Strategic Orientations of Brazilian Export Ventures: A Taxonomic Approach

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This study followed a holistic approach (Venkatraman and Prescott, 1990) to identify strategy gestalts (cf. Hambrick, 1983). A taxonomic classification of exporters of manufactured products based on their strategic orientation (in terms of systematization of export planning and differentiation of the export offer) was derived from a sample of 414 medium and large exporters. Cluster analyses, MANOVA, ANOVA, post hoc tests and crosstabs were used in the analyses. The study identified four clearly discernible patterns of strategic orientation of Brazilian exporters, and provided indications of their association with firm and managers characteristics. Findings suggest that planning and differentiation seem to pay off when employed by firms from developing countries. Planning by itself does not seem to be sufficient to warrant winning results. It seems that it is the combination of planning with differentiation that helps an exporter to perform better than its counterparts. Results also indicate that there seems to be an intricate set of relationships among strategic orientation and organizational dimensions and their impact on export performance. However, industry effects were not found to be significant, a finding that questions industrial organization paradigms and lends credence to the resource-based view.

INTRODUCTION

A recurrent issue in international business research is the investigation of factors that can help explain observed differences in international performance and, more specifically, in export performance. Part of this effort is of a descriptive nature and includes the identification of the characteristics of firms and environments in the international arena. Additionally, there can also be seen quite a lot of research effort that moves beyond descriptive accounts and into explanatory analyses, considering not only organizational and environmental factors but also strategy decisions as determinants of export performance (as evidenced by some reviews of the literature, e.g., Aaby and Slater, 1989, Katsikeas, Leonidou and Morgan, 2000, Leonidou, Katsikas and Samiee, 2002, Da Rocha and Christensen, 1994, and Zou and Stan, 1998; or several empirical studies about factors affecting export performance, e.g., Cavusgil and Zou, 1994, Madsen, 1989, and Styles, 1998, among others).

While one can investigate the individual impact of a single variable (e.g., a firm characteristic, an environmental aspect, or a strategic decision) on another (e.g., performance), the recognition that there are probably several determinants that affect performance results has led recent research into multivariate models. However, some effects may not be additive and universal, but rather depend on particular circumstances (contingencies), so some authors argued for a moderating (interaction) approach and a contingent approach in the study of the determinants of performance in general (Miller, 1981; Robinson and McDougall, 2001) and of export performance in particular (Lages, 2000; Robertson and Chetty, 2000). Thus the contingency paradigm from strategic management literature (Hambrick, 1983; Venkatraman, 1989) – according to which performance outcomes are the result of the degree of fit between environment variables, firm characteristics and strategy decisions – has also influenced research on the determinants of export performance (Aaby and Slater, 1989; Cavusgil and Zou, 1994).

However, the use of a multivariate design and an interaction perspective may not be enough to uncover the complex influences, since the impact on performance may derive from more than additive independent effects and two-by-two interactions. Therefore, a more holistic approach that preserves the systemic nature of relationships among phenomena (cf. Venkatraman and Prescott, 1990) would probably add to this investigation effort. So, taking archetypes (i.e., composites of several variables instead of just individual components) may
help elucidate the simultaneous and intricate influences on export performance. So, the use of a taxonomic approach can be useful.

The present study builds upon the contingency approach and takes on a holistic and contingent perspective to the investigation of the export phenomenon. Three main research objectives guide the study. The first two are more of a descriptive nature and the third objective is explanatory:

1. Can there be identified distinct strategic orientations of exporters?
2. Is there some association of strategy orientation with firm characteristics or with environment aspects?
3. Is there some association between strategy type and export venture performance? Is this association contingent on firm or environmental characteristics?

The paper is organized as follows. After this introduction, we present the theoretical background that justifies the use of a taxonomic approach to the study of strategy and performance, review some studies that have employed this approach, and discuss the methodology involved in deriving a taxonomy. Then, we present the sample and methods employed and the measures used to operationalize the relevant constructs. Next, we report the findings and discuss theoretical and managerial implications. Some concluding remarks and suggestions for future studies close the paper.

THEORETICAL BACKGROUND

Typologies and taxonomies of strategy have been proposed both in the strategic management as well as in the international business literature. Taxonomic approaches demand that some appropriate choice of clustering variables and of profiling variables be made. Also, from both a theoretical and a managerial perspective, some explanation ought to be provided about the performance implications of strategy types.

Typologies and taxonomies of strategy

Hambrick (1980) argued that one possible approach to the study of strategy would be the identification of a set of archetypes that could represent the majority of the possible combinations of strategy variables. As Hambrick (1983) has put it, such a set of archetypes – whether theoretically-conceived as in a typology or empirically-derived as in a taxonomy – would reduce the vast array of multiple possible combinations to a manageable set and the categories of such a classification scheme would represent generic types (gestalts), each defining a holistic package of attributes. This holistic approach would consider simultaneous patterns of inter-relationships, where the archetypes would be wholes representing the simultaneous and conjoint interactions that take place (Venkatraman and Prescott, 1990), thus better reflecting the complex nature of the phenomenon. In the international business literature, Namiki (1994, p.28) has argued for a taxonomic approach to the study of export strategy instead of the more usual approach of dealing with just a few “independent forces of marketing methods” (emphasis in the original).

The search for taxonomies of export marketing strategies resembles research on strategic groups in the strategic management literature (e.g., Dess and Davies, 1984; Galbraith and Schendel, 1983; Harrigan, 1985; McGee and Thomas, 1986). The reasoning is that it would be possible to categorize firms into groups, where each group would be composed of firms that are sufficiently similar among each other along some pre-defined dimensions, while sufficiently different from other firms outside that group.

Literature review of strategy taxonomies of exporters
In the strategic management literature, there have been advanced some typologies of strategy (e.g., Chrisman, Hofer and Boulton, 1988; Miles and Snow, 1978; Mintzberg, 1988; Porter, 1980) whose classificatory dimensions have influenced most of the taxonomic research thereafter. Except for Miles and Snow (1978) typology, the others consider (not necessarily all) dimensions of target market scope (e.g., broad vs. narrow), competitive weapons (e.g., low cost vs. differentiation) and segment differentiation (same vs. distinct competitive weapons across different market segments). Miles and Snow typology, on the other hand, revolves around the overall strategic posture of the firm.

In the international management literature, some classification schemes of export strategy have been derived from cluster analysis of empirical data. A brief review of nine of these works, which are deemed to provide a fair representation of the efforts in the area, is presented here in chronological order, since some works somehow build upon previous ones.

Cooper and Kleinschmidt (1985) collected a sample of 142 high technology electronics firms in the U.S. and proposed a six-type typology derived from the dichotomization of three strategy dimensions: degree of product adaptation, countries exported to (few countries vs. many countries), and market segmentation across countries (one and the same market segments in foreign markets vs. multitude of different segments). The impact on two performance measures – export intensity and export sales growth – was investigated. They concluded that one of the strategy types (the one that emphasized world orientation – i.e., many counties, product adaptation, and market segmentation) clearly outperformed the others.

Douglas and Rhee’s (1989) study was based on a sample of 250 firms in the U.S. and 187 firms in Europe. The authors uncovered six generic, rather similar across regions, strategy types. For the identification of the clusters, they employed seven strategy dimensions derived from principal components analysis of 17 PIMS variables (covering three main conceptual domains: marketing strategy, market scope, and vertical integration). For the purpose of profiling the clusters, they employed four environment dimensions (rate of market growth, technological pressure, market concentration, and purchase concentration) and three organizational characteristics (type of business, location of corporate headquarters, and timing of market entry). They reported implications on four measures of performance: ROI, ROS, cash flow and market share. Their results indicate that, except for rate of market growth, other environmental variables do not seem to play an important role in conditioning performance across the strategy types.

Morrison and Roth (1992) used a sample of 115 U.S. firms and found four strategy clusters based on five strategy dimensions (quality reputation, manufacturing leadership, marketing leadership, product specializations, and prestige products), one dimension of international investment, two dimensions of integration (international internal integration, and international external integration), and one dimension of international political sub-strategies. They found no significant differences across clusters along four environmental variables – standardization of worldwide buyer demands, presence of concentrated worldwide distribution channels, absence of government restrictions on international business activities, and intensity of international competitive rivalry. Also, differences in four key industry characteristics – industry sector, stage in product life cycle, rate of technological change, and industry concentration level – across clusters were not found to be significant. Three self-reported performance measures were investigated: ROA, ROI, and sales growth. Although a MANOVA procedure indicated significant multivariate differences in performance, very few significant pairwise differences were found across clusters. This result would suggest that a multiplicity of strategy types would be equally viable in an export context.

Carpano, Chrisman and Roth (1994) conceptually proposed and empirically verified, with a
sample of 75 U.S. firms, two dimensions of international business-level strategies: segment
differentiation (i.e. different, or not, competitive weapons in different markets) and
geographic scope (broad vs. narrow), yielding a classification scheme of four strategy types.
The authors hypothesized contingent relationships between strategy type and environment
(operationalized as a dichotomy: global vs. multidomestic industries) in their influence on
performance. They employed two indicators of performance, both measured relatively to
competitors: ROI and sales growth. Partial support was found to the contingent hypotheses.

Namiki (1994) submitted 16 marketing variables (representing marketing mix and market
scope domains) to a principal components analysis and uncovered six strategy dimensions:
promotion, product / place adaptation, low pricing, worldwide orientation, new products /
services, and technological superiority. He cluster analyzed 99 U.S. electronics exporters and
found six distinct strategy types. He used three measures of performance: export intensity,
export sales growth, and export profitability. Although export sales growth did not seem to be
influenced by the type of strategy and only one cluster presented a statistically different (in
fact, lower) mean of export intensity, results nonetheless indicate that two strategy types
seemed to be more successful than the others.

Axinn, Noordewier and Sinkula (1996) proposed, and empirically confirmed in a sample of
71 U.S. firms, a typology based on two strategy dimensions: adaptation, or not, of the export
product to target countries; and few vs. many countries exported to. After controlling for
several possible influential factors, they found that export performance (operationalized by
two indicators: export intensity and the percent of profits attributed to export activities) did
not seem to be significantly influenced by export strategy.

Stewart and McAuley (2000) employed nine strategy factors: export scope, product
adaptation, support to foreign channel, promotion adaptation, domestic scope, value, domestic
product strategy, product support, and product experience. A cluster analysis of 207 Canadian
firms and 160 UK firms, produced four strategy composites. The authors used seven
environment characteristics – degree of technological intensiveness, level of price
competition, degree of legal and regulatory barriers, demand potential, sophistication of
marketing infrastructure, competitive intensity, and degree of product exposure in the market –
to investigate possible differences across clusters. Only technological intensiveness and
sophistication of marketing infrastructure were significantly related to the strategy composite.
They employed only one performance measure: perceptual assessment of the success of the
venture. Although no significant performance differences were found across U.K. exporters,
one strategy composite in the Canadian sample was shown to outperform the others.

Unlike previously presented works, Shoham, Evangelista and Albaum (2002) did not derive
an empirical classification of strategy types, but rather used a self-typing approach to classify
firms in each of the four types of the Miles and Snow (1978) typology. So, instead of
competitive dimensions, they chose to use overall strategy orientations. By means of
discriminant analysis and regression analysis of data on 193 Australian firms, they
investigated the association of 15 competitive weapons with each strategy type and the
contingent association of strategy type and competitive weapons with two measures of export
performance (export intensity and overall (perceptual) measure of success). Five competitive
weapons were found to be significant discriminators among the strategy types.

Cavusgil, Chan and Zhang’s (2003) study was centered on one particular strategic decision –
pricing. They employed principal components analysis to uncover, out of 14 variables, five
underlying pricing dimensions. From these dimensions, in a sample of 371 U.S. exporters,
they uncovered four clusters, which were then profiled according to five organizational
characteristics (size, experience, centralization, commitment, and product factors), two export
market variables (Government regulations and market aggressiveness), and four performance measures (profitability, impact of strategy on performance, sales volume, and export intensity). Their results indicate that there are no universally best pricing strategies to achieve export success. Rather, the impact of pricing strategy on export performance is contingent on organizational and environmental factors.

As this review of the literature shows, there has been a lot of diversity in the variable chosen to group firms and to profile the clusters. Also, great variety can be observed in the choice of performance measures.

**Clustering variables**

We decided to concentrate on two relevant aspects of the strategic orientation of an exporter, the planning posture of the firm and the competitive positioning of its offer, which can be considered to encompass major dimensions of export strategy. So, variables that represent these two broad dimensions were used as clustering variables in the present study.

Several researchers have highlighted the importance of export planning to export performance (e.g., Christensen, Da Rocha and Gertner, 1987; Madsen, 1989; Shoham and Kropp, 1998, Walters, 1993) and several variables have been proposed to represent the construct, such as: systematic search for foreign markets (Moini, 1995), market research intensity (Johanson and Vahlne, 1977; Madsen, 1987), systematic exploitation of export opportunities (Burton and Schlegelmilch; 1987; Wiedersheim-Paul, Olson and Welch, 1978), and frequency of visits to foreign markets (Cicic, Patterson and Shoham, 2002; Moini, 1995). In a complementary vein, Shoham (1996) argued that the more planning instruments a firm employs, the better the results it will get. Bijmolt and Zwart (1994) concluded that export performance would be influenced by form of organization of the export activity, managerial attitudes towards exports and export planning. In spite of these findings, Katsikeas, Piercy and Ioannidis (1996) found a negative relationship between perceived export performance and export planning and control. Also, Chetty and Hamilton’s (1993) meta-analysis and Zou and Stan’s (1998) review showed that the impact of market planning and of exploratory analysis of export opportunities on export performance is not unambiguous.

Travelling to foreign markets seemed to be positively associated to export performance. Certain studies found a positive impact on performance of traveling to export markets (e.g. Beamish, Craig and McLellan, 1993; Kaynak and Kuan, 1993; Khan, 1978; Styles and Ambler, 1994). Shoham and Albaum (1995) verified the existence of a positive relationship between number of visits and export performance, and Piercy, Kaleka, and Katsikeas (1998) found that frequent contacts abroad positively influenced performance. A meta-analytical study (Leonidou, Katsikeas and Samiee, 2002) established that personal visits to foreign markets were positively associated with export performance (except for industrial products).

As for competitive positioning, several scholars have studied its impact on performance. The meta-analytical study of Leonidou, Katsikeas and Samiee (2002) listed a number of variables which were consistently and significantly related to performance: product quality, customer service, and product advantage/uniqueness, among others. Subsequent studies have looked at the impact of competitive positioning in export performance. Julien and Ramangalahy (2003) found strong evidence of the impact of competitive strategy on export performance; Pett and Wolf (2003) found a connection between the adoption of a differentiation strategy and performance.

It is believed, however, that there is a need for further research, in order to clarify the relationship between competitive strategy and export performance (Morgan, Kaleka, and Katsikeas, 2004). For example, the results of a study on the impact of the adoption of...
differentiation strategies by developing countries firms were ambiguous (Aulakh, Kotabe, and Teegen, 2000), suggesting that other variables, such as the “made in effect” might neutralize the positive impact of differentiation. More recently, Brouthers, O’Donnell and Hadjimarcou, 2005) found that differentiation strategies had a positive impact on the performance of exporters from developing countries when entering developed markets. It should be noted, however, that competitive positioning is a very broad concept and several forms have been suggested to conceptually define its domain. In this study, we decided to choose one single, yet important, aspect of competitive positioning: the degree of differentiation of the offer.

Profiling variables

After identifying clusters of firms according to their similarities and differences along strategy dimensions, it is necessary to better characterize each cluster. This characterization can be done by investigating differences in a given set of profiling variables. Since the literature on strategic management and that on international business have suggested that there are organizational and environmental correlates to (export) performance, we chose four firm characteristics (size, degree of internationalization, managers’ risk propensity, and status of the exporting activity) and one environment aspect (type of industry) to profile the clusters.

The choice of firm size is justified since it has been one of the most researched variables in the literature on export performance (e.g., Czinkota and Johnston, 1983, Holzmüller and Kasper, 1991, Katsikeas, Piercy and Ioannidis, 1996, Samiee and Walters, 1990). Additionally several researchers (e.g., Contractor, Kundu and Hsu, 2003, Gomes and Ramaswamy, 1999, Grant, 1987) have discussed the effects of the degree of internationalization, especially the effects related with economies of scale and of experience.

Given that foreign operations may involve some additional risk (vis-à-vis domestic operations) some researchers have suggested that managerial support of exports would depend on attraction vs. aversion to foreignness (Holzmüller and Stöttinger, 1996; Schlegelmich and Ross, 1987; Shoham, 1999), level of stress tolerance (Holzmüller and Stöttinger, 1996), and degree of risk aversion (Gomez-Mejia, 1988). We chose one construct, the risk propensity of decision makers, which summarizes part of these influences.

Walters and Samiee (1990) found that success in exports would be associated with certain types of organizational arrangements. Das (1994) concluded that autonomous export units would lead to better export results than those subordinated to more formal structures. Eamnish et al. (1999), following Katsikeas et al.’s (1996) conceptual reasoning, empirically found a positive association between export performance and the degree of independence of the export activity. However, the impact of the level of decentralization of the export activity may not be so clear-cut, as has been empirically shown by Madsen (1989). Given this discussion, we chose to use the status of the exporting activity as a profiling variable in the present study.

Industry effects have long been discussed in the industrial organization tradition of strategic management (Porter, 1980) and have also been considered – although relegated to a lesser degree of importance – by the resource-based view (Barney, 1991). This is enough to warrant the inclusion of industry type as a profiling variable.

Strategic types and export performance

The influence of a given factor on export performance may depend on the particular performance measure used (Leonidou et al., 2002). Besides, since export performance has been argued to be a complex and multifaceted construct (Matthyssens and Pauwels, 1996; Katsikeas et al., 2000; Leonidou et al., 2002), it is advisable to use several indicators for the construct in order to capture its several conceptual facets. We chose four measures of export performance: past export revenues, (expected) future export revenues, past growth of export revenues, and the status of the exporting activity.
revenues, and past export profitability.

DATA AND METHODS

Data for this study was collected as part of a larger research project along May-August 2007. The sample was based on a list of the 3,057 largest Brazilian exporters of manufactured products. Firms were mailed a questionnaire with a pre-paid return envelope. A total of 448 firms responded (an effective response rate, after correcting for non-eligibles, of 15.5%). Cases and variables with more than 15% missing data were dropped and the final sample had 414 firms. The unit of analysis was the single export venture, i.e., the pair of a given product (or product line) exported to a given country. Crosstabs and t-tests did not show any evidence of response bias, suggesting that the sample offers a good representation of the population.

This study was composed of four stages:

- **Stage 1**: Selection of clustering and profiling variables, as described in the theoretical background section of this paper. Dimensions of firm characteristics were identified by principal components analysis.
- **Stage 2**: Delineation of unique strategic composites. Cluster analysis with a hierarchical procedure to suggest the appropriate number of clusters followed by non-hierarchical k-means method to assign cases to clusters.
- **Stage 3**: Profiling of export venture clusters. The profiling dimensions presented in the theoretical background section were used to describe the clusters and explore their similarities and differences. MANOVA procedures, post-hoc tests and crosstabs were employed for the analyses.
- **Stage 4**: Investigation of performance implications. Possible impacts on export performance were examined by means of MANOVA and one-way ANOVA procedures.

The following variables and operational definitions were used:

**Strategic orientation** – Two domains of strategic orientation were considered for this study: strategic positioning and export planning. Strategic positioning was initially represented by four differentiation types of Mintzberg’s (1988) typology: quality, project, support, and image. Project differentiation was later on dropped because of high incidence of missing data. Four indicators of differentiation were kept, all measured by five-point semantic-differentiation scales: product quality, company reputation or product brand image, client services, and degree of sophistication of the offer. A sub-domain of export planning, the degree of systematization of export planning, was measured by three variables. The first is formalization of the firm’s export planning process, given that formal planners have been consistently shown in the literature as attaining higher export performance. The second variable is the drive to actively search for new export opportunities, which aimed at capturing less tangible aspects of a firm’s planning process. The third variable was the amount of visits to foreign markets, which has been determined to be a desirable condition for acquiring market knowledge, maintaining contacts, and nurturing relationships abroad, which, in turn, should be conducive to higher performance. These variables were measured, respectively, by a five-point semantic-differentiation scale, a five-point Likert scale and a six-point ratio-like scale. So, a total of seven variables were employed to identify types of exporters.

**Firm characteristics** – Each of the four aspects of firm characteristics initially chosen for this study – size, degree of internationalization, managers’ risk propensity, and status of the exporting activity – were represented by two or three indicators each. The totality of 11 indicators was submitted to principal components analysis with varimax rotation in order to draw orthogonal factors. KMO and Barlett sphericity tests were adequate as was the ratio of
cases (414) to variables (11). Eigenvalue greater than 1.0 and loading greater than .591 (i.e., 35% variance explained) were used as cutoff criteria. Four orthogonal factors were uncovered (Table 1), which explain 59.3% of total variance. For clarity of interpretation, although sacrificing factor independence, we decided to split factor #1 in two dimensions: absolute firm size (an averaged summated scale of number of employees and the natural logarithm of total revenues), and degree of internationalization (an averaged summated scale of number of years since first exports and number of countries exported to in the previous year). Much by the same token, we split factor #4 in two dimensions: firm size relatively to competitors in the target country, and export intensity. The other two dimensions were retained as suggested by the factor analysis: managers’ risk propensity (an averaged summated scale of risk acceptance and attraction for novelty) and status of the export activity (an averaged summated scale of autonomy of the export unit, prestige of the export unit, and importance attributed to exports, Cronbach alpha = .652). So, a total of six dimensions of firm characteristics were later on used to profile the clusters.

Table 1 – Orthogonal factors of firm characteristics

<table>
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<th>Component</th>
<th>1</th>
<th>2</th>
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<th>4</th>
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<tbody>
<tr>
<td>relative size</td>
<td></td>
<td></td>
<td></td>
<td>.721</td>
</tr>
<tr>
<td>number of employees</td>
<td></td>
<td></td>
<td>.706</td>
<td></td>
</tr>
<tr>
<td>ln (total revenues)</td>
<td></td>
<td>.741</td>
<td></td>
<td></td>
</tr>
<tr>
<td>export intensity</td>
<td></td>
<td></td>
<td></td>
<td>.639</td>
</tr>
<tr>
<td>years exporting</td>
<td></td>
<td>.645</td>
<td></td>
<td></td>
</tr>
<tr>
<td>number of countries</td>
<td></td>
<td></td>
<td>.703</td>
<td></td>
</tr>
<tr>
<td>risk acceptance</td>
<td></td>
<td></td>
<td></td>
<td>.735</td>
</tr>
<tr>
<td>attraction for novelty</td>
<td></td>
<td></td>
<td></td>
<td>.694</td>
</tr>
<tr>
<td>autonomy of export unit</td>
<td></td>
<td>.593</td>
<td></td>
<td></td>
</tr>
<tr>
<td>prestige of export activity</td>
<td></td>
<td>.809</td>
<td></td>
<td></td>
</tr>
<tr>
<td>importance of exports</td>
<td></td>
<td></td>
<td>.808</td>
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External environment – To represent the external environment, we employed two classifications of industry: durables vs. non-durables, and consumer vs. industrial products.

Export Performance – Four measures of export performance were chosen – satisfaction with past export revenues, satisfaction with past growth of export revenues, satisfaction with past export profitability, and (expected) future export revenues – which represent several aspects of the domain of the construct (cf. Carneiro, Hemais, da Rocha and da Silva, 2005; Katsikeas et al., 2000; Matthyssens and Pauwels, 1996), namely: economic measures (revenues and profits), variety in temporal orientation (past and future, and static and dynamic (growth) measures). All measures were self-reported by export managers in five-point semantic-differential scales. A principal components analysis revealed that a single factor (Cronbach’s alpha = .765, explained variance = 58.9%) underlied the four performance variables (Table 2).

Table 2 – Factor analysis results of the export performance variables

<table>
<thead>
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<th>Component</th>
<th>1</th>
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<th>4</th>
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<tbody>
<tr>
<td>satisfaction with past export revenues</td>
<td>.769</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>satisfaction with past growth of export revenues</td>
<td></td>
<td>.826</td>
<td></td>
<td></td>
</tr>
<tr>
<td>satisfaction with past export profitability</td>
<td></td>
<td></td>
<td>.797</td>
<td></td>
</tr>
<tr>
<td>(expected) future export revenues</td>
<td></td>
<td></td>
<td></td>
<td>.670</td>
</tr>
</tbody>
</table>
Analytical technique for the identification of strategic composites

We employed a hierarchical cluster analysis procedure to suggest the appropriate number of clusters followed by non-hierarchical $k$-means method to assign cases to clusters. The change in the agglomeration coefficient in the transition from five to four clusters suggested that four would be the appropriate number of clusters. MANOVA showed that the clusters were multivariately different along the seven clustering variables (Wilks’ lambda $= 0.951$; $p = 0.002$).

**FINDINGS AND DISCUSSION**

Four distinct cluster were identified (Table 3) based on the seven strategic orientations variables.

Table 3 – Final cluster centers (z-scores)

<table>
<thead>
<tr>
<th></th>
<th>Cluster 1</th>
<th>Cluster 2</th>
<th>Cluster 3</th>
<th>Cluster 4</th>
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<tbody>
<tr>
<td>Planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal Planning</td>
<td>.46247</td>
<td>-1.14929</td>
<td>.24397</td>
<td>-.58621</td>
</tr>
<tr>
<td>Active Search</td>
<td>.50563</td>
<td>-1.48601</td>
<td>.44222</td>
<td>-.84605</td>
</tr>
<tr>
<td>Frequency of Visits</td>
<td>.15560</td>
<td>.22176</td>
<td>.00371</td>
<td>-.39719</td>
</tr>
<tr>
<td>Differentiation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Sophistication</td>
<td>.63983</td>
<td>-.62206</td>
<td>-5.8048</td>
<td>.38814</td>
</tr>
<tr>
<td>Product Quality</td>
<td>76432</td>
<td>-.97777</td>
<td>-6.4263</td>
<td>.50146</td>
</tr>
<tr>
<td>Customer Support</td>
<td>78670</td>
<td>-.89131</td>
<td>-2.9882</td>
<td>-2.4356</td>
</tr>
<tr>
<td>Reputation</td>
<td>.73995</td>
<td>-.86214</td>
<td>-6.6300</td>
<td>.51505</td>
</tr>
<tr>
<td>N (total = 414)</td>
<td>135</td>
<td>46</td>
<td>153</td>
<td>80</td>
</tr>
<tr>
<td>%</td>
<td>33%</td>
<td>11%</td>
<td>37%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Note: boldface indicates emphasis by the firms (average cluster mean) in the respective strategy variable

Cluster #1, the second largest with 33% of the cases, is composed of firms that emphasize all the three strategic domains: systematization of export planning, frequency of visits to foreign markets and differentiation of the export offer. On the other hand, cluster # 2, the smallest with 11% of the cases, is composed of firms that place little emphasis (as compared to the overall sample mean) on systematization of export planning and on differentiation; although they seem to make quite an effort to frequently visit their foreign clients. As for cluster #3, the largest with 37% of the cases, its firms export an undifferentiated offer, but they do emphasize systematization of export planning and visit their clients a little more frequently than observed in the overall sample mean. Cluster #4 firms (19%), on the other hand, emphasize differentiation aspects (except for support to foreign clients), but they reported not to have a structured export planning process.

The four clusters were profiled against the six dimensions of firm characteristics and the two categorizations of industry type to see if there were relevant differences. A MANOVA procedure with all six firm dimensions as dependent variables indicated that there were significant multivariate differences in at least between two clusters. One-way ANOVA procedures and post hoc tests helped clarify that three dimensions – relative size, managers’ risk propensity and status of the export activity – contributed more to the differences across clusters.

Although, on average, cluster #2 firms were larger and cluster #4 were smaller, there could be found no significant differences in absolute size across clusters (it should be noted, however, that the sampling procedure selected only medium and large exporters; so results could have been different if we had a sample representative of all Brazilian exporters). On the other hand, when compared with competitors in their respective industries, cluster #1 firms’ mean relative
size was statistically larger than the others’ means, followed by cluster #4 firms whose mean relative size was statistically larger than those of cluster #3 and cluster #2 firms. Between the latter, there were no statistically significant differences, but cluster #3 mean relative size was higher than cluster #2’s. So, although cluster #2 firms are, on average, larger in absolute terms, they are nonetheless relatively smaller when compared against their respective industry average size.

Cluster #1 firms are on average more internationalized (in terms of years of export experience and the number of countries exported to) than the others, while cluster #4 firms are less internationalized; but no differences are statistically significant. However, in terms of export intensity (i.e., export revenues divided by total firm revenues) cluster #2 firms are smaller and the difference is statistically significant when compared with cluster #1 (highest in export intensity) and cluster #3 means. Differences between pairs of clusters #1, #3 and #4 were not statistically significant. Interesting differences could be observed in terms of managers’ risk propensity. Cluster #1 firms exhibit on average higher risk propensity followed by cluster #3 firms and both clusters present statistically higher risk propensity that both clusters #2 and #4 firms. A similar pattern of differences can be found in terms of status of the export activity, except that this time cluster #2 firms are the lowest. Cluster #1 and cluster #3 firms exhibit higher status of the export activity when compared with cluster #4 and #2 firms, as far as the following aspects of the export activity are concerned: autonomy of decision-making, prestige conferred to employees vs. those in other areas of the firm, and importance attributed to exports.

In order to examine possible industry impacts, we employed crosstabs and compared the observed distribution of firms with what would be expected if a proportional cross-distribution were present. No significant differences across clusters were found either in the distribution of durables vs. non-durables or of consumer vs. industrial products. So it does not seem that firms in a specific industry type are more likely to adopt this or that particular strategic orientation. This result leads us to conclude that differences in export performance across strategic orientations cannot be attributed to industry effects (at least, according to the particular operationalization of industry used in this study). Figure 1 indicates the statistical significance of the differences in means of firm dimensions across clusters.

Strategic orientations and export performance

Since a MANOVA procedure indicated that at least two clusters were significantly (multivariately) different along the four export performance variables, we ran one-way ANOVA and post hoc tests in order to identify which variables more strongly influenced the statistically significant difference. At \( p < .05 \), three of the univariate tests were significant and one of them was significant at the .10 level. Moreover, cluster #1 means was statistically higher than cluster #2 means for two performance measures (growth of past export revenues and past profitability). A one-way ANOVA procedure with a summed scale of export performance (average sum of the four indicators) also indicated the existence of significant differences (at least between two clusters). Given the significant ANOVA results, we ran Tamhane (post hoc) tests to conduct paired comparisons of differences. In all tests, the pattern was the same: cluster #1 was highest (although the difference to each of the other clusters was
not always statistically significant) and cluster #2, lowest (see Figure 2 as an illustrative example); in four out of five tests cluster #3 was the second highest and, consequently, cluster #4 was the second lowest. These results provide indication that strategic orientation affects export performance outcomes and that the type of comparative effect across strategic orientations does not seem to depend on particularities of measures of export performance chosen.

Figure 2 – Illustrative example of the pattern of export performance differences across clusters

![Figure 2](image.png)

Figure 3 indicates the statistical significance of the differences in export performance means across clusters. It should be noted that the rank of highest to lowest is the same across all five measures of export performance (except for an inversion in the middle positions in the case of past export profitability).

Figure 3 – Indication of differences in export performance means across clusters

![Figure 3](image.png)

Note: Means covered by the same line are not significantly different at $p < .05$.

Results indicate that those export performance differences do not seem to be associated with the degree of internationalization or the absolute size of the firms. Interestingly, the pattern of performance differences across clusters was similar to the observed pattern of differences in relative size, degree of internationalization, export intensity, status of the export activity, and managers’ propensity to risk, that is, cluster #1 mean highest and clusters #2 or #4 means lowest. These results suggest that there may be more than just independent and additive impacts – in fact, a somewhat intricate configuration of effects and relationships among strategy decisions and firm characteristics seems to conjointly affect export performance.
Description of strategy composites of exporters

Clusters were named after the strategy orientations. A description and a discussion of their main characteristics follow.

Cluster #1, the Super Achievers (33%). They are the second more populated cluster, very close to the largest one. When judged against the average scale of their industry, Super Achievers are larger. They also tend to be more internationalized (in terms of years in the export activity, number of countries attended, and ratio of export revenues to total revenues). One can imply that their larger size (though not in an absolute sense) would allow them to have more resources than their competitors available for international expansion. Their managers are less risk averse, maybe as a consequence of possible slack resources accruing from size advantages. Their export area is more prestigious than can be found in other firms – which can be either a cause or a consequence, or both, of better export results and comparatively higher export involvement. On average they tend to be better performers than all the other clusters in terms of both revenues and profitability. This result suggests that there may be synergistic effects between planning and differentiating.

Cluster #2, the Field Workers (11%). They are the smallest group. They seem to be hard workers diligently repeating a single task, in this case, visiting their clients abroad. However, they do not dedicate attention to export planning and they do not emphasize any aspect of differentiation of their offer. Perhaps, they try to be low-cost players, but their present strategic orientation does not seem to pay off. They can be considered losers in the export business, given that, on average, they tend to perform more poorly than other types of exporters. This may be a consequence of the fact that they do not systematically plan their export activity, maybe just reacting after the fact. Their average absolute size tends to be the highest when compared to exporters with other strategic orientations.

Cluster #3, the Planners (37%). This is the largest group. They emphasize systematization of the export planning process and de-emphasize differentiation. Their size, when compared to their industry average, tends to be small as does their absolute size. However, in terms of degree of internationalization, risk propensity, and status of the export activity they tend to rank high (though not highest). While their profitability (both past and expected future) is close to the sample mean, they reported above average revenues and revenue growth.

Cluster #4, the Differentiators (19%). This cluster is composed of the smallest firms in absolute size, but large (though not largest) when compared to their industry peers. Since they are less internationalized than most other firms with distinct strategy orientation (though the differences are not statistically significant), one can conjecture that a differentiated offer will find a smaller market that possibly would a low-cost low price offer. They also seem to have started internationalization more recently. Though they differentiate their offer, they are more risk averse than, and they do not enjoy such a high status in the exporting activity as, the Planners – or the Super Achievers for that matter. They reported revenues and revenue growth lower than the sample mean and past profitability just a little above the sample average. They reported more pessimistic expectations than the average firm in the sample, although their expectations were still better than those of the Field Workers (cluster #2). It seems that differentiating without structured planning may still leave the future uncertain.

CONCLUSIONS AND DIRECTIONS FOR FUTURE RESEARCH

The results of the study can contribute in several aspects to the understanding of the impact of strategic orientations on export performance. Caution is necessary, however, before generalizing to firms from other emerging markets and developed countries, since the specificities of the Brazilian environment might have affected the results. In addition, because
of the specific sample used in the study, findings may be more applicable to medium and larger exporters with medium to high degree of internationalization. Other limitations of the study include the use of perceptual measures and of a single respondent per firm.

This study contributed by identifying clearly discernible patterns of strategic orientation of Brazilian exporters and their association with firm and manager characteristics. Moreover, we provide an indication of export performance effects associated with strategic orientation.

The conclusions of our study suggest that planning and differentiation seem to pay off when employed by firms from developing countries.

Research on the impact of planning on performance has reached mutually inconsistent findings (Pearce, Freeman and Robinson, 1987). Although it has been argued that systematization of the planning process can allow firms to better exploit opportunities and to anticipate threats, it has also been acknowledged that too much formal planning may lead to organizational rigidity, besides taking up resources that might be better employed in some other areas of the firm. This may be especially true when the external environment is predictable (Hambrick, 1983). The fact, however, that Field Workers in this study, that is, firms that do not emphasized planning, have on average lower export revenues may be an indication that they have been missing export opportunities. Furthermore, planning by itself does not seem to be sufficient to warrant winning results. It seems that it is the combination of planning with differentiation that helps an exporter stand out of the crowd.

The fact that industry effects were not found to be significant goes against industrial organization paradigms and somehow lends weight to the resource-based view, where differences in performance are assumed to be driven by differences in firms’ resources and competences and not differences in industry structure. While this study presented some evidence that there seem to be complex, multiple and conjoint effects on export performance as a consequence of the interplay between strategic orientation and organizational characteristics, these findings as well as the impact of other (firm-, environment- and strategy-related) variables, not included in the present study, need to be further investigated.

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