic options.

Introduction

The role of marketing in business organizations has not remained stable through time (e.g. Gardner and Thomas, 1985; McGee and Spiro, 1988; Webster, 1988, 1992; Grönnroos, 1994; Thomas, 1994; Brown, 1997a, 1997b); rather, it has evolved quite markedly, passing from a concentration on very specific aspects of business management to the use of decision-making models of great complexity (e.g. Cravens, 1987; Day and Wensley, 1988; Mckenna, 1991; Hunt, 1994; Saunders et al., 1996). This process of change has taken place in parallel with an extension of the ambit in which marketing is studied and as a consequence of its interaction with other disciplines, such as planning or strategic management.

Several authors (e.g. Lambin, 1993; Kotler, 1994) have reflected on this evolution in the adoption of the concept of marketing by firms. In fact, there is a clear parallelism in the approaches developed by these authors and one can note how the development of marketing activities has taken place in parallel with the needs of the firm. These needs have emerged simultaneously with the degree of rivalry that exists in the market and with the progressively more sophisticated tools employed in business management. In summary, these approaches illustrate the marked evolution experienced by the concept of...
marketing and its application in the business organizations, with ever greater importance being given to the strategic aspects and to the integrated character of marketing activities.

In this context, the objective and research question addressed in this paper is: to analyse the potential applications of SGA in the development of the strategic marketing policy of a firm, and to illustrate how these applications can be put into practice.

The paper is organised as follows. After the introduction, section two is devoted to describing the new information needs of strategic marketing; we introduce the concept of strategic group and suggest several potential applications of SGA in strategic marketing. In the third section we describe some methodological aspects of SGA applied to the Spanish retail sector, which is considered as a reference, and we analyse how we can put into practice the potential applications suggested. In the last section we offer some conclusions and the managerial implications of the paper.

**Theoretical approach**

*The new challenges for strategic marketing*

The formulation of a marketing plan with a strategic perspective is a process which involves great complexity and which carries great information needs with it. These needs have grown considerably within the last few years due to the high level of dynamism to which the markets are subject and which is leading inexorably towards ever more competitive and turbulent environments. This significant process of change highlights the need for strategic marketing planning to consider the following aspects (Lambin, 1993):

- the need to concentrate the activity of the firm in solid strategic options;
- the development of new systems of analysis and vigilance of the environment;
- the reinforcing of the capacity of the firm to adapt to changes in the environment; and
- to make the renewal of the firm’s products-markets portfolio more agile according to the evolution of the environment.

When undertaking this task, it is necessary to broaden and consolidate the role played by strategic marketing in the firm and to adopt new priorities, from among which the following two should particularly be mentioned:

1. The competition must be carefully considered in developing marketing planning.
2. New systems for the analysis and vigilance of the environment must be developed.

On the basis of these approaches it can be appreciated that, to develop the strategic marketing plan properly, it is necessary to use new tools which
provide a complete view of the market and which diagnose with some precision the relationship between the firm and the market.

With the aim of responding to the new challenges faced by marketing planning, in this paper we advance the convenience of using SGA as a business management tool that is especially useful for strategic marketing planning. Some potential applications of SGA have been proposed in a number of previous papers (e.g. Hatten and Hatten, 1987; Easton, 1988; Carroll et al., 1992; Aaker, 1995; McGee et al., 1995). However, it should be noted that in the majority of these papers the potential applications of SGA have only been suggested from a theoretical point of view, without proposing a specific methodology that allows us to put them into practice. Also, the most common perspective of analysis employed has been strategic management instead of strategic marketing. Finally, none of these papers have centred attention on the various applications that SGA might have.

In the light of this, it seems appropriate to develop a paper in which the main applications that can derive from SGA as a management tool for strategic marketing are put in a synthesised and structured form, and with consideration being given to the specific manner in which such applications could be implemented.

SGA as a tool for strategic marketing
In this section, we introduce the concept of strategic group and present a short review of the literature on the topic. We then propose six potential applications of SGA as a strategic marketing tool.

The concept of strategic groups. The concept of strategic groups was coined by Hunt (1972) to refer to highly symmetric firms operating within the same industry with respect to some of their aspects such as cost structure, formal organisation, degree of product differentiation and diversification, etc. The strategic groups approach supposes that the strategic diversity of an industry can be simplified by classifying the firms into different competitive groups (Newman, 1978; Porter, 1979). Furthermore, it can be foreseen that these groupings will remain stable due to the presence of mobility barriers, which limit the movement of firms through strategic space (Caves and Porter, 1977), or due to imperfections in the market for resources, which either make difficult or delay the acquisition of the specific assets that are necessary for the implementation of each strategy (Dierickx and Cool, 1989).

The concept of mobility barriers between groups is an extension of the entry barriers to the industry. In particular, the theory of mobility barriers holds that barriers impede not only the access of the newcomers from other industries, but also the movement of firms between groups in the same industry. Additionally, it is important to note that the mobility barriers may often be asymmetric (Hatten and Hatten, 1987). This asymmetry is reflected in two ways. First, entry into some groups would be more difficult than into others (it would
depend on the group in which the firm was previously competing). Second, the barriers associated with entry may be very different from those associated with exit.

**Potential applications of SGA.** The idea that the strategic heterogeneity of an industry can be simplified through SGA is not new, and has been present in the literature since the earliest research papers on the topic (e.g. Newman, 1978; Porter, 1979). Specifically, we could say that SGA provides a global idea of an industry which would be difficult to achieve in any other manner, given the large number of firms that are usually included. By classifying firms into a reduced number of groups, it becomes easier to determine the different strategies being implemented by the competitors. In summary, SGA makes the analysis of business heterogeneity more manageable.

Furthermore, it should be noted that in a specific piece of strategic group research, each group reflects the specific characteristic aspects of those firms which, in a global analysis of an industry, would be hidden by the use of aggregate data such as averages or typical deviations (Hatten and Hatten, 1987). Therefore, we can say that the simplification of strategic diversity is carried out preserving the basic characteristics which cause certain firms to be particularly similar one with another and clearly different from the rest of the industry. As a result, we can conclude that SGA has the following application:

- **Application 1:** SGA simplifies the strategic heterogeneity of the market and preserves the key aspects of strategic heterogeneity.

The analysis of business rivalry can also be markedly simplified through SGA. Specifically, if we identify strategic groups following the criteria established by Cool and Schendel (1987) – the most widely accepted criteria – we will have, in each group, a set of competitors characterized by offering similar products to the same market segments, in comparable geographical areas and who assume similar resource commitment. Additionally, Carroll et al. (1992) observed that the firms within a group often compete for resources and consumer segments. Therefore, we could say that SGA helps us to understand which firms compete strongly with each other.

In the light of this, we could argue that knowledge of the strategic groups structure of an industry is extremely useful for the strategist because, using this as a starting point, it is possible to concentrate attention in a preferential manner on the strategic movements made by competitors who form part of the same group, establishing an order of priorities and, in summary, simplifying the study of the rivalry faced in the market.

- **Application 2:** SGA facilitates the study of the rivalry that exists in a market.

Some theoretical approaches associated with SGA allow us to explain the existence of differences in performance between the firms of the same industry and their permanence in the long term. Specifically, it is possible to justify the differences in performance between groups on the basis of the adoption of
different patterns of strategic behaviour (Porter, 1979) protected by mobility barriers (Caves and Porter, 1977) and supported by specific resources (Grant, 1991). Furthermore, the special relationship that exists between the available resources and the strategy implemented, together with the problems associated with the acquisition of these resources, is an argument which explains why firms cannot easily change their strategy and modify the performance obtained.

Therefore, the existence of groups of firms which follow different strategies supported by specific resources justifies the differences in performance between competitors in the short-term and their permanence in the long term. As a result, we can conclude that SGA has the following application:

- **Application 3**: SGA allows for the justification of the differences in performance found between firms which compete in the same market.

Although some papers (e.g. Aaker, 1995) implicitly raise the idea of the interest there may be in applying SGA to the analysis of the strengths and weaknesses of a firm, in reality very little progress has been made in this area.

In this paper, it is argued that the result of an SGA is a particularly appropriate context in which to identify the strengths and weaknesses of a firm. Specifically, by knowing the different firms which put a specific strategy into practice, and the resources and skills on which they can count to that end, it may be possible to evaluate the appropriateness as between the available resources and the chosen strategy and, as a function of these relative differences, to identify the strengths and weaknesses of the firms which make up each strategic group.

Additionally, SGA could also facilitate the analysis and identification of the threats and opportunities offered by the environment to the firms included in each strategic group. Specifically, the strategic distance which separates two strategic groups could be considered as an approximate indicator of the intensity of the barriers to mobility which isolate these groups. Thus, by evaluating the strategic distance of each group in relation to the rest of the market, as well as the differences in performance, it may be possible to quantify with greater precision the risk of the entry of new competitors into the said group. Logically, the identification of threats and opportunities is a relative process; what, for the firms making up one group, represents an opportunity of access to another group, where the firms are obtaining better performance, will represent, for the firms of that other group, the threat of entrance of new competitors.

- **Application 4**: SGA facilitates the identification and analysis of the strengths and weaknesses of the firms, and the threats and opportunities offered by the environment.

The treatment of the time perspective carries great importance in strategic groups research. If we carry out a study from a dynamic perspective, we could analyse the evolution of the market in a structured form.
On the one hand, we shall study if the number of different strategies implemented in the market (number of strategic groups) increases, decreases, or remains constant (Hatten and Hatten, 1987). Additionally, we can determine if the different strategies implemented are convergent, or increasingly more divergent.

On the other, we shall study the evolution experienced by the competitors which make up each grouping, analysing whether the firms who implement a similar strategy adopt increasingly more homogenous competitive behaviour or, by contrast, become more heterogeneous with the time.

* Application 5: SGA simplifies the analysis of the evolution of the different strategies implemented in the market.

Hatten and Hatten (1987) have suggested that SGA allows us to assess the effectiveness of strategic actions over a wider range of variation than that offered by the experience of a single firm, because we can analyse different firms simultaneously. Additionally, Harrigan (1985), from a theoretical perspective, proposed that SGA could allow us to assess the long-term opportunities for profitability in an industry.

In this paper, we assume both theoretical proposals and we extend them by suggesting that SGA allows us to determine with greater precision the relative attractiveness of each strategy in the medium term, and even in the long term, by having evidence of the height or intensity of the barriers which isolate each strategic group. Specifically, by bringing together a body of firms which follow a similar strategy into the same group and by knowing the performance obtained by these firms through time, it is possible to estimate with greater reliability the level of performance to which each strategy leads, and to correct it by the corresponding level of risk. Furthermore, by estimating the intensity of the mobility barriers which protect each group, we can determine the extent to which the strategy implemented by a firm can be imitated by other potential competitors. As a result, we can conclude that SGA has the following application:

* Application 6: SGA simplifies the evaluation of the attractiveness of each strategy.

**Methodological aspects and results of the analysis**

*Strategic groups in the Spanish retail grocery sector*

In order to highlight the great versatility of strategic groups as a tool of analysis and its potential applications, we take as a reference the results obtained from a study of strategic groups centred on the Spanish retail grocery sector. In particular, the sample considered includes 71 of the largest firms operating in Spain. Each one of these firms has an annual turnover of more than 4,000 million Pts and, overall, the sample represents more than two-thirds of the sales volume of the sector. The period under study covers the years from 1989 to 1993. The source employed in the selection of the firms and the data has
been the *Informe Anual de Alimarket*, the *Anuario Financiero de la Distribución* and the business journal *Distribución Actualidad*.

Taking into account the information that is publicly available, in order to describe the competitive behaviour of the firms and to identify the strategic groups, we have employed the variables included in Table I. Following the criteria established by Cool and Schendel (1987), these variables reflect the scope of the activities of the firm and its resource commitment.

The scope of the firm is reflected as follows:

- the area of activity is delimited by the joint consideration of the total size of the firm, the geographical area in which it operates and the intensity of dedication to the retail business;
- the diversity of the products offered is reflected by the variable which estimates the range of the retail offer;
- despite the fact that there is no variable available to us which allows us to study the type of customer served, we have considered different aspects which have a certain discriminatory capacity by type of customer or purchasing situation, such as the type of establishment[1], the degree of personal attention, its infrastructure, the extent of the offer, etc.

The resource commitment represents the investments made by the firm in order to serve its customers. Specifically, we have sought to reflect the following aspects:

- the intensity of the growth strategy;
- the type of establishment;
- the effort made with respect to personnel who, in the final analysis, contribute a significant part of the service;
- the effort made in offering the consumers an infrastructure of greater or lesser importance in relation to the investment in current assets;

<table>
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<tr>
<th><strong>Table I.</strong> Strategic dimensions used to identify the groups and proxies employed to measure them</th>
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<td><strong>Scope of business activities</strong></td>
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<td>Size</td>
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<td>Extent of commercial offer</td>
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<td>Geographical spread</td>
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<td><strong>Proxy</strong></td>
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<td>Total sales area</td>
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<td>Number of references offered and stock volume of them</td>
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<td>Retail sales area in relation to total sales area</td>
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<td>Number of provinces in which they operate</td>
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the effort made to obtain more advantageous relationships with suppliers or cheaper financing.

As a prior step to the identification of the strategic groups, we have analysed the stability of the global strategic behaviour of the market in order to detect the possible existence of cut-off points which might reflect significant changes in the strategy implemented in the market[2]. On the basis of this analysis, the period under study has been divided into two different sub-periods, the first covering the years from 1989 to 1992, and the second covering 1993 (Flavián, 1995).

The structure of stable periods obtained is coherent with the evolution of the Spanish retail grocery sector. Specifically, at the end of 1992 and the beginning of 1993 the Spanish consumer transferred the serious effects of the economic crisis through which the country was passing into his purchasing behaviour, as evidenced by the evolution of the aggregate economic indicators. As was to be expected, the firms operating within this sector modified their strategic behaviour in the face of these changes in consumption, which could well have given rise to the appearance of a new period in 1993.

The identification of the strategic groups was made in each one of these sub-periods, reaching the conclusion that it was possible to distinguish seven groups of firms within each sub-period that maintained clearly differentiated positions.

**Potential applications of SGA**

In this section we analyse how SGA can facilitate the development of business management in general and of strategic marketing planning in particular. In order to carry out this analysis, we should take as a reference the result obtained from the SGA as described in the earlier section. In particular, SGA has the following potential applications:

- **Application 1**: SGA simplifies the strategic heterogeneity of the market and preserves the key aspects of strategic heterogeneity.

In the Spanish retail grocery sector it has been possible to identify seven strategic groups, which allows us to simplify the essential aspects of strategic diversity that exists among the 71 firms which make up our sample[3]. The identified groups enjoy great stability, in that they are isolated by important mobility barriers such as the business size or type of establishment, the geographical spread of the establishments, etc. Table II contains a brief summary of the main characteristics of each one of these groups, which markedly simplifies the analysis of the strategic heterogeneity.

In the Spanish retail grocery sector we can appreciate a significant heterogeneity between the different patterns of strategic behaviour that have not been lost with SGA (see Table III). For example, the firms included in group 3 have a particularly characteristic strategic behaviour which allows them to be clearly differentiated from the rest of the industry. Additionally, if we
concentrate on a detailed analysis of the positioning of the groups in each one of the strategic dimensions, we can see, for example, that in 1993 the average firm size in the market, measured by way of the total sales area, was 46,520m². However, the range of variation in the identified groups oscillates from 6,920m² in group 7 or 19,570 in group 2 to 317,360m² in group 3.

Table II.
Principal characteristics of the identified strategic groups

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<th>Gr. 1</th>
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<td>Large chains of small supermarkets operating at the regional level</td>
<td>Small supermarket firms operating at the local level</td>
<td>Large hypermarket firms operating at the national level with significant negotiating power</td>
<td>Retailers in which wholesalers have some participation</td>
<td>Large supermarket chains with high rates of growth</td>
<td>Large scale retailers offering a specialized service and with significant negotiating power</td>
<td>Small hypermarket firms operating at local level</td>
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Table III.
Positioning of the identified groups in period I (1989-1992) and period II (1993)

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<th>Period I (1989-1992)</th>
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Notes:
++ indicates that the strategic positioning of a group in this period is especially high in relation to a strategic variable
-- indicates that it is especially low
In summary, SGA allows us to simplify the industry heterogeneity, at the same time as preserving the most characteristic aspects of each strategic behaviour. As a result, we could argue that SGA allows us to highlight the essence of the different forms of competitive behaviour that exist in a given market.

- **Application 2**: SGA facilitates the study of the rivalry that exists in a market.

The study applied to the Spanish retail grocery sector has allowed us to identify seven groups in both periods. Table IV lists some of the firms following each strategy in period I. From the result of the analysis we can see, for example, that group 3 is made up of four large firms dedicated to the operation of hypermarkets at the national level, with significant negotiating power and which offer a large number of product lines (Alcampo, Continente, Hipercor and Pryca). On the basis of the information supplied by this analysis, the manager of each one of these firms can properly view the other three as competitors with which they could establish a more intense rivalry, as they all

<table>
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<th>Group 1 (17 firms)</th>
<th>Group 2 (13 firms)</th>
<th>Group 3 (4 firms)</th>
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<tr>
<td>Albeto</td>
<td>Adolfo Marineto</td>
<td>Alcampo</td>
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<td>Agru Commercial</td>
<td>Almacenes Casan</td>
<td>Continente</td>
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<td>Alm. G. Serrano</td>
<td>Almacenes Paquer</td>
<td>Pryca</td>
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<td>Caprabo</td>
<td>Barcenilla</td>
<td>Hipercor</td>
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<td>Coviran Sdad. Andaluza</td>
<td>Condal Alimentación</td>
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<td>Dagesa</td>
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<td>Distrib. Froiz</td>
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<td>Distrib. Uribe</td>
<td>Pascual Hermanos</td>
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<td>Hijos de Ignacio Tabares</td>
<td>Superficies Alimentación</td>
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<td>Hilario Osoro, etc.</td>
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<td>Group 4 (9 firms)</td>
<td>Group 5 (11 firms)</td>
<td>Group 6 (12 firms)</td>
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<td>Alm. Coloniales Unidos</td>
<td>Comercial Guzmán</td>
<td>Bon Preu</td>
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<td>Almacenes Mar y Mar</td>
<td>Ecoahorro</td>
<td>Consum</td>
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<td>Coalimentacion Granollers</td>
<td>Ecore</td>
<td>Distrib. Giménez</td>
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<td>Coloniales Cruz</td>
<td>Galerias Primero</td>
<td>Eroski</td>
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<td>Comercial Jesuman</td>
<td>Hiper Valme</td>
<td>Establecimientos Alfaro</td>
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<tr>
<td>Comercial Piedra Trujillo</td>
<td>Super Cruz Mayor</td>
<td>Expresso Comercial</td>
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<td>Distrib. Alim. del Sureste</td>
<td>Supermercados Alcosto</td>
<td>J.M. Berutchi-Euroní</td>
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<td>Distribuidora del Oeste</td>
<td>Supermercados Sabeco</td>
<td>Mercadona</td>
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<td>Productos Gamar, etc.</td>
<td>Supermercados Seyca</td>
<td>Sebastian de La Fuente</td>
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<td>Group 7 (5 firms)</td>
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<td>Supermercados Economics, etc.</td>
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<td>Jumbo Comercial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orsueco</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soc. Hispanica Desarrollo</td>
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</table>

Table IV.
Main competitors making up the identified groups in period I (1989-1992)
follow very similar strategies, compete for the same resources and in the same market segments.

However, when studying rivalry it is necessary to take certain precautions, in that it is possible for the firms which make up the same group to operate in different geographical markets and, therefore, not to compete directly one with another. This phenomenon is reflected in group 7. This group is made up of five small hypermarket firms which follow a niche type strategy in five different geographical markets (Ecovol in Seville, Herdosán in The Canaries, Jumbo Comercial in Madrid, etc.). These firms have been included in the same group because they follow similar strategies as against third competitors in their respective markets. This phenomenon is especially important in retailing, given that on most occasions consumers would prefer to make their purchases in establishments that do not meet their preferences, rather than travel long distances in order to have access to the desired offer. Therefore, the managers of retail firms, when analysing the competition, must give consideration to the competitors located in the same area of influence and, among these, pay greater attention to those firms which are integrated into their own strategic group.

- **Application 3**: SGA allows for the justification of the differences in performance found between firms which compete in the same market.

When we analyse the relationships between strategy and performance, we must note that this connection can be established in many forms (Ginsberg and Venkatraman, 1985) and that the concept of performance has a multidimensional nature (Cool and Schendel, 1987). As a result, we must consider more than one performance indicator in order to analyse this relationship (McGee et al., 1995). Specifically, the indicators used have been:

- Rotation: \( \text{Rotation} = \frac{\text{Sales turnover}}{\text{Total assets}} \)
- Margin on ordinary activities: \( \text{M.O.A.} = \frac{\text{Profit before interest and tax}}{\text{Sales turnover}} \)
- Return on assets \( \text{R.O.A.} = \frac{\text{Profit before interest and tax}}{\text{Total assets}} \)[4]

As well as checking if significant differences exist in the level of performance, we also must analyse whether the strategies are found to be exposed to different levels of risk and whether the performance adjusted for risk is also different. The differences in performance are analysed by way of the comparison of the average levels of performance obtained by the firms within each group during the years which make up each period. The risk is measured by way of the typical deviation of the performance of one firm during the years which make up each period, with the performance adjusted for the risk being measured by way of the quotient between the performance and the risk[5]. The hypotheses which allow us to compare the differences in performance, in risk and in performance adjusted for the level of risk are as follows:

\[
H_0 : \bar{X}_{i1} = \ldots = \bar{X}_{jn} = \ldots = \bar{X}_{k7}
\]
Strategic groups analysis

\[ H_0 : \sigma_{i1} = \ldots = \sigma_{jn} = \ldots = \sigma_{k7} \]

\[ H_0 : \frac{\bar{X}_{i1}}{\sigma_{i1}} = \ldots = \frac{\bar{X}_{jn}}{\sigma_{jn}} = \ldots = \frac{\bar{X}_{k}}{\sigma_{k7}} \]

Where \( i, j \) and \( k \) represent the firms which make up groups 1, \( n \) and 7. \( \bar{X}_{jn} \) and \( \sigma_{jn} \) represent the average and the typical deviation of the performance obtained by the firm \( j \) of group \( n \) throughout the years which make up each stable period.

To develop this point, we analyse whether the levels of performance, risk and performance adjusted for risk of each group present significant differences between themselves in each one of the indicators, when considered individually (ANOVA) and jointly (MANOVA). The information contained in Table V allows us to confirm that, overall, significant differences do exist in performance, in risk and in performance adjusted for the level of risk between the seven groups identified in both periods. Indeed, all the joint indicators and the great majority of the individual indicators, present levels that support this view.

In summary, by classifying the firms into different strategic groups it is possible to study with greater precision whether the adoption of different strategies leads to significantly different levels of performance. Indeed, by way of SGA it has been possible to confirm the existence of significant performance differences between groups. Finally, it should be emphasised that the argument on which this type of analysis rests provides an explanation for the existence of these differences and why they persist through time.

- **Application 4**: SGA facilitates the identification and analysis of the strengths and weaknesses of the firms and the threats and opportunities offered by the environment to the firms included in each group.

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<tbody>
<tr>
<td></td>
<td>Return F</td>
<td>Risk F</td>
</tr>
<tr>
<td>Rotation</td>
<td>2.69**</td>
<td>2.81**</td>
</tr>
<tr>
<td>M.O.A.</td>
<td>3.61**</td>
<td>2.76**</td>
</tr>
<tr>
<td>R.O.A.</td>
<td>4.42**</td>
<td>2.38**</td>
</tr>
<tr>
<td>MANOVA</td>
<td>1.95**</td>
<td>1.61*</td>
</tr>
</tbody>
</table>

**Notes:**

- **P \leq 0.01; **P \leq 0.05; *P \leq 0.10

In period II (1993) it has been possible to estimate the level of risk to which the members of each group are subject or the performance adjusted for risk, because they are calculated by way of the deviation of the performance throughout the length of the different years included in each period.

*Table V.* Comparison of differences in performance, in risk and in performance adjusted for risk of the three indicators considered individually (ANOVA) and jointly (MANOVA) for both stable periods.
In relation to the identification and analysis of the strengths and weaknesses, we must note that, in the development of whatever strategy, there are some critical resources. If we compare the provision of resources relative to the firms in the same group (potential competitors of greater intensity), it would be possible to determine in which of these critical resources one particular firm stands out, by virtue of its high levels (strengths) or low levels (weaknesses). For example, a critical aspect for the development of the strategy followed by the firms included in group 3 is their large size, which allows them to obtain important economies of scale and other significant advantages. Nevertheless, within this same group there are some competitors which take much higher values than the rest, for example Pryca, which has a particularly large size (see Table VI). For this firm, its size, apart from being a critical aspect of the strategy it follows, would be one of its strong points, where it stands out in relation to its main competitors.

In relation to the identification and analysis of the threats and opportunities offered by the environment, we propose to apply the following formula to quantify the strategic distance between groups:

\[
S.D_{j,k} = \frac{1}{n} \sum_{i=1}^{n} (x_{i,j} - x_{i,k})^2
\]

where \( x_{i,j} \) is the average positioning of the firms that make up strategic group \( j \) in the variable \( i \).

Table VII reflects the strategic distance that exists between the seven strategic groups identified in both periods[6]. On the basis of these results, emphasis should be placed on the limited threat of entry of new competitors in group 3, in that the strategic distance which separates it from the other competitors is especially important. Specifically, the strategic positioning of this group is clearly distinct from the rest of the industry in some variables, such as the total size of the firm, the extent of the offer, the negotiating power, the type of establishment used, etc. However, the threat of entry of new

<table>
<thead>
<tr>
<th>Firm</th>
<th>Size</th>
<th>Extent of commercial offer</th>
<th>Power relationship with suppliers</th>
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</thead>
<tbody>
<tr>
<td>Alcompo</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Continente</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pryca</td>
<td>+ +</td>
<td>-</td>
<td>+ +</td>
</tr>
<tr>
<td>Hipercor</td>
<td>- -</td>
<td>+ +</td>
<td>-</td>
</tr>
</tbody>
</table>

Table VI.
Strategic positioning of firms in group 3 in their critical variables in period I (1989-1992)

Notes:
+ + indicates that the strategic positioning of a group in this period is especially high in relation to a strategic variable
- - indicates that it is especially low
Strategic groups analysis

competitors in groups 1 and 2 is clearly higher, because the strategic distance which separates these two behaviour patterns is relatively limited, supposing few difficulties for those firms which try to change group.

- Application 5: SGA simplifies the analysis of the evolution of the different strategies implemented in the market.

To analyse the possible convergence or divergence of the strategic groups over time, we could employ the index of the strategic distance suggested in the previous section. On the basis of the evolution of this index (see Table VIII), note should particularly be taken of the growing heterogeneity between groups 2 and 4; between 4 and 6; and between 4 and 7. Specifically, the progressive differences between group 4 and the other three are most accentuated in the levels of service offered and in the provisions for infrastructures, with the progressive heterogeneity that group 4 maintains with 2 and 7 in relation to the business size also standing out. By contrast to the above, the evolution experienced by groups 1 and 2 show that both groups adopted more homogeneous behaviour over time with a progressive convergence taking place in the business size, the extent of the commercial offer and the levels of infrastructure. Finally, note the parallel evolution experienced by groups 1 and 5 and also by groups 5 and 6.

The possible convergence or divergence of the strategic positioning of the firms included in each group can be analysed by observing the variation experienced through time by the average value of the typical deviations of the positioning of the firms which make up each group (see Figure 1). Specifically, we can note that group 2 is the most homogeneous in the market, while group 6 is the most heterogeneous. Similarly, we can observe that the firms included in group 1 maintain increasingly heterogeneous strategic postures. If we examine the results in more detail, we can note that the growing differences in size, the extent of the offer, the diversification and the growth strategy are the main aspects which justify this growing strategic diversity[7]. Finally, at industry
Table VIII
Evolution of the strategic distance which separated the groups (1989-1993)

|        | Gr. 2 | Gr. 3 | Gr. 4 | Gr. 5 | Gr. 6 | Gr. 7 | Gr. 2 | Gr. 3 | Gr. 4 | Gr. 5 | Gr. 6 | Gr. 7 | Gr. 2 | Gr. 3 | Gr. 4 | Gr. 5 | Gr. 6 | Gr. 7 | Gr. 2 | Gr. 3 | Gr. 4 | Gr. 5 | Gr. 6 | Gr. 7 |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1989   | 0.45  | 4.24  | 0.73  | 0.88  | 0.96  | 1.68  | 4.31  | 0.63  | 0.62  | 0.90  | 1.32  | 5.27  | 4.29  | 2.49  | 2.57  | 1.28  | 1.81  | 2.15  | 0.91  | 1.83  | 2.01  |
| 1990   | 0.42  | 5.59  | 0.48  | 0.85  | 1.23  | 1.90  | 5.39  | 0.67  | 0.62  | 1.02  | 1.52  | 6.31  | 5.40  | 3.63  | 2.92  | 1.18  | 1.91  | 2.34  | 1.06  | 2.01  | 2.15  |
| 1991   | 0.41  | 4.31  | 0.57  | 0.92  | 0.99  | 1.61  | 4.13  | 0.79  | 0.75  | 0.73  | 1.21  | 5.12  | 4.19  | 2.94  | 2.20  | 1.30  | 1.89  | 2.25  | 0.91  | 1.87  | 1.71  |
| 1992   | 0.40  | 4.21  | 0.65  | 0.90  | 1.08  | 1.63  | 4.11  | 0.88  | 0.70  | 0.80  | 1.30  | 5.24  | 4.17  | 2.85  | 2.08  | 1.45  | 2.04  | 2.43  | 0.96  | 1.74  | 1.58  |
| 1993   | 0.38  | 5.00  | 0.83  | 0.92  | 1.41  | 1.91  | 4.64  | 1.24  | 0.70  | 0.97  | 1.45  | 5.71  | 4.44  | 3.65  | 2.63  | 1.42  | 2.83  | 3.06  | 1.03  | 1.96  | 1.92  |

Notes:
- ↓ indicates increasing strategic distance
- ≈ indicates stable strategic distance
- ↑ indicates decreasing strategic distance
level we can particularly note the existence of a progressive heterogeneity in business size and in the level of services offered to the consumer, with the other aspects remaining at relatively similar levels during the period under study.

In this context we should emphasize that SGA carried out from a dynamic perspective not only allows us to observe and analyse how the relative evolution of the global market, of the groups which compete in it and of the firms which make up each group takes place, but also permits us to interpret the rules which govern these movements. Specifically, if we had been able to use a larger time horizon in our study, it would have been possible to examine with greater reliability how the groups react to the global changes that take place in an environment or to the strategic movements made by other adjacent groups. Similarly, we could have studied the responses given by the firms in each grouping to the isolated movements of one member of the same group or of the leading firm in particular.

- **Application 6**: SGA simplifies the evaluation of the attractiveness of each strategy.

In order to measure the degree of effectiveness of a strategy, we could analyse the level of performance achieved by the firms that belong to the same strategic

![Figure 1. Evolution of the degree of heterogeneity of the strategic positioning of the firms which make up each group (1989-1993)](image)

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</tr>
</thead>
<tbody>
<tr>
<td>Gr. 1</td>
<td>3.23</td>
<td>0.31</td>
<td>1.64</td>
<td>0.63</td>
<td>4.96</td>
<td>1.86</td>
<td>3.80</td>
<td>1.73</td>
</tr>
<tr>
<td>Gr. 2</td>
<td>3.52</td>
<td>0.55</td>
<td>2.50</td>
<td>1.25</td>
<td>8.05</td>
<td>3.89</td>
<td>3.26</td>
<td>2.51</td>
</tr>
<tr>
<td>Gr. 3</td>
<td>2.14</td>
<td>0.30</td>
<td>2.95</td>
<td>0.51</td>
<td>6.30</td>
<td>1.82</td>
<td>1.95</td>
<td>3.10</td>
</tr>
<tr>
<td>Gr. 4</td>
<td>3.50</td>
<td>0.28</td>
<td>1.94</td>
<td>0.45</td>
<td>5.60</td>
<td>1.50</td>
<td>2.73</td>
<td>1.36</td>
</tr>
<tr>
<td>Gr. 5</td>
<td>3.06</td>
<td>0.42</td>
<td>1.32</td>
<td>0.56</td>
<td>4.06</td>
<td>1.49</td>
<td>2.30</td>
<td>1.50</td>
</tr>
<tr>
<td>Gr. 6</td>
<td>2.33</td>
<td>0.38</td>
<td>0.28</td>
<td>1.53</td>
<td>0.97</td>
<td>3.46</td>
<td>2.22</td>
<td>-1.57</td>
</tr>
<tr>
<td>Gr. 7</td>
<td>2.75</td>
<td>0.56</td>
<td>4.03</td>
<td>1.13</td>
<td>10.83</td>
<td>4.00</td>
<td>2.04</td>
<td>3.29</td>
</tr>
<tr>
<td></td>
<td>3.04</td>
<td>0.40</td>
<td>1.80</td>
<td>0.89</td>
<td>5.28</td>
<td>2.55</td>
<td>2.90</td>
<td>1.58</td>
</tr>
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**Table IX.** Level of performance and degree of exposure to risk obtained by each strategic group in both periods
The future attraction of a strategy may be estimated by analysing the evolution of the performance of the firms which implement that strategy and by studying the mobility barriers that isolate the said group. In this respect, it should be noted that firms included in groups 1 and 2 are separated by very limited mobility barriers; having said that, nor are the incentives to change group very great, given that the higher levels of performance obtained by the firms in group 2 carry associated levels of risk that are also higher. On the other hand, the performance of the firms included in groups 3 and 7 are also attractive; however, these groups are protected by significant barriers that make access difficult. The barriers which limit access to group 3 are particularly important and are reflected in aspects such as large business size or large establishment size, which allow the firms in this group to enjoy economies of scale in the purchase and distribution of goods and in the management of the establishments. In this line, Lewis and Thomas (1990; 1994) and Carroll et al. (1994) found a clear relationship between these barriers and business performance in the UK retail grocery industry.

By way of conclusion to this section, we should note that as a consequence of the simplification of the relative attractiveness of the different strategies, SGA also allows us to evaluate with greater precision the overall convenience of a change of strategic group and, therefore, the strategy implemented. This valuation could be made by comparing the performance and the resources associated with the strategy currently being implemented, with the potential performance that could be obtained following an alternative strategy, and with the cost associated to the acquisition of the resources necessary for its implementation.

Conclusions and managerial implications
Throughout this paper, we have shown how SGA facilitates the global analysis of the environment, responds to the various information demands that are considered essential for the design of a strategy, simplifies the analysis of the market and allows managers to concentrate the activity of their firms in solid strategic options. Furthermore, emphasis should be placed on the fact that some systems for the design of strategies and the analysis of the competition take as their reference only the competitive behaviour adopted by the main firms operating in the market or that adopted by the most direct rivals, an
approach which implies a significant loss of information. By contrast, SGA offers the possibility of a simultaneous consideration of the strategy adopted by the totality of the firms operating in the market, thanks to its great synthesizing capacity.

On the basis of the results of a single analysis, it is possible to obtain information that is extremely valuable for decision-making purposes with respect to different aspects of business strategy (the possible strategies to be implemented, the number of competitors who implement each strategy, the level of performance obtained with each strategy, etc.); it also acts as a particularly appropriate starting point for the study of other very interesting questions (the key factors for the success of each strategy, the resources necessary for its implementation, the market segments covered by the firms implementing each strategy, the analysis of the viability of new strategies that have not currently been adopted by any competitor, future business opportunities, etc.).

In this paper, SGA has made it possible to simplify the strategic heterogeneity that exists in the Spanish retail sector into seven clearly differentiated groups which are stable over time. These groups allow us to determine the essence of the different strategy profiles in the market. Each one of these groups reflects a body of firms who could potentially establish an especially intense degree of rivalry (the firms of each group compete for the same segments and follow similar strategies). However, in the retail grocery sector, competition between different strategic groups can also be very important. Therefore, it will be necessary to establish an order of priorities, paying greater attention to the firms which make up the same group, but without forgetting the firms which belong to adjacent groups.

We have illustrated how this type of analysis is a particularly appropriate context in which to identify the main strengths and weaknesses of the competitors that make up each group, as well as the threats and opportunities presented by the environment. Additionally, we have found differences in performance between firms competing in different groups which remain present through time, and we have explained these phenomena by reference to the differences in their resources and the presence of barriers which impede less fortunate firms from copying the strategy implemented by the more fortunate. Also, we have studied the relative attractiveness of the strategies implemented in the market.

Finally, the dynamism to which the sector under study is exposed has been confirmed by observing the notable relative variation in the strategic positioning of the different groups and of the firms which make up each group. In relation to the dynamic behaviour of the groups, the possibility of using SGA in order to forecast the future strategic behaviour of the firms is of particular interest. Specifically, we should draw attention to the existence of several lines of research which have sought to analyse this aspect[8]. Although the results achieved with these approaches have not been entirely satisfactory, the
analysis of strategic groups from a dynamic perspective and the study of their
evolution through time represents one of the most attractive aspects of this
theory and opens a new research horizon with great possibilities for future
development.

In summary, throughout this paper we have shown that SGA can be
considered as a powerful tool for the design of the strategic marketing policy of a firm.

Notes

1. In fact, one can find significant differences between the profile of the consumer who buys
in hypermarkets and the consumer who chooses small sized supermarkets (East et al.,
1994). Furthermore, the purchasing situations are clearly different in aspects such as the
higher number of products purchased and the amount spent in each travel, the shopping
frequency, etc.

2. The identification of these periods was made by paying attention to the possible changes
in the values taken by average vectors of the strategic positioning of all the firms included
in the sample of each year and in the variance and covariance matrices – of the strategic
positioning – throughout the length of the period, following Fiegenbaum and Thomas

3. In order to identify the strategic groups competing in each period, we have employed
cluster analysis (the Ward hierarchical technique) and, in order to determine the number of
groups, we have simultaneously analysed the values taken by the total variance explained
by each grouping and the increase in the variance explained by the division of the sample
into the immediately superior number of groupings (Flavían, 1995).

4. The inclusion of rotation and M.O.A. is particularly important in the light of the great
relevance that these ratios have in retailing as indicators of business success, given the
limited margins obtained in the sector. In addition to these, it is necessary to include a ratio
which allows us to measure the efficiency of the invested capital. During the period
analysed in this paper, continuous capital investments were taking place in the Spanish
retail grocery sector (the opening of new outlets, the application of new technologies, etc.)
R.O.A. allows us to measure the efficiency of the capital invested.

5. In several previous works on strategic groups developed from a dynamic perspective (e.g.
Cool and Schendel, 1987, 1988; Fiegenbaum and Thomas, 1990), the generally accepted
formula for the measurement of risk has consisted in the calculation of the typical
deviation of the performance obtained by the firm through time, while the adjustment of
performance for risk has been made by way of the quotient between the performance and
the risk. However, other alternatives could be considered, such as sales volatility, the beta
or systematic risk derived from the capital asset pricing model (Copeland and Weston,
1979).

6. In order to avoid the variables which take higher values having a greater influence in the
calculation of the strategic distance, the positioning of the firms in the different variables
must be previously standardized.

7. By contrast, the two groups of firms which use the hypermarket commercial formula, that
is to say 3 and 7, are characterized by their progressive homogeneity. This variation is
justified in group 7 by the growing similarity in the number of lines offered and the
negotiating power, while in the case of group 3, and in addition to these variations, we can
observe a progressive homogeneity in the level of service and in the facilities offered to the
consumer.

8. Fiegenbaum and Thomas (1994, 1995) have tried to model the evolution of strategic groups
by considering that the firms which make them up orientate their strategic behaviour
towards a point that is considered as ideal for each strategic group. The works of Kumar (1987) and of Kumar et al. (1990) concentrate on determining the strategic positions that might exist in a market in equilibrium, considering that each one of these equilibrium positions is a strategic approach that may be viable in the long term. The works of Huff et al. (1992, 1994), are focused on the analysis and the modelling of the forces that induce firms to begin the process of change and the inertia that limits or makes difficult these movements. Finally, Tang et al. (1994) propose the modelling of the dynamic behaviour of strategic groups by way of Markov models.

References


