

# Impact of the strategy, strategy-making and its formalization in the export performance of SMEs, in the province of Cartago

Impacto de la estrategia, la forma de elaborarla y su formalización en el desempeño exportador de las PYMES, de la provincia de Cartago

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## Keywords

SMEs; strategy; export performance; impact.

## Abstract

This research analyzed the impact of the strategy, the strategy-making and its formalization on the export performance of SMEs, located in the province of Cartago (Costa Rica) that exported in 2013. To collect the information the study used a database of the index export performance (IDE) from PROCOMER and a structured questionnaire, to evaluate the strategic area of the company, which was sent via email to 35 companies and self-administered by them. From the information gather, it found that the owners and managers strategic knowledge is basic, also that companies do not handle a defined strategy, but a hybrid of these. Furthermore, hypothesis tests were conducted using bivariate correlations to determine the existence of a relationship between the IDE and evaluated different aspects, this was rejected since there was no significant relationship in any of the cases. Finally, it can be concluded that the strategic aspects evaluated are not important on terms of export performance is concerned.

## Palabras Clave

PYMES; estrategia; desempeño exportador; impacto.

## Resumen

Esta investigación analizó el impacto de la estrategia, su elaboración y formalización en el desempeño exportador de las PYMES, ubicadas en la provincia de Cartago (Costa Rica) que exportaron en el año 2013. Para esto se utilizó la base de datos del índice de desempeño exportador (IDE) de PROCOMER, así como un cuestionario estructurado para evaluar el área estratégica de la empresa, el cual fue enviado vía correo electrónico a 35 empresas, y auto administrado por estas. A partir de esto se encontró que el conocimiento estratégico de los dueños y administradores es básico, además de que las compañías no manejan una estrategia definida, sino un híbrido de estas. Además se realizaron pruebas de hipótesis, utilizando correlaciones bivariadas, para determinar la existencia de una relación entre le IDE y los diferentes aspectos evaluados, esto se rechazó ya que no existió una relación significativa en ninguno de los casos. Finalmente, se puede concluir que los aspectos estratégicos evaluados no son importantes en cuanto a desempeño exportador se refiere.

## Introduction

Nowadays, there is a high increase in the internationalization of enterprises as a way to grow and be competitive in the market. One of the most common ways that companies use to face globalization is internationalization, mainly through exports. In the matter of Costa Rica, understanding the determinants of export performance of Small and Medium Enterprises (SMEs) has become increasingly important, which can be seen in the statistics of exports in 2013, where SMEs represent a 61% of export companies, generating 13% of exports (Arguedas et al, 2014). Furthermore, according to the "Current Status of SMEs in Costa Rica 2013" of the Ministry of Economy, Industry and Trade (MEIC) these represented 74% of all firms in the country, contributing to a 33.05% of GDP. (Quesada, Quesada, Jara, & Arias, 2013).

Another example of the relevance of these businesses in the country is in the “National Development Plan 2015-2018 Alberto Cañas Escalante”, developed by the government, which aims to strengthen SMEs and growth exports. In addition, the Municipality of Cartago (2009) in the “Municipal Strategic Plan 2010-2015” has a policy of promoting the creation of SMEs.

The development of this study is mainly justified by the instability that occurs in the level of success of exporting SMEs in the country. According to the article, published by the newspaper “La Nación”, called “Success exporter of Costa Rican MSMEs had ups and downs in the past three years”, in a period of three years from 2010, the amounts companies classified according to the Index of Export Performance (IDE) as successful performance had been unstable. It had changed from 46% of total export companies in 2010, rose to 79% in 2011, and then fell to 56% in 2012, which shows high variability (Leitón, 2013).

The main research question that arises is: “What effect of the strategic aspects have in the export performance of SMEs in the province of Cartago?” Based on that the research objective is: To determine whether the strategic aspects have an effect on the export performance of SMEs in the province of Cartago or not. The research focuses on the strategic aspects of: formalization of strategic, strategy-making and the type of strategy used.

## Citation and hypothesizing

This section describes some important terms taken into account to generate a conceptual basis of the study and finally delve into the bibliographic context that justify the assumptions made in this study.

### 1. PYME

According to the law 8262 of Strengthening of Small and Medium Enterprises, these are “all productive units of a permanent nature that has stable physical resources and human resources, manage and operate under the figure of a natural person or legal entity in industrial, commercial or service activities”(p.2-3).

However, to determine the size of firms, the methodology developed in this law is not used because it requires data that are difficult to obtain due to confidentiality of businesses. It is use the method used by the Costa Rican Social Security Fund (CCSS), based on the proposed of Donato, Haedo and Novaro (2005), which only consider the variable of number of employees to determine the size of the company, will be used. The size of the SME's are those with more than 5 employees and less than 100.

### 2. Export Performance

For purposes of this study is vital to identify the export performance of SMEs. The issue of export performance had been highly studied, but it haven't reached a scientific consensus on how to measure it. For this study, the method developed by FUNDES, adapted and implemented by PROCOMER, to determine the success or failure of SMEs exporting is going to be use. This method is the closest to the economic reality of the country, being multidimensional, dynamic and one that allows comparisons between the results obtained in each exporting company (Milesi & Moori, 2007).

### 3. Strategy as a factor in export success

According to Thompson, Peteraf, Gamble & Strickland (2012) the strategy of a company is “all the competitive measures and commercial plans which the managers use to fruitfully compete, improve performance and grow the business” (p.4). The strategy seeks to achieve competitive

advantage, through actions and movements in the market to improve their competitive position. The strategy is important because the good performance of a company may be due to the scope of the strategy and how is executed.

#### a. Strategic Plan formalized

The strategic plan is the one that indicates the direction of the company, the business purpose, performance goals and strategy (Friedman, 2013). According to the literature review by Abby & Slater (1989), the lack of a formal strategic planning carried the company to obtain poor results in their export activities.

According to Thompson et al (2012), the formulation of a strategic plan involves developing a strategic vision, mission and values, set goals and devise a strategy to achieve the objectives of the vision and take the company to an established route. Formalizing the mission and vision may be reflected in the performance of the company, according Rarick and Vitton (1995) companies that have a mission statement have twice the average return on capital for shareholders. In addition, Bart and Baetz (1998) found a positive relationship between mission statements and organizational performance of a company.

H1: The more formalized strategic planning for SMEs, the greater its export performance.

#### b. Competitive Strategy

There are two types of competitive strategies widely used in scientific research: the typology developed by Porter (1980) and the one developed by Miles & Snow (1978). Both are used in a variety of studies, however, for this research the typology developed by Miles & Snow is chosen, as there are scales tested in previous studies in which these types of strategies are used.

Miles & Snow (1978) identify three types of competitive strategy: the prospector, based on identifying and exploiting opportunities; the analyzer, tries to minimize risk while seeking to maximize profits and the defensive, related to companies seeking to protect their market position. There is a fourth strategy named reactive, however this is known as the no strategy, as it is used when the company has a strategic mistake, introducing inconsistencies between strategy, technology, structure and processes.

According to Miles & Snow (1978), organizations generally tend to fit predominantly in one of the types of strategies and can predict the behavior of a company according to the type of strategy that is used. When a relationship between these types of strategies and export activity is analyzed, it can be seen that not all strategies have the same result; exploratory strategy is oriented to the search for opportunities in new markets, which could lead to international markets (Hambrick 1983; Conant, Mokwa & Varadarajan, 1990).

H2: The SMEs exporting companies have a tendency to fit into any of the strategies proposed.

H3: Firms with strategies such as exploratory and the analyzer will tend to be better exporting companies than the ones defensive or reactive strategies.

### 4. Strategy-making

From another point of view, Mintzberg (1973) developed a typology related to how firms make decisions and linked them to form strategies. This typology focuses primarily on the origin of the strategy rather than its content (Segev, 1987). Three types of strategy making are determined: the entrepreneurial mode, mainly seeking for new opportunities having the problem solving as a sideline; adaptive mode, trying to avoid the uncertainty however lacking of clear goals; and the planning mode where analysis are important and decisions are made carefully.

According to Mintzberg (1970), it is more likely for smaller companies focus more on an entrepreneurial strategy-making mode, since it is common that the power is concentrated on one person, the owner. He also indicates that these modes can be used as a combination of strategy-making modes. In the types of strategy-making it is possible that the more entrepreneurial approach also has a higher export performance, since the type of exploratory strategy is very similar to the entrepreneurial strategy.

From this, the following hypotheses are proposed:

H4: SMEs exporting companies have a tendency to use a combination strategy-making mode.

H5: The higher the orientation of companies to use the entrepreneurial mode, the greater its export performance.

## Methodology

This research is descriptive, as it seeks to describe the strategic knowledge of managers and strategic aspects of exporting SMEs. In addition, it is also a correlational research, because it tries to find a relationship between strategic aspects and export performance of SMEs in Cartago. For testing hypothesis and doing statistical test, the research has a quantitative approach, as it allows measuring the variables and numerical data through statistical methods.

### Study Population and Sample

The sample used for the study was obtained from the databases of PROCOMER, with a total population of 90 SMEs, 87 were able to be contact by telephone, 63 companies agreed to answer the questionnaire and it was sent to them via email. However, only 35 companies answer it, although there was the respective follow up.

It is determined that the level of response is 38% of the population consulted, which is positively compared with response rates obtained in studies of this kind 28% for Chilean exporters, 11.4% for a study of Canadian companies and 31.9% for a case of SMEs exporters from Mexico (Rock & Ahmed, 2014; Croteau & Bergeron, 2001; Ochoa et al, 2014)

This low level of response is very normal in business-oriented research as managers and owners are very difficult to contact and generally do not like to participate in such studies. In addition, Costa Rica does not have a culture that promotes research and, in most of the cases, companies do not see the potential benefits that these studies can give to their business.

## Methods of data collection

The main data collection methods used in the study are described below:

### 1. Literature Review

Initially, a data collection was conducted from the review of literature sources, using databases provided by the library of the Instituto Tecnológico de Costa Rica (TEC), as well as information from reliable websites. This provided a diagnosis and a theoretical reference for the study on which the hypotheses were developed; also, the questionnaire used for the research was obtained with this review.

### 2. Database with export performance index

PROCOMER helped with the information of the index of export performance by providing a database with this information. This index takes into account data of exporters for the period

of 2010-2013 and consists of 4 indicators: export continuity (35%), indicates how stable is the company in its export activities; export growth (15%), measures the growth of exports of a company in the period; market diversification (35%), measured by the number of countries to where the company is exporting; and conditions of access to markets (15%) was measured according to the share of exports in 2013 that went to markets with which the country has not signed free trade agreements or customs unions.

According to the scores, which can be between 0 and 10, the index is calculated as a weighted average of the four indicators.

### 3. Questionnaire and variables

The collection of data related to the strategic part of the business was conducted through a survey using a structured questionnaire, which consists of 55 questions divided into 6 blocks. The part that evaluate the strategic planning was based on the major developed aspects when planning the strategy; as vision, mission, objectives, strategic plan (Friedman, 2013 & Thompson et al, 2012). For blocks of the strategy employed and the strategy-making mode, the scale developed by Segev (1987) was used. A Likert scale was used for these three parts, in which companies should qualify 1-7 the statement indicated, with 1 being 'the statement is not related at all with my company' and 7 'the statement is completely related with my company', these items were analyzed using the mean of the items. Subsequently a pilot with five companies, of which there were doubts as to the wording of the items were performed and Cronbach's alpha tests were conducted to analyze the reliability of the scale used.

**Table 1.** Results of the Cronbach's alpha tests

Scale	Alpha	Amount of items
Formalized strategy	0,907	5
Prospector strategy	0,848	8
Reactive strategy	0,621	3
Defensive strategy	0,644	5
Analyzer strategy	0,657	5
Entrepreneurial strategy-making	0,681	2
Adaptive strategy-making	0,534	2
Planning strategy-making	0,519	2

According to the results of the Cronbach's alpha test, some items were eliminated in the analysis of the information.

### Design of processing and data analysis

According to the answers obtained and tabulated in the statistical tool SPSS, the following analysis were developed:

### 1. Processing of descriptive data.

To facilitate processing and analysis of results, initially the average of the scales use of every company were calculated. Subsequently descriptive data of each item as well as the averages of the numeric variables were obtained, using the SPSS tool.

### 2. Hypothesis Testing

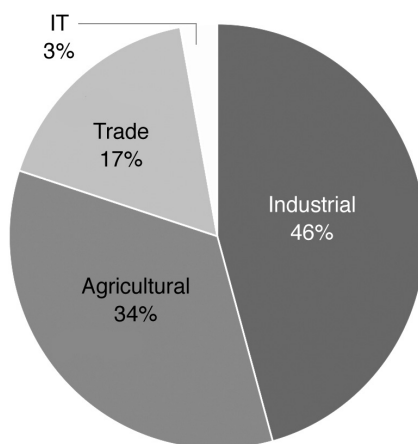
To test the hypothesis, the test of Pearson correlation coefficient was performed. These tests are used to determine whether there is a linear correlation between the different variables used. The result of the correlation will be located between -1 and 1, the ends being the highest degree of correlation, and 0 indicates no correlation between the variables. According to the sign, it is determined if the relationship is direct (positive) or reverse (negative). It is important to note that the results obtained may not be significant, so random effects may cause the results.

## Findings

### Sample characterization:

Most companies are engaged in industrial business, followed by the agricultural and only one company is dedicated to the area of information technologies.

The firms have on average 20.79 years old and 13.03 years of being exporters. The companies last about 7.7 years to start their export activities. It is important to note that within the sample there were also cases of born-global companies.



**Figure 1.** Distribution of the trade or business to which the respondent company is engaged (n = 35). Source: Own elaboration

As shown in Table 2, most of the companies in the sample chosen as an export destination countries in North America, followed by Central American countries, with 40% of companies. Only one company exports to countries in South America. This is the normal behavior of exporters in Costa Rica, since most of the exports of the company are from the United States.

In the matter of size of the companies, 51% of the firms are medium and 49% are small, according to the number of employees in the company. This indicates that the sample has a wide distribution, since there is no significant predominance in any of the sizes of companies.

**Table 2.** Geographical areas the companies of the sample are exporting to (n = 35)

Area	%	Abs.
North America	57,1%	20
Central America	40,0%	14
Europe	28,6%	10
The Caribbean	20,0%	7
Asia	11,4%	4
South America	2,9%	1

Source: Own elaboration.

### Hypothesis testing:

Regarding the Pearson correlation with the level of formalization of the strategy the result is -0.026; implying that there's an inverse relationship however is not a meaningful relationship.

**Table 3.** Pearson correlation between the types of strategy

Category	Prospector Strategy	Analyzer Strategy	Defensive Strategy	Reactive Strategy
Prospector Strategy	1	,711**	,167	,802**
Analyzer Strategy		1	,155	,637**
Defensive Strategy			1	,292
Reactive Strategy				1
*. Correlation is significant at the 0,05 level (bilateral).				
**. Correlation is significant at the 0,01 level (bilateral).				

Source: Own elaboration.

The correlation between strategies is highly significant between the prospector, the analyzer and the reactive. This implies that as prospector strategy indicators are present there is an increase in the analyzers and reactive aspects, and similarly with the other types, except with the defensive strategy.

Regarding the relationship between the IDE and the type strategies there is no significant correlation. According to that result, even if there is a result in the correlation test, it might not actually arise to be a relationship, so there is a high risk that this relationship is false.



**Table 4.** Pearson correlation between the strategy-making modes

	Entrepreneurial	Adaptive	Planning
Entrepreneurial	1	.384*	,112
Adaptive		1	-,066
Planning			1
*. Correlation is significant at the 0,05 level (bilateral).			

Source: Own elaboration.

Among the modes of strategy-making there is also a relationship between the entrepreneur type and adaptive type, which is significant and positive. The type of planning if kept separate from other modes of strategy-making.

As for the relationship between the strategy-making and the IDE, in the companies that makes decisions based on entrepreneurial mode there is a positive relationship with the IDE, contrary to what happens with the adaptive mode and planning that have a negative relationship. However, none of these relationships is significant, so there is a high risk that these relationships are not real.

## Discussion and conclusions

As for the relationship between formalization of the strategy, Hypothesis 1 is rejected; because there is, no significant relationship indicating that the more formalized the best company will export performance. This means that the literature review of Abby & Slater (1989) for companies with less formality in their strategy has lower export performance does not apply to the case of SMEs companies in the province of Cartago.

As for the type of strategy the second hypothesis is not accepted, which indicates that companies will always prefer some sort of strategy. According to the analyzes of the correlation between different types of strategies, there is a strong correlation between exploratory strategies, analytical and reactive. This leads us to conclude that contrary to indicate Miles & Snow (1978), Cartago exporting SMEs tend to not choose one of the strategies of the four defensive strategies, but to choose a cross between the prospector, analytical and reactive, or use a defensive strategy.

Regarding the relationship of strategy with the index of export performance, the results also lead us to reject the third hypothesis, since having a higher or lower average in any of the types of strategy does not affect their export success. Contrary to reports of Ibeh (2004) and Kazem (2005), in this case there is no significant difference between whether the strategy is more entrepreneurial, as the prospector, related to a better export performance.

The fourth hypothesis, regarding the mixture of modes of strategy-making, the mixture is present mainly between the type of entrepreneurial and adaptive, which have a significant positive correlation, which indicates that the higher the average of the items of the entrepreneurial type, the greater the adaptive average and vice versa, just like Mintzberg (1973) indicates. Following this, the fourth hypothesis that states that companies are not going to use one type of strategy, but a mixture is confirmed.

No significant difference was found in the entrepreneurial strategy-making mode with the others mode of strategy making, in the matter of IDE. Likewise, the fifth hypothesis is rejected because the difference is not significant enough to say that the entrepreneurial strategy-making mode is more successful at exporting level than the other types.

The results may be explained by the comments of experts in the area of SMEs from Germany, whose indicate that most of these companies are familiar companies, and the most important factor of success in these companies lays mainly in the head of the company. They indicate that it is truly important that they have a strategy direction, but that it is more important the leadership that they have to adopt the strategy chose. In addition, that is normal that SMEs start ordering all the administrative part, not when they are successful, but when they have to face problems. Therefore, there may be a change in the moment they start exporting. So there may be a difference between SMEs that are not exporting yet, with those that are already exporting. (Brinks, 2014 & Hauk, 2014)

On the other hand, the importance of strategy, may not lay in the type of strategy that the companies are using, but the importance and quality of it in the company. Jalali (2012) in his study concludes that the implementation of the strategy in the companies have a relationship with the export performance, and it takes into account environmental aspects that are widely important in the exports.

## Recommendation

From the study results and experience, the following lines of research are recommended:

Conducting this study at the country level, since it is possible that with a larger sample size greater results and interesting conclusions are obtained.

Making a comparison between companies that are not exporting with the ones that are not, since it is possible that companies go through a process of administrative order when initiating export activities.

Conduct a qualitative study, in which they can reflect results of exporting SMEs in which a quantitative study cannot delve.

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