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Intangible resources and strategic orientation of companies An analysis in the Spanish context

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Abstract

To obtain a sustainable competitive advantage, companies must analyze the resources and capacities they possess in order to select strategies likely to offer the best returns. Therefore, the consistency that exists between a company's set of resources and capacities and its strategic orientation has constituted a fundamental subject of study in strategic management [Adm. Sci. Q. 25 (1980) 317; Strategic Manage. J. 6 (1985) 273; J. Manage. Stud. 23 (4) (1986) 401]. However, it has been argued in the literature that the company's achievement of a sustainable competitive advantage depends not only on the resources and capabilities that constitute its competitive basis, nor on the consistency of these with its strategy, but also on the degree of coincidence or overlap between its resources and the set of strategic industrial factors (SIFs) that are critical for success in its markets [Strategic Manage. J. 14 (1993) 33; Barney, J. Integrating organizational behavior and strategy formulation research: a resource based analysis. In: Shrivastava P., Huff A., Dutton J., editors. Advances in Strategic Management, vol. 8. Greenwich, CT: JAI Press, 1992. pp. 39–62]. From the starting point of these theoretical considerations, we have defined three hypotheses aimed at analyzing the linkage between the resources and capabilities possessed by companies and their strategic orientation, and at determining the influence exercised by competitive market factors on the choice of a particular strategy. For the empirical testing of these hypotheses, we took a sample of 130 out of the 500 largest Spanish companies, subjecting the data obtained to various techniques of multivariant analysis.

Keywords: Intangible resources; Resources-based view; Strategic industry factors; Empirical analysis

1. Introduction

The theoretical approach that underlies the resources-based view considers a company as a "bundle" of diverse, unique resources, and not as the protagonist of activities in particular product markets. It, thus, represents a radical departure from the traditional economic perspective (Wernerfelt, 1989). Companies in the same industry often differ considerably in their history, culture, dominant management style, etc., and these differences lead them to make different strategic choices about how to use the more important among their heterogeneous resources (Barney, 1991, 1992).

"Resources" have been widely defined in the literature as all the various types of assets that enable a company to conceive and carry out strategies that improve its efficiency, effectiveness, and competitiveness (Amit and Schoemaker, 1993; Schoemaker and Amit, 1994; Grant, 1991, 1995). However, the contribution of intangible resources to the strategic positioning or orientation of companies and, therefore, to sustaining their competitive advantage, has, to date, received relatively little attention.

In the present paper, starting from a theoretical consideration of the mutual influence among intangible resources, strategic factors of the industry, and strategic behavior, we undertake an empirical analysis of the influence of certain internal and external variables on the strategic choices and orientation of companies. Using the taxonomy of intangible resources proposed by Hall (1993) and Dess and Davis (1984), and the well-known typology of strategies of Miles and Snow (1978, 1984), we devised a questionnaire to enable us, indirectly, to determine which intangible resources were valued most highly by companies and to identify the contribution made by these resources to the company's strategic orientation. Another objective of our analysis was to determine the influence exercised by competitive market factors on the choice of a particular strategy (Amit and Schoemaker, 1993).

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The present paper is divided into five parts. First, we review the literature on the concepts of resources and capacities as the basis on which firms compete to configuring the company strategy. We also introduce the role played by industry sector factors and their relationship to the company's competitive stage. From the arguments in the literature, we derive three hypotheses to be tested. Second, we present an analysis of our empirical data. Third, we discuss the data in relation to our hypotheses. Finally, we offer some relevant conclusions qualified by the limitations of the study.

2. Resources and capacities, strategic orientation, and the influence of industry sector: a review of the literature

The term "resources" is variously defined in the literature (Amit and Schoemaker, 1993; Black and Boal, 1994; Grant, 1995) as the inputs or factors available to a company through which it performs its operations or carries out its activities. This generic definition includes resources of different kinds, physical, employee skills, patents, productive teams, etc.

Amit and Schoemaker (1993) consider that resources are stocks of available factors, differing in nature, which are the property of the company and are used as an integral part of the process of production. Dierickx and Cool (1989) liken strategic resources to what they define as "stocks of flows" that tend to be accumulated within the company by complex interactions over time and that can be adapted to the company's various needs. Grant (1991, 1995) considers that the resources of a company are its stock of factors, in other words, the inputs into the processes of production, and they represent the basic units of analysis. Grant refines the definitions in the literature by stating that resources taken as separate, isolated factors are not in themselves productive factors or elements: what is necessary in order to generate a productive activity or task is cooperation between resources in a coordinated way.

To define the competitive base of a company's strategy, we must consider those resources that are strategically valuable, also referred to as superior resources. Black and Boal (1994) define these resources within the term "system of resources," in order to show that these are valuable at the strategic level and are configured as a complex network of factors. Such a "complex network" is understood as consisting of direct and indirect connections among a large number of factors, whose limits are difficult to establish and to assess. Thus, intangibility is seen as fundamental to strategic resources.

Grant's point implies that resources themselves do not constitute a distinctive competitive base but must be coordinated to produce superior yields in the company's operations. The coordinating ability that companies possess to differing degrees has been termed capacity, which is also intangible (Collis, 1991; Grant, 1991; Amit and Schoemaker, 1993).

Capacity has been differently defined in the literature and remains among the vaguest and most diffuse terms. As Collis (1991) notes, there are as many definitions of organizational capacity as there are defining authors. However, all the definitions encompass the company's full set of resources. The approaches fall into four categories.

First, capacity can be defined as the organization's ability to pursue its basic tasks more efficiently and effectively than its competitors do (Collis, 1991). Included in this category are the definitions proposed by Grant (1991) and Amit and Schoemaker (1993), who consider that resources are factors that have an important potential role but cannot in themselves be productive. For this, they need to be coordinated and put into operation jointly by means of the organization's capacities. From this position, it follows that the capacities of a company are considered as its ability to coordinate and deploy resources for a productive activity, with the objective of achieving a specified goal or purpose.

Second, capacity may be considered similar to the knowledge and abilities of employees considered as individuals. Gronhaug and Nordhaug (1992) consider that capacities are the employees' knowledge relating to their work, together with their skills and competencies. By implication, this concept includes knowledge acquired through previous or outside training, as well as employees' experience within their current company.

Third, capacity may be viewed as the dynamic improvement of the firm's activities based on the knowledge or competence of the organization as a whole. Teece (1982) defines capacity as the articulation of knowledge at the level of the entire organization. This is constituted by the "routinization" of the company's activity. Teece et al. (1997) have defined it as the dynamic routine that governs the organization's ability to learn, to adapt, to change, and to innovate over time. Lado and Wilson (1994) view capacity as the dynamic element or factor in the company, its ability or competence to generate, develop, and deploy resources in order to perform better than its competitors. Halles and Pisano (1994, p. 78) state that capacity is "the ability of a company to make changes in its productive teams: for example, to be able to develop new products faster or to reduce costs faster, and with the use of minimum resources."

Finally, Collis (1991, p. 145) defines capacity as "the ability to obtain a better understanding or better perception of the strategy, which enables the firm to recognize the intrinsic value of other resources and to develop new strategies before its competitors." This fourth approach, which is closely related to the third, is also taken by Barney (1986, 1992), who defines capacity as the characteristics that give an organization the ability to conceive, select, and implement strategies (Barney, 1992).

At the risk of oversimplifying, we may say that all these definitions refer to an intangible or nonphysical ability or capacity of the company (whether creative, static, or dynamic) that leads it to pursue its activity more effectively than its competitors (Collis, 1991).

In addition, all these definitions agree that capacities represent what the firm is capable of doing with a combination of resources. Resources are the source of capacities, with both of these constituting the basis of strategy (Grant, 1991). To simplify concepts, we assume that the company's competitive base must be constituted by resources and capacities that are fundamentally intangible, and we include them all within the global term "strategic resources" (Hall, 1993).

Naturally, the company will have a great interest in identifying and analyzing its own resources and capacities in order to discover which of them can be considered superior and distinctive. Generally speaking, such resources and capacities will be those that enable a company to perform in a superior way to its competitors, or in such a way as to achieve better results (Barney, 1992). The following questions inevitably arise: Among the various resources and capacities possessed by a company, which ones may be considered strategic? In other words, which of them could lead the company to obtain distinctive competencies? Does there exist a unique set of strategic resources and capacities for each type of organization?

There are two perspectives on strategic resources. Grant (1991, 1995), Amit and Schoemaker (1993), Reed and Defillippi (1990), Lado and Wilson (1994), and Teece (1982) consider that strategic resources essentially reside in the organizational knowledge generated by coordinating various specific and individual capacities and resources. A second approach stresses resources generated by a process of internal accumulation. In this view, strategic resources are more like stocks than like knowledge and, therefore, this second approach is less dynamic and evolutionary (Dierickx and Cool, 1989).[2]

An intermediate approach is presented by Hall (1993), who considers that the success of a company's strategy is the result of a superior differential competence and that, as Coyne (1986) suggests, intangible resources and capacities may be the source of those capacities and, thus, be the source of competitive advantage. This is the proposition on which the arguments of this paper are based.

Hall's taxonomy of strategic resources distinguishes between assets and capacities. Assets, which are held or possessed, are subdivided into those that are legally protected and those that are not. The capacities that are derived not from specific possessions but rather from the knowledge and skills held within the organization of the company, are dependent on individual employees. Nevertheless, in the proposal put forward here, it has been considered more useful to distinguish between capacities dependent on individuals and those that cannot be directly ascribed to them, i.e., capacities that are better viewed as inherent in the organization as a whole. The purpose of such differentiation is to connect them more directly with the distinctive capacities observed by Hall (1992, 1993).

Following Hall, we propose this taxonomy of intangible strategic resources:

ASSETS

Protected by law:
- Intellectual property rights
- Patents
- Copyrights
- Commercial secrets

Not protected by law:
- Reputation
- Data bases

CAPACITIES

Dependent on individual employees:
- Employee knowledge
- Employee experience
- Level of employee training
- Knowledge held by agents directly associated with the company (e.g., employees of suppliers, distributors, etc.)

Residing in the organization as a whole:
- Management abilities and style
- Adaptability, ability to manage change, ability to innovate
- Organizational culture
- Teamwork

Hall associates this taxonomy with a specific and distinctive competence, so that if we can identify by induction those intangible resources of a company, whether assets or capacities, that are important for the development of its corporate strategy, we will be able to establish the competencies on which the company builds its competitive advantage. Following Hall (1993), we propose the following relationships. Assets can induce two distinctive competencies, one regulatory, the other positional. The first derives from the possession of some asset protected by law. The second results from past actions that have given the company a certain reputation. Both of these may lead to a sustainable competitive advantage. Capacities can also generate two distinctive competencies, one functional and derived from the knowledge, abilities, and experience of the employees, and the second cultural and derived from the capacities that can be imputed to the organization as a whole.

Our aim is to establish the relationship between a company's capacities and its strategic orientation. Numerous studies can be found in the literature indicating the need to analyze the connection between these two variables, with the objective of being able to understand how this relationship affects the company's competitive advantage (Miles

[2] Dierickx and Cool (1989) define the stocks of assets as a resource of the firm that cannot be immediately modified or adapted and is accumulated over time by means of a specific process from the flow of stocks. Therefore, if the competitive base is considered to have the character of this type of asset, it will not be very dynamic.

and Snow, 1978; Snow and Hrebiniak, 1980; Hitt and Ireland, 1985, 1986; Grant and King, 1982; Yavitz and Newman, 1982). Starting from the previously proposed taxonomy of strategic resources and the well-known typology of strategies established by Miles and Snow (1978),[3] the following hypotheses (Hypotheses 1.1–1.3) are derived from the arguments above.

> *Hypothesis 1:* A company's strategy is conditioned by the capacities on which its sustainable competitive advantage has been based, so that:
>
> *Hypothesis 1.1:* A "prospector" organization will base its strategy on those capacities that strengthen innovation in products/services and markets and on those that enable it to respond rapidly to changes in its markets.
>
> *Hypothesis 1.2:* An "analyzer" organization will base its strategy on those capacities that strengthen efficiency and innovation in processes, rather than in products.
>
> *Hypothesis 1.3:* A "defender" organization will base its strategy on those capacities that strengthen innovation in processes, efficiency, and specialization in markets and products/services.

Amit and Schoemaker (1993) formulate essentially the same "resources and capacities-competitive basis" model with the firm as the relevant unit of analysis. However, they also they explicitly introduce into their arguments the role played by the industrial sector in determining financial returns. They argue that the company's achievement of a sustainable competitive advantage depends not only on the resources and capacities that constitute its competitive basis, nor on the consistency of these with its strategy, but also on the degree of coincidence or overlap between its resources and the set of strategic industrial factors (SIFs) that are critical for success in its markets. This latter factor was introduced by Barney (1992), who used the term "value" of the resource in reference to the need for a company's competitive base to fit both its strategy and its external competitive environment in combination.

Thus, sustainable competitive advantage is derived from two factors. Imperfections in the market for strategic factors produce asymmetry in companies' initial endowments of resources and capacities and, thus, a systematic differentiation between firms (heterogeneity). Hence, a company's strategic resources should show limited transferability, scarcity, complementarity, and specificity (Barney, 1991, 1992). However, there is a second factor that integrates the strategic organization and the market: the company's strategy should match its particular industrial framework.[4]

A second hypothesis is derived from this line of argument:

> *Hypothesis 2:* The sector in which the organization competes determines a set of capacities whose possession to different degrees by different companies in that sector is the condition for obtaining a sustainable competitive advantage.

Therefore, companies differ in how they value their intangible assets because the same asset may or may not be considered strategic as a function of the particular competitive pressures in a specific market/industry sector.

From Hypotheses 1 and 2, a third is derived, which can be formulated as follows.

> *Hypothesis 3:* The strategic capacities that enable a company to build sustainable competitive advantage are conditioned by the company's particular sector of activity and determine its strategic orientation.

3. Results of the empirical analysis

In order to test these hypotheses, we devised a questionnaire addressed to the most senior executive in the organization. The questionnaire consisted of two groups of items. In the first, the aim was to identify company's strategic orientation. Respondents were offered four definitions corresponding to the four strategic orientations defined by Miles and Snow (1984) and using the questions devised by Peck (1994, p. 731). In the questionnaire, each of these strategic orientations was designated as organization Types A, B, C, or D, and respondents were asked to identify how closely their company matched these types using a Likert scale.

The second part of the questionnaire comprised 22 items corresponding to the 21 intangible resources defined by Dess and Davis (1984), to which a last factor was added: "product quality." We, thus, obtained scores for 22 possible strategic factors that companies could use to build their competitive advantage. We measured the degree to which each of these factors was valued by the company, on a Likert scale ranging from *unimportant* to *very important*.

The companies in the sample belonged to very diverse competitive sectors. We identified 10 sectors, among which the companies were distributed as follows (missing cases = 14): (1) steel and other metals manufacture ($n = 9$); (2) shipbuilding ($n = 5$); (3) chemicals ($n = 19$); (4) construction ($n = 11$); (5) services ($n = 16$); (6) textiles ($n = 2$); (7) food and tobacco ($n = 14$); (8) mechanical and automobile engineering ($n = 19$); (9) information technology, telecommunications, and electronics ($n = 16$); (10) ceramics and glass ($n = 5$). Of these 10 sectors, three that presented very few individual companies were omitted from the analysis (shipbuilding, textiles, and ceramics and glass). The resulting total number of companies returning valid questionnaires was 78.

[3] Miles and Snow (1978) identified four types of strategy: "prospector," "analyzer," "defensive," and "reactive." However, in this study, we have dispensed with the fourth type on the basis that it corresponds to organizations that do not have a clearly defined strategic option.

[4] This point refers to the superimposition or coincidence of the competitive base with the set of relevant strategic factors.

Table 1
Results of the factorial analysis

Rotated factor matrix								
Variables	Communality	F1	F2	F3	F4	F5	F6	F7
V1. Product quality	0.83	0.03	0.07	0.09	0.16	0.89	0.07	−0.04
V2. New product development	0.74	0.25	0.06	0.76	0.07	0.24	−0.16	0.09
V3. Operating efficiency	0.70	0.09	0.76	0.11	0.16	0.27	0.06	0.00
V4. Minimizing of cost	0.75	0.00	0.85	0.04	0.12	−0.02	−0.04	−0.05
V5. Product quality control	0.51	0.03	0.09	0.21	0.46	0.49	−0.04	0.08
V6. Competitive pricing	0.56	0.12	0.54	0.06	0.11	0.05	−0.22	0.43
V7. Broad range of products	0.69	0.35	0.10	0.74	0.04	0.03	0.07	−0.01
V8. Brand identification	0.47	0.53	−0.08	0.32	0.26	0.12	0.04	0.05
V9. Control of channels of distribution	0.64	0.70	0.29	0.10	0.21	0.05	−0.01	−0.12
V10. Procurement of raw materials	0.81	0.11	0.08	−0.05	0.87	−0.09	0.00	0.15
V11. Innovation in manufacturing processes	0.69	0.05	0.27	0.40	0.58	0.11	0.31	−0.07
V12. Customer service	0.71	0.21	0.46	0.13	−0.06	0.63	−0.02	0.21
V13. Experienced/trained personnel	0.59	0.07	0.49	0.36	0.04	0.16	0.34	0.26
V14. Maintaining high inventory levels	0.50	0.25	0.38	0.23	0.48	0.10	−0.02	0.00
V15. Developing/refining existing products	0.67	0.03	0.29	0.58	0.37	−0.03	0.31	0.07
V16. Innovation in marketing techniques and methods	0.79	0.82	0.20	0.23	−0.04	0.03	0.16	0.01
V17. Forecasting market growth	0.79	0.86	−0.03	0.03	−0.04	0.02	0.14	0.13
V18. Capability to manufacture specialty products	0.61	−0.07	0.08	0.50	0.03	0.40	0.36	0.23
V19. Serving special geographic markets	0.73	0.24	0.05	−0.01	0.20	0.01	0.78	0.15
V20. Products in high price market segments	0.64	0.25	−0.12	0.11	−0.17	0.04	0.70	−0.19
V21. Advertising	0.81	0.86	−0.00	0.08	0.11	0.02	0.22	0.12
V22. Reputation within industry	0.83	0.09	0.04	0.11	0.10	0.07	0.04	0.89
Eigenvalue		6.20	2.59	1.60	1.30	1.20	1.10	1.07
Percent of total variance		28.2	11.8	7.3	5.9	5.5	5.0	4.8
KMO	0.78060							
Barlett Test of Sphericity	966.29 (P=.0000)							

3.1. Analysis of data

We first conducted a reductive analysis of the 22 variables in the second part of the questionnaire in order to discover whether or not there existed intangible capacities that could explain the strategic behavior of the companies in the sample.

Factorial analysis using the principal components method, then obtaining the rotated solution (Varimax), provided us with the results given in Table 1. All the factors are sufficient for the analysis (eigenvalue ≥ 1) (Bizquerra, 1989).

To interpret the factors, we adopted a conservative criterion, eliminating from the composition of the factors both those variables that were not shown as saturated in one of them, and those that were saturated in both but had a factor loading below .7. This helped us interpret the factors, since the elimination of the variables that did not comply with the previous factors increased the internal homogeneity of the factor. Each of the factors was associated with a new variable corresponding to the capacities described in Table 2. Next, using those variables that we considered as relevant for the interpretation of the factor, we defined new variables as a combination of the original variables.

Table 2
Description of the factors

Factors	Capacities
F1	Marketing capacities
F2	Business efficiency
F3	Product/service innovation
F4	Process innovation
F5	Company orientation towards the customer
F6	Specialization of the business
F7	Reputation of the company

In order to investigate the existence of a relationship between the company's strategic orientation, its specific sector of activity and its capacities, we conducted an ANOVA analysis considering the factors obtained from the factorial analysis as dependent variables, and the typology of strategy and the activity sector of the company as the independent variables or factors. The results are given in Table 3. In Table 4, we present the distribution by type of strategic orientation for all the companies in the sample.

Only two factors were significantly affected by strategic orientation: marketing capacities (F=2.52, P=.05) and product/service innovation (F=3.40, P=.01). When we consider activity sector of the company as the independent variable, the results highlighted three significant factors: marketing capacities (F=2.36, P=.04), business efficiency (F=2.44, P=.03), and product/service innovation (F=5.34, P=.00).

Table 3
Analysis of variance

One way

	By strategy					By sector				
Variable	*df*	Sum squared	Mean squared	*F* ratio	*F* probability	*df*	Sum squared	Mean squared	*F* ratio	*F* probability
F1	4	9.83	2.55	2.52	.05	6	6.5	1.08	2.36	.04
F2	4	2.94	0.74	1.47	.22	6	1.55	0.26	2.44	.03
F3	4	6.95	1.74	3.40	.01	6	9.44	1.57	5.34	.00
F4	4	5.72	1.43	1.53	.20	6	0.64	0.11	0.20	.97
F5	4	1.27	0.32	0.91	.46	6	0.36	0.06	0.90	.50
F6	4	3.22	0.80	0.83	.51	6	1.44	0.24	0.45	.84
F7	4	4.15	1.04	1.73	.15	6	0.34	0.06	0.47	.83

MANOVA

Variable	Hypothetical SS	Error SS	Hypothetical MS	Error MS	*F*	Significance *F*	Hypothetical SS	Error SS	Hypothetical MS	Error MS	*F*	Significance *F*
F1	9.92	90.44	1.65	0.97	1.70	.13	6.13	38.19	1.02	0.47	2.19	.05
F2	4.21	46.61	0.70	0.50	1.40	.22	1.64	9.46	0.27	0.12	2.37	.04
F3	21.79	51.64	3.63	0.56	6.54	.00	7.83	24.66	1.30	0.30	4.34	.00
F4	5.33	87.41	0.89	0.94	0.95	.47	1.50	42.51	0.25	0.52	0.48	.82
F5	1.68	32.56	0.28	0.35	0.80	.57	0.38	6.06	0.06	0.07	0.85	.54
F6	5.87	95.85	0.98	1.03	0.95	.46	1.94	45.65	0.32	0.56	0.58	.75
F7	2.66	47.69	0.44	0.51	0.87	.52	0.28	6.16	0.05	0.08	0.63	.71

Test of significance	Value	Approximate *F*	Hiph. *F*	Error *df*	Significance *F*	Value	Approximate *F*	Hiph. *F*	Error *df*	Significance *F*
Pillais	0.63	1.55	42.00	552.00	.02	0.67	0.46	42.00	486.00	.03
Hotelling	0.84	1.72	42.00	512.00	.00	0.85	1.51	42.00	446.00	.03
Wilks	0.48	1.64	42.00	411.52	.01	0.47	1.50	42.00	359.92	.03

The multivariate analysis of the variance showed adequate values for the three tests of multivariable significance used ($P>.05$), allowing us to reject the null hypothesis for strategic orientation. In this analysis, only the variable product/service innovation showed significant difference ($F=6.54$, $P=.00$), while the variable marketing capacities lost significance ($F=1.70$, $P=.13$).

The analysis for activity sector of the company also showed adequate values in the tests for multivariate significance ($P=.05$), allowing us again to reject the null hypothesis. The univariate analysis provided us with two variables in which the differences were significant: business efficiency ($F=2.37$, $P=.04$) and product/service innovation ($F=4.34$, $P=.00$), while marketing capacities was situated on the borderline for admission ($F=2.19$, $P=.05$).

A MANOVA analysis with two factors, strategic orientation of the company and activity sector of the company, yielded significance tests that were not within acceptable parameters (Bizquerra, 1989, pp. 149–154).

Table 4
Strategic orientation of the companies

Strategic orientation	Number of companies	Percentage (%)
Prospector	48	38
Analyzer	50	39
Defender	18	13
Data missing	14	10

4. Discussion of data

How do the results of this factorial analysis bear on our hypotheses? We have obtained seven capacities from the 22 intangible resources defined in our questionnaire (Dess and Davis, 1984). All of these are capacities that can be imputed to the overall organization and, therefore, make the company capable of obtaining distinctive competencies of the "cultural type" (Hall, 1993). Among them can be identified capacities corresponding to the three categories defined by Hall (1993) in the group of "capacities not dependent on individual employees": (1) relating to management skills: marketing capacities, business efficiency, innovation in products/services, and specialization of the business; (2) relating to organizational culture: company orientation to the customer and company reputation; and (3) relating to team-working abilities: innovation in processes.

The companies' evaluations of their key capacities should be intimately related to their strategic orientations. The analysis of variance seems to support Hypothesis 1, given that the univariate analysis found significant differences for two of the capacities defined from the factorial

Table 5
Evaluation of capacities

Factors	Prospector	Analyzer	Defender
Marketing capacities	3.17 (1.01)	3.21 (0.98)	2.75 (1.12)
Product/services innovation	4.05 (0.72)	3.65 (0.92)	2.64 (0.94)

analysis, marketing capacities and innovation in products/services, though the multivariate analysis found a significant difference only for the second of these capacities.

Table 5 shows the companies' evaluations of these two capacities, segmented according to their strategic orientation.

Companies reporting a prospector strategy are those that make frequent changes and improvements in their products, services, and markets, trying to be first in the development of new products and services (Peck, 1994; Miles and Snow, 1978, 1984). Therefore, in order to achieve a sustainable competitive advantage, these companies should value more those capacities that clearly support and strengthen innovation, enabling them to respond rapidly to changes in their competitive environment (Nayyar and Bantel, 1994). In the sample studied, the prospector companies are those that attach the greatest value to innovation in products/services ($M = 4.05$, S.D. = 0.72). Marketing capacities was also highly valued by prospector companies ($M = 3.17$, S.D. = 1.01), although less than analyzer companies. Of these two important capacities, it is the first, innovation in products/services, that has the more weight for companies when it comes to the selection of their strategic orientation. These results are consistent with Hypothesis 1.1.

Analyzer companies, understood as those that maintain a relatively stable base of products, services, and markets, developing them selectively in imitation of the prospector types and trying to compete through greater efficiency (Peck, 1994; Miles and Snow, 1978, 1984), ought to show a different evaluation of their key capacities. This type of company should emphasize those capacities that strengthen its efficiency, but should also value the development of products and markets. At the same time, it should respond less quickly to changes in its competitive environment. Our data show that these companies value innovation in products/services ($M = 3.65$, S.D.=.92) somewhat more highly than marketing capacities ($M = 3.21$, S.D.=.98). Compared to companies with other strategic orientations, analyzer companies give the greatest weight to marketing capacities, whereas the weight they attach to innovation in products/services is in second place behind the value given to this variable by prospector companies. Although it is consistent with Hypothesis 1.2 that analyzer companies attach importance to product innovation, we should also have found a greater significance for "process innovation." Still, analyzers attach more importance to process innovation than do prospectors ($M_P = 3.68$, $S.D._P = 0.96$, compared with $M_A = 3.75$, $S.D._A = 1.01$). We must, therefore, conclude that this hypothesis has been confirmed only partially.

Defender companies occupy a market segment in which they offer a relatively stable range of products and services, and concentrate on doing the best possible job in their area of activity (Peck, 1994; Miles and Snow, 1978, 1984). Accordingly, they should value most those capacities directed towards specialization and efficiency, in comparison with prospector and analyzer companies. The results show that effectively they attach less value to innovation in products/services ($M = 2.64$, S.D. = 0.94) and to marketing capacities ($M = 2.75$, S.D. = 1.12) than do the other types, while giving greater importance to capacities such as business efficiency ($M = 4.43$, S.D. = 0.73), reputation ($M = 4.57$, S.D. = 0.53), and orientation to the customer ($M = 4.71$, S.D. = 0.49). Hence, we can conclude that Hypothesis 1.3 has been partially confirmed.

Lastly, Table 4 shows that the greater percentages of companies in the sample are prospectors (38%) and analyzers (39%). Since the capacities they value most highly are innovation in products/services and marketing capacities, we consider these the capacities of greatest strategic importance, at least in the Spanish context.

Hypothesis 2 was better supported. According to the analysis of variance, there are three capacities showing significant differences correlated with belonging to a particular competitive sector. This hypothesis does not propose, as it might seem on first reading, that the fact of belonging to a particular sector determines the way in which companies compete. On the contrary, and consistent with the approach formulated from the resource-based theory, our data confirm the premises advanced by Amit and Schoemaker (1993) and by Schoemaker and Amit (1994) that there exists a set of capacities valued by all the companies of a given sector, whose asymmetric possession by the various firms in that sector provides them with the bases for constructing their respective, and different, competitive advantages.

For the companies in the sample studied, there stand out three capacities differentiated according to the activity sector of the company: marketing capacities, business efficiency, and innovation in products/services. The univariate analysis found all three to be strongly significant. In the multivariate analysis, the first of these was situated just on the boundary of admission. These are the three capacities that could qualify as SIFs. The other four capacities did not show a similar degree of support. It can, therefore, be concluded that this hypothesis has been proven.

Hypothesis 3 could not be tested since the significance tests did not allow the corresponding analyses to be conducted.

5. Conclusions and limitations of the study

The literature suggests that companies compete in the market on the basis of resources and capacities. However, to secure competitive advantage, a company must take into consideration the requirements of its competitive envir-

onment or activity sector. In effect, Schoemaker and Amit (1994, p. 7) suggest "the existence of Strategic Industry Factors implies that firms cannot instantly adjust their stocks of *strategic assets*. These assets are 'firm-specific' resources and capabilities that are scarce, durable and difficult to trade and imitate, and have few substitutes. These strategic assets must exhibit overlap with SIFs." In defining the company's strategic orientation, only intangible capacities are taken into account and the company is considered as a single, global organization.

These lines of argument have led us to try to prove a series of hypotheses referring to the relationship between the company's organizational capacities (Hall, 1993) and its strategic orientation (Miles and Snow, 1978, 1984), and to test a hypothesis regarding the relationship between organizational capacities and SIFs. The results of the study reveal that, the companies that compete mainly on the basis of superior product/service innovation and marketing capacities show a prospector strategic orientation. However, the relationship between the analyzer and defender strategic orientations and the organizational capacities that should differentiate them is weaker.

Three capacities are significantly related to the company's activity sector: innovation in products/services, marketing capacities, and business efficiency. The conclusions drawn for this last hypothesis could not be more concrete, owing to the limitations inherent in the study.

Those limitations are as follows. First, the questionnaire was addressed to the organization's Chief Executive. Therefore, replies could be biased, in the sense that both the definition of the company's strategy and the evaluation of the strategic resources and capacities on which it was based have been made by only one individual. Second, companies were asked directly to specify their competitive sector by reference to the National Classification of Economic Activities (CNAE'93). However, rather than selecting from a standard classification, it would have been better to identify the corresponding competitive sector of each company by means of its own definition of the factors required to compete in its sector.

Third, the wide spread of sectors led to the elimination of those seriously underrepresented in the sample, and as a result, the second hypothesis had to be tested on a reduced sample. Lastly, given that this study is limited to companies competing in the Spanish market, the extrapolation of our conclusions to other contexts should be treated with caution.

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