

January 2018

Efectos del uso de la competitividad como estrategia en las empresas exportadoras: situación actual

Gladys Mireya Valero Córdoba

Universidad Pontificia Bolivariana, gladys.valero@upb.edu.co

Manuel Rodenes

Universidad Pontificia Bolivariana, mrodenes2@gmail.com

Gladys Elena Rueda

Universidad Pontificia Bolivariana, gladys.rueda@upb.edu.co

Follow this and additional works at: <https://ciencia.lasalle.edu.co/eq>

Citación recomendada

Valero Córdoba, G. M., M.Rodenes, y G.E. Rueda (2018). Efectos del uso de la competitividad como estrategia en las empresas exportadoras: situación actual. *Equidad y Desarrollo*, (30), 173-194.

<https://doi.org/10.19052/ed.4214>

This Artículo de Investigación is brought to you for free and open access by the Revistas científicas at Ciencia Unisalle. It has been accepted for inclusion in *Equidad y Desarrollo* by an authorized editor of Ciencia Unisalle. For more information, please contact ciencia@lasalle.edu.co.

Effects of the use of competitiveness as a strategy on exporting companies: Status of the issue*

Gladys Mireya Valero Córdoba**

Manuel Rodenes***

Gladys Elena Rueda****

Keywords

Competitiveness, strategy, exports, internationalization, company

JEL Codes

B12, F10

Abstract

The literature on competitiveness to enter the international market has initially focused on the competitive approach of the diamond model; however, after reviewing other elements in the process of internationalization of companies, new strategies have emerged. This work is based on a literature review and proposes a model of variables, sub-variables, indicators, and authors, seeking to determine the competitive strategy of companies to enter international markets. The importance of this work lies mainly in basing export efficiency on new elements related to competitiveness, innovation, productivity, and business structure, which define the strategy of companies, and how it is possible to confirm that these elements are valuable within competitiveness as an internationalization strategy for companies. The model we propose is a step forward for new elements required by international strategy.

How to cite this article: Valero Córdoba, G.M., Rodenes, M. & Rueda, G.E. (2018). Effects of the use of competitiveness as a strategy on exporting companies: Status of the issue. *Equidad y Desarrollo*, (30), 173-194. doi: <http://dx.doi.org/10.19052/ed.4214>

Received: March 17, 2017 • Accepted: October 11, 2017

* This article is a result of the research work entitled “The influence of competitiveness and technological capital in the internationalization of exporting companies of Bucaramanga and its metropolitan area in Colombia”.

** PhD (c). Universidad Pontificia Bolivariana (Colombia). E-mail: gladys.valero@upb.edu.co

*** PhD. Universidad Politécnica de Valencia (Spain). E-mail: mrodenes2@gmail.com

**** PhD. Universidad Pontificia Bolivariana (Colombia). E-mail: gladys.rueda@upb.edu.co

Efectos del uso de la competitividad como estrategia en las empresas exportadoras: situación actual

Resumen

La literatura sobre competitividad para entrar al mercado internacional se ha concentrado inicialmente en el enfoque del diamante de la competitividad; sin embargo, después de revisar otros elementos en el proceso de internacionalización de las empresas, han surgido nuevas estrategias. Este trabajo se basó en una revisión de la literatura desde la cual se propone un modelo de variables, subvariables, indicadores y autores, para estructurar la estrategia competitiva que deben utilizar las empresas para su entrada en los mercados internacionales. La importancia de este trabajo radica principalmente en que respalda la eficiencia de las exportaciones en nuevos elementos inmersos en la competitividad, la innovación, la productividad y la estructura empresarial, que definen la estrategia de las empresas, y en cómo es posible comprobar que estos elementos son valiosos dentro de la competitividad como estrategia de internacionalización para las empresas. El modelo que se propone es un paso adelante para los nuevos elementos que requiere la estrategia internacional.

Palabras clave

Competitividad, estrategia, exportaciones, internacionalización, empresa

Efeitos do uso da competitividade como estratégia nas empresas exportadoras: situação atual

Resumo

A literatura sobre competitividade para entrar ao mercado internacional concentrou-se inicialmente na visão competitiva do diamante; contudo, depois de revisar outros elementos no processo de internacionalização das empresas, há novos elementos como estratégia. Este trabalho está baseado em uma revisão da literatura a partir da qual se propõe um modelo de variáveis, sub variáveis, indicadores e autores, para estruturar a estratégia competitiva que as empresas devem utilizar para entrar nos mercados internacionais. A importância deste trabalho radica principalmente em que respalda a eficiência das exportações em novos elementos imersos na competitividade, a inovação, a produtividade e a estrutura empresarial, que definem a estratégia das empresas, e em como é possível comprovar que estes elementos são valiosos dentro da competitividade como estratégia de internacionalização para as empresas. O modelo que propomos é um passo adiante para os novos elementos requeridos pela estratégia internacional.

Palavras chave

Competitividade, estratégia, exportações, internacionalização, empresa

Introduction

In any global economy, the internationalization process and the opening of markets are issues of special importance; for Colombia, this aspect has strengthened its importance since 1991, when it entered the international market in a more aggressive and less timid manner. From that year, the internationalization process has been driven by the disposition of governments towards world markets, which has become evident in the development plans in which Colombia has advanced since that year and which have favored a growing outward projection of the business network.

Nowadays, the number of Colombian companies present in the world markets of goods and services has increased progressively. At the same time, the international dimension has become a relevant part of the companies' strategy. However, Colombian presence abroad is still below the potential, which means continuing with the efforts to expand the incursion of export companies in the global market and to consolidate this international perspective.

Under this structure, we can say that competitiveness as a strategy is an aspect that is of great importance in companies. From this perspective, the conditions for insertion in the international market are prepared, taking into account fundamental aspects in the preparation for entry into the global economy, and they contribute efficiently to a better behavior of companies and Colombia in this international process.

Literature Review

Competitiveness

As far as the concept of *competitiveness* is concerned, it is found that it is historically linked to commerce as an economic activity; hence, Table 1 shows the temporal evolution of the concept:

Table 1. The commercial evolution towards competitiveness

Historical evolution	Source	Contribution
1776 – Classical economists identified the four factors: land, capital, natural resources, and labor	Adam Smith (1776), <i>An Inquiry into the Nature and Causes of the Wealth of Nations</i>	Absolute advantage
1817 – David Ricardo, with his law of comparative advantage, emphasizes how countries should compete	David Ricardo (1817), <i>On the Principles of Political Economy and Taxation</i>	Comparative advantage
1942 – Joseph Schumpeter emphasized the role of the entrepreneur as a factor of competitiveness	Joseph Schumpeter (1942), <i>Capitalism, Socialism, and Democracy</i>	Innovation and technological change
1965 – Alfred P. Sloan and Peter Drucker further developed the concept of <i>management</i> as a major factor for competitiveness	Alfred P. Sloan (1963), <i>My years in General Motors</i> ; and Peter Drucker (1969), <i>The Age of Discontinuity</i>	Management and administration
1990 – Finally, Michael Porter has tried to integrate all these ideas into a systematic model called the Diamond of National Advantage	Michael Porter (1990), <i>The Competitive Advantage of Nations</i>	Competitive advantage

Source: Garelli (2006).

Competitiveness has its beginnings in the absolute advantage of Adam Smith (1776), a classic theory that recognizes the advantages that economies have and that are indisputable in the commercial activity. From there, it moves to the comparative advantage that reflects different conditions in terms of relativity for the exchange as a decisive element, as well as innovation and the company from the administrative concept. Finally, we have the competitive advantage, created by Michael Porter (2002a, 2000b).

Based on this literature review, competitiveness is one of the fundamental aspects when entering the international market. When a company considers international insertion via exports, it must be exhaustingly prepared to achieve this insertion in aspects such as innovation, productivity, and business structure.

Authors like Ball and McCulloch (1996), Rock (2014), Sosa Rodriguez and Reyes (2014), Hill (2001a, 2001b), Daniels (2000), and Czinkota (2002), among others, consider the importance of competitiveness in order for companies to truly

enter the global market in an optimal manner, stating that international immersion is gradually achieved, first in the local market, adjusting the internal conditions that favor the supply in the domestic market, and later entering the global market, either in terms of exports, imports and/or foreign investment.

In this sense, the present research seeks to identify some of the fundamental aspects of competitiveness and its influence on the exports made by companies.

In the book *The Competitive Advantage of Nations*, Michael Porter (1990) considers competitiveness as the value that a company manages to create for its customers and to exceed the cost of it. That is, the competitive advantage is given in low costs and differentiation (Porter, 2002a, 2000b). The author considers that the basic tool with which the competitive advantage is diagnosed is through the value chain that divides a company into the activities of designing, producing, marketing, and distributing its goods.

It is observed that, over the years, the concept of *competitiveness* versus *trade exchanges* determines the entry of an economy into the international market. Nowadays, there is almost no company (large or small) that does not feel the effects of events in global competition, since most companies sell their products, receive supplies from foreign countries, or both, and compete with goods and services from abroad (Daniels & Radebaugh, 2000). It is also worth mentioning the views and contributions of Paul Krugman (2008) in his book, *The Return of the Economy of the Depression and the Current Crisis*, where competitiveness in the era of globalization must take into account fundamental elements and their complex implications.

Competitiveness as strategy

In this sense, competitiveness as a strategy makes it possible to affirm that companies are transformed into exporters, not overnight, but step by step through an export development process made up by different reasons for internationalization, administrative and corporate elements of the company, the influence of the agents of change and the ability of the company to overcome the internationalization barriers (Czinkota & Ronkainen, 2002).

Consequently, companies that consider internationalization within their strategy must decide whether they do it via export, import and/or investment: “When operating internationally, a company must consider its mission (what it claims to be and do in the long term), its objectives (specific performance purposes for the

fulfillment of its mission) and its strategy (the means by which it will achieve its objectives)” (Daniels & Radebaugh, 2000, pp. 8–9).

Taking this into account, companies define four concrete objectives in their competitive strategy process to enter the international market:

- To increase your sales
- To acquire resources
- To diversify your sources of sales and supplies
- To reduce competitive risk

These four aspects illustrate that the competitive strategy through global markets involves leaving the local market, due to the advantages of an international market that improves the operation of the company in sales, resources, acquisitions, and competitive risk. In addition, they should assess external influences focused on physical and social factors related to policies, geographical conditions, values, and economic characteristics. Likewise, it is necessary to review the competitive environment that allows companies to enter the international market with clear advantages in prices, differences, and capacities.

With the above considerations, the companies determine the competitive strategy through the common pattern of internationalization known as: “General pattern concentrating on reducing risk to the lowest level” (Daniels & Radebaugh, 2000). The interpretation of said pattern is made from the center to the outside, and considers, among other things, the passive-to-active search for opportunities, the external and internal management of operations (understood as exports, imports and/or foreign investment), and limited or broad operating modalities. A slow movement by one of them can allow the release of resources that enable a faster expansion in any other way.

Daniels and Radebaugh (2000) consider that the common pattern of internationalization implies that companies make internationalization decisions in five axes, namely:

- A: The stimulus for international businesses that relates with the incentive (or not) for international operations, such as exports, imports or foreign investing.
- B: Internal or external management of operations abroad depending on how these operations are handled if done directly by the company, delegated to another, or to an intermediary.

- C: Modality of operations, or how broad the common pattern of internationalization is, i.e., in basic operations such as exports-imports, foreign production through business as strategic alliances and those related to foreign direct investment.
- D: Number of foreign countries in which the company conducts business—that is, the number of countries depending on the company’s valuation, capacity and strategy.
- E: Degree of similarity between foreign countries and origin, including assessment of aspects such as language, culture, geographical proximity, and so on.

The above criteria are constituted in the variables that affect the companies with the strategic agreement, towards the international markets via exports.

Exports

Internationalization involves the crossing of borders to carry out commercial exchange, i.e., export, import and/or foreign investment. In that vein, the concept of *export* is found in many works, but in this case, we adopt the more general definition of the term. Export is the sale of goods or services produced in one country to residents in another country (Hill, 2001b).

To expand a little more on the concept, let’s take a look at the definition by the DIAN, the Colombian Tax and Customs Office:

Export is the exit of goods from the Colombian customs territory to another country or an industrial free zone of goods and services, complying with the requirements set forth in the standard. The State regulates the exit of the country from genetic resources and their use, in accordance with the national interest. (DIAN, 2016)

The two definitions illustrate that export is not simply the entry into the international market, but also the efficiency in the management of rules and government regulations linked to other aspects that favor carrying out the process in a competitive way.

These concepts constitute a platform to revise the concept of *exportable supply*, as it specifies the conditions for the companies and economies to stay in the inter-

"The exportable offer consists in the company's ability to ensure the volumes requested by a particular customer or to have products that meet the requirements of the target markets. The exportable offer has to do with the economic, financial and management capacity of the company".

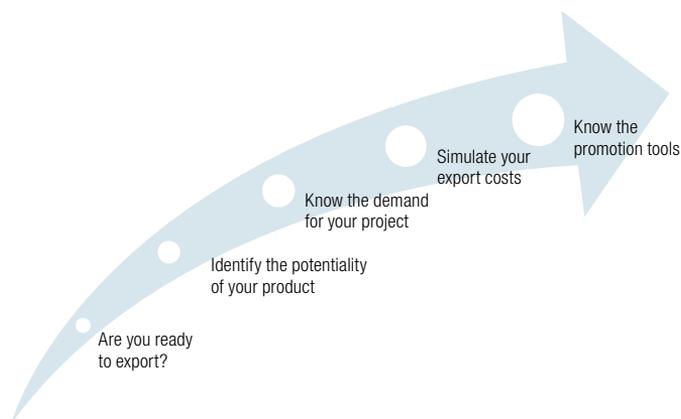
national market; the exportable offer consists in the company's ability to ensure the volumes requested by a particular customer or to have products that meet the requirements of the target markets. The exportable offer has to do with the economic, financial and management capacity of the company, that is:

- **Product availability:** Based on the product you want to export, the company must determine the volume available for the external market. The volume must be one that can be offered in a stable or continuous way. Likewise, the product must meet the needs and requirements of the target market.
- **Economic and financial capacity of the company:** The company must have the necessary resources to pay for an export; it must also be able to have competitive prices. If the company does not have the possibility to pay the process with its own resources, it must be able to borrow and obtain external financing.
- **Capacity of management:** "The company must develop an export culture with clear objectives and knowledge of its capacities and weaknesses" (Ministerio de Cultura y Riego, 2016).

Likewise, as an export promotion fund created after 1992, PROCOLOMBIA determines the internationalization process through five phases that allow the business owner to analyze and evaluate the internationalization process; it also explains the procedures, requirements and guidance instruments to move forward in reaching other markets (PROCOLOMBIA, 2016).

The criteria considered entail an obligatory consultation to carefully review the aspects that determine the capacity to enter the international market, as well as to stay in the market. Figure 1 shows the five basic steps.

Figure 1. Guide for entrepreneurs interested in exporting



Source: PROCOLOMBIA (1992).

Reviewing other references, the Colombian Tax and Customs Office has published a set of guidelines for exports (DIAN, 2016), which define the variables to be taken into account in order to identify the exportable capacity of a company and which generally conform to those mentioned by PROCOLOMBIA. According to PROCOLOMBIA (2016), this is what a company must have in order to export:

- Availability of the product: Based on the product to be exported, the company should only offer what it is capable of producing in a stable and continuous way.
- Quality: The quality must be the one required by the market, taking into account the customer's expectations. It also considers international quality certifications.
- Value added: Characteristics that give the product a differentiating factor and in turn a greater commercial potential compared to the competition.
- Optimal value for money: The company must have the necessary conditions to face new challenges, such as establishing competitive prices and in turn complying with safety standards in the quality of products.
- Adaptability: Adequacy of the product according to the different needs and conditions of each market, taking into account cultural barriers, regulations, physical attributes and packaging of the product.

Through the Procolombia Information Center, it is also suggested to carry out a financial and administrative analysis, which allows companies to identify capacities through international trade. Furthermore, through the test of the exporter, their potential to carry out their export management can be measured.

Determining factors of exports

Table 2 lists the contributions made by recent authors, who define the aspects that must be considered to make exports:

Table 2. Determinants of exports, some appreciations

Issue	Author	Contribution
Five facts about value-added exports and implications for macroeconomics and trade research	Robert Johnson (2014)	Value-added exports. Trade manufacturing is relatively small, and service trade is relatively larger, when measured in terms of value added
Export performance based on the creation of social capital through the use of information technology. A study in the plastic sector	Peláez Cano (2011)	Entry into the international market is carried out through innovation, which is decisive in the export process and which is also a fundamental indicator for measuring export performance
The export boom of the Mexican Revolution: characteristics and contributing factors	Sandra Kuntz Ficker (2004)	Prices, quantities and structure as geographic location: determining factors for exports
Export promotion enhances the firm's quality reputation, product and service quality, generating sales and profits: a structural equation modelling using AMOS	Hamad, Kinson, and Shy (2015)	The latent variables that have highly marked the potential of the quality of the firms in the international market are: to improve the products, providing a better quality of service, and gaining in reputation
Location factors of export-platform FDI: the example of Vietnam	Nguyen and Minda (2012)	Labor costs and productivity are decisive when it comes to exports
Business	Ricky W. Griffin and Ronald J. Ebert (1997)	Determinant issues for exports: social-cultural differences, economic differences, political and legal differences, competitive differences, the capacity of the company and the business climate in other nations.
Globalization. Strategies for obtaining a worldwide competitive advantage	George S. Yip (1992)	Determine following aspects: globalization potential, degree of globalization, organizational capacity and necessary changes.

Source: Own elaboration.

In the previous review, we can say that each one of the activities carried out by the company is a fundamental factor that is closely related to their management. The levels of productivity related to labor, production factors, the portfolio of products generated by the company, among others, are aspects that prepare the ground towards international markets (exports), in addition to the elements immersed in the macro-environment—that is to say, those that are outside the organization and that undoubtedly affect the international immersion.

From the methodology used by PROCOLOMBIA as an entity in charge of promoting tourism, foreign investment in Colombia, non-mining energy exports and the image of the country, the determinants for entering the international market through exports are listed below (PROCOLOMBIA, 1992):

1. Identify the determining factors of the products that will be exported
2. Political and economic panorama
3. Trade relationship with the country
4. Potential of the product in said market
5. The structure to enter that market
6. The business culture to export to this market
7. The conditions of access established by the customs
8. Entry requirements based on documentation
9. Regulations and rules
10. Labor legislation and structure for SMEs

As a conclusion, it can be said that, once the aspects to be evaluated in order to enter the international market have been defined and identified, companies decide whether or not to enter the international market, which depends on the strategic projection of the company and its capacity to assume the international business as a fundamental element within the organization.

Proposal of a Model as a Competitive Strategy for the Internationalization of the Company

Based on this review, we proceed to propose a model that considers the competitive strategy via internationalization based on innovation, productivity, and business structure. For this purpose, each of the elements is reviewed in order to

illustrate the importance of these elements within any competitive strategy in the international insertion (exports) of the companies.

184

Innovation

Entering the international market implies doing so in a competitive way, and therefore the concept of *innovation* must be considered. Over time, this concept has evolved considerably, as seen by some of the concepts in Table 3 below:

Table 3. Innovation according to several authors

Author	Issue	Proposal
Shumpeter (1934)	The theory of economic development	The development of economies depends on the level of innovation projected in GDP
Friedman (1974)	Free competition	The integration between technology and inventions generates innovation
Drucker (1988)	Management of the 21 st century	The company innovates when it allocates resources for it
Porter (1990)	Competitive advantage	Innovation is the key element that explains competitiveness
Fajnzylber (1988)	Technological progress	Authentic competition is obtained when technological progress of goods is incorporated from the innovation that is obtained from research and development (R&D)
Bradley (1997)	Determining knowledge of competitiveness	Innovation, technological capital and intellectual capital transform the tangible and intangible into wealth for companies

Source: Own elaboration based on several authors.

As seen in all the previously reviewed approaches, innovation is a fundamental platform in the process of internationalization (exports), since it has a positive relationship that, together with productivity and investment in research and development, contributes to a better gross domestic product (GDP) of the country (Gaviria Muñoz, 2016), which is a fundamental aspect in competitive exports that can be consolidated.

In general terms, and according to the consultation of the CIDEM-Maloka Methodology developed by Universidad del Rosario (2009), the following aspects are taken into account to define the export capacity in Colombia:

Intrinsic and production attributes. There is a competitive or innovative advantage in raw materials; a competitive or innovative advantage in design; a competitive or innovative advantage in the production process; a competitive or innovative advantage in quality; the company has processed the certificate of origin at the Ministry of Commerce, Industry and Tourism; the product is subject to controls by national authorities; the product is identified by some code or reference; there is sufficient supply of raw materials and inputs that allow timely deliveries, compared with others products abroad; the company must adjust to international requirements and, based on the life cycle of its product, identify the level of competitiveness of the product selected for international markets; the product is a unique product on the market; and the product meets the environmental standards.

External attributes. It has a competitive or innovative advantage in packaging; the labels comply with international requirements; the cartons used as packaging have the identification of the company; the appropriate packaging for the international market has been identified; the product requires pictograms for manipulation; there is some presentation in visual media; and the packaging is adjusted to international needs.

Intangible attributes. The product has a warranty management policy as well as a use and storage manual; the product brand is registered before the Superintendencia de Industria y Comercio; there is a manual in both Spanish and English language; and it has a technical file.

Other aspects. The company has production capacity for the international market (related to the selected product); it has technical, professional and financial resources necessary for its commercialization and maintenance of the image of the company; the technical file identifies the direct and indirect costs of the production process, sales growth, and the established cost of production; it has identified its tariff heading; and the product has tariff preferences.

As shown, innovation is a fundamental aspect considered in the methodology and it allows, according to the approach, an optimal entry to the international market. It is clear that these aspects are adjusted depending on the company, the sector and the particular aspects when defining the export capacity.

Productivity

186

According to the dynamics proposed by Almunia (2005), the concept of *productivity* refers to “the sustained growth of an economy, which must be based on the factors that determine the increase of productivity in the long term, especially the accumulation of all kinds of capital, physical, human and knowledge. The incorporation of new knowledge into the productive process via research, development and innovation (R&D+i)” (Almunia, 2005) makes it possible to produce more with the same resources and, consequently, increases labor productivity and accelerates growth.

Productivity also implies considering the training of talent, since “there is a positive correlation between the formation of human talent and the productivity of the companies” (Long, Kowang, Chin, & Hee, 2016, pp. 475–487). This indicates that the increase of the training activities improves the company, thus achieving a better competitiveness. For his part, Blanco Rivero (1999) believes that productivity growth is the most important factor in maintaining a competitive advantage in most developed countries. Likewise, productivity has become the pillar to increase the competitiveness of the different types of companies. The internationalization of the economy, the productivity cycle, strategic planning and its main management indicators, among others, are some of the issues that contribute to the achievement of competitiveness via international markets.

By the same token, according to Pires (2011), the growth of income, labor and the increase of physical and human capital in companies favor a good level in each of the factors of production. In this sense, there is a relation between income growth and institutional changes, economic policies, access to international markets and technological change.

Due to all of this, productivity is important to reach levels of competitiveness, among which is the behavior of each sector. Sectoral competitiveness evaluates the performance and evolution of the industrial sectors (Sanchez & Acosta, 2001). Colombia, in particular, has focused the sectorial competitiveness on its Productive Transformation Program (PTP), which is a tool provided by the National Government for the implementation of the industrial policy that leads to the productive development of the country and with which it is expected to generate more competitive environments, as well as stronger and more productive companies.

The PTP is an ally of entrepreneurs because it offers them support to accelerate their productivity and competitiveness, guiding their capacities and taking advan-

Figure 2: Productive transformation program



187

Source: Programa de Transformación Productiva (2016).

tage of their comparative advantages (PTP, 2016). When reviewing the sectoral composition of the PTP, it is important to clarify which sectors are considered as world-class sectors, which can be seen in Figure 2 above.

Michael Porter (2002b) considers that the main structural characteristics of the industries are those that determine the spirit of the competitive force and for the same the profitability of the industry. Combined efforts to evaluate potential participants, suppliers, buyers and substitutes define the potential of the company to move in those industries or sectors, determining the sectoral competitiveness.

As shown, productivity as an internal element in companies is an important axis to achieve levels of competitiveness, and the specific aspects in the companies reflected in the managerial style favor the achievement of high levels of productivity, which are undoubtedly aligned with competitiveness.

Business structure

188

The company as an economic unit defined from the simplest aspect refers to an open system that includes inputs (capital, technology, raw materials, etc.), transforms them through a productive process that includes the strategic areas of the company in terms of production, administration, marketing and finance, and obtains outputs represented in goods, services and image. In this sense, the different dynamics that are present in the context and allow companies to be competitive.

Business competitiveness. Corporate competitiveness considers that, in the framework of organizational studies, there are different approaches that explain the origin of its resources and competitive advantages. Decision-making about the acquisition of resources for the organization depends not only on rational processes guided by administrative principles, limited by the individual's capacity for learning and analysis, but it is also guided by the manager's vision, which is expressed through its voluntary, subjective and discretionary action as to how the company should be organized and directed (Zapata Rotundo & Hernandez, 2014).

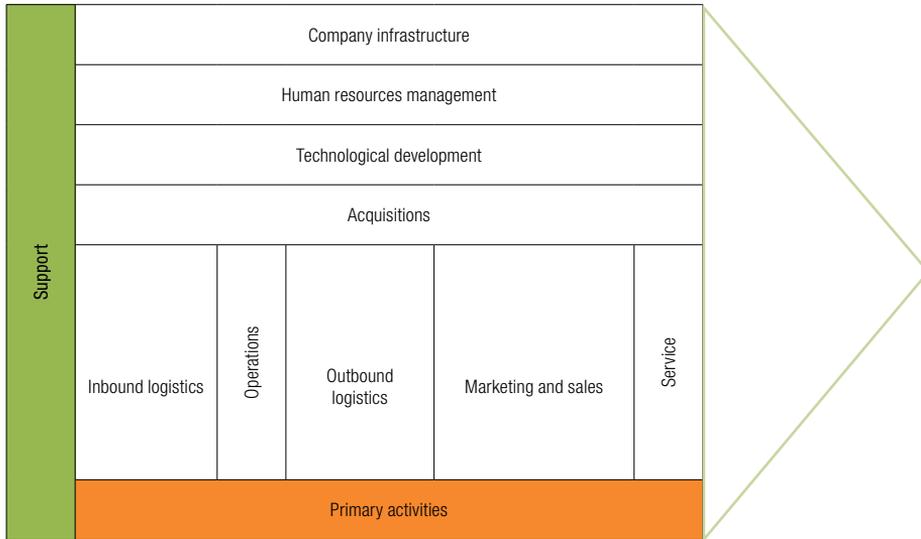
D'Andrea-O'Brien and Buono (2012) point out that organizations from the 21st century "must be in the process of significant structural change, the development of horizontal networks, around processes rather than tasks, driven by customer needs and inputs, depending on team performance" (pp. 735–759).

Among the decisive factors for the growth and development of a company is the construction of a solid management team, which allows the maintenance of competitiveness through the centralization of customer needs, the creation of alliances that generate business, the improvement of management structures and processes, and the management of human resources (Candalino & Knowlton, 2012).

Michael Porter (2002a, 2000b) considers this aspect under the dynamic of generic value chain, which are structures through which a useful product is created for buyers. This value chain is divided into two major primary and support groups, and when the interconnection of each other is achieved, these value activities are constituted in the discrete structures of competitive advantage (Figure 3).

It is recently found that, according to the Competitiveness Map of the Inter-American Development Bank, these value chains include factors such as: strategic planning, production and operations, quality, marketing, accounting and finance, human resources, environmental management and information systems, and complemented by external indicators based on the systemic competitiveness approach (Saavedra Garcia, 2012). The aforementioned authors show how the business struc-

Figure 3. Generic value chain



189

Source: Own elaboration.

ture is constituted as a fundamental platform, because the competitive conditions are generated through this structure, taking into account the infrastructure, the human resources, and finances.

Model

Reviewing the three fundamental axes of competitiveness, the following are the aspects that characterize the model to be proposed (Table 4). The approach of the model allows the evaluation of competitiveness from the innovation, productivity and business structure with the values and indicators, based on the investigations carried out (Porter, 2002a, 2000b; Sistema Nacional de Competitividad, Ciencia, Tecnología e Innovación, 2016; Lugones, s.f.; OCDE-EUROSTAT, 2005; Zapata Rotundo & Hernandez, 2014; Miranda & Toirac, 2010; Fajinzyber, 2006; and Jaramillo, Lugones, & Salazar, 2001).

Table 4. Determination of variables and subvariables for the competitive model

Variable	Sub-variables	Indicators	Author
Competitiveness	Innovation	Number of products in catalog	Banco Mundial (2016); Jaramillo, Lugones, and Salazar (2001)
		Number of innovations	OCDE-EUROSTAT (2005); Fajinzylber (2006); Lugones (s.f.)
		Brands and patents	Consejo Nacional de Política Económica y Social (2006); Consejo Privado de Competitividad (2015)
	Productivity	Units produced	Consejo Nacional de Política Económica y Social (2006); Arge, Dajer Plata, and Alvarez (s.f.)
		Supplies units used	Miranda and Toirac (2010)
		Sold units	Arge, Dajer Plata, and Alvarez (s.f.)
	Business structure	Square meters infrastructure	Arge, Dajer Plata, and Alvarez (s.f.)
		Number of employees	Comisión Regional de Competitividad (2016); Zapata Rotundo and Hernandez (2014)
		Financial capability	Comisión Regional de Competitividad (2016); Sánchez and Acosta (2001)

Source: Own elaboration.

As shown, the variables that allow competitiveness to be achieved via exports are supported through innovation, which is measured by indicators that identify the new products and the trademarks or patents processed by the company. Productivity is also fundamental in competitiveness, reflecting the efficient use of the factors of production. Finally, the business structure, which is reflected in the infrastructure, the number of employees and their financial capacity to attend and prepare for the international market, is also important.

Conclusions

Competitiveness is a requirement for the international insertion of companies.

Being competitive involves, among other things, price, technology, packaging, logistics, and marketing efficiency.

Productivity, structure and innovation are essential for achieving competitiveness and projecting companies in terms of international operations.

The economic doctrines have generated and made contributions to the concept of competitiveness used today. There are many authors who study the subject, and in different perspectives their contributions allow the extension of the conceptual dimension.

Technology allows companies to create new products and services according to the need they satisfy, and based on their presentation to the market, packaging is essential, since it is through it that it achieves an entry to the international market in a differentiated way, thus favoring competitiveness into the global market.

Innovation is ultimately a prime variable; nowadays, exports are an elementary factor of internationalization, and they constitute a fundamental variable because they make it possible to enter the international market in a competitive and successful way.

Structural capacity must be reviewed from both micro and macro economic points of view, in such a way that it allows the organizations to improve the international insertion.

The field of research remains relevant since it reveals the approach of experts, entities and knowledge on the subject, in such a way that raises aspects that favor a competitive strategy that truly positions the company or the economy in the international market in a permanent and continuous way.

References

Almunia, J. (2005). Brecha tecnológica y crecimiento económico. *Política Exterior*, 19, 55–64.

Arge, G., Dajer Plata, R., & Alvarez, D. (s.f.). Diseño e implementación de un mapa de

ordenamiento competitivo regional soportado en tecnología internet para asistir procesos de inversión en el departamento de Córdoba-Colombia. En ASCOLFA (Ed.), *Conferencia Nacional ASCOLFA* (pp. 183–225).

- Ball, D. A., & McCulloch, W. (1996). *Negocios internacionales: introducción y aspectos esenciales*. Madrid: Irwin.
- Banco Mundial. (2016, March 23). Retrieved from <http://www.bancomundial.org/>
- Blanco Rivero, L. E. (1999). *Productividad: factor estratégico de competitividad a nivel global*. Bogotá: Escuela Colombiana de Ingeniería.
- Consejo Nacional de Política Económica y Social. (2006). *Institucionalidad y principios rectores de política para la competitividad y productividad*. Retrieved from <http://www.desarrolloeconomico.gov.co/sites/default/files/marco-legal/CONPES-3439.pdf>
- Candalino, A. W., & Knowlton, M. (2012). Small companies as business laboratories. *Canadian Business Review*, 21(1), 25–27.
- Comisión Regional de Competitividad. (2016). *Santander Competitivo*. Retrieved from <http://santandercompetitivo.org/secciones-14-s/quienes-somos.htm>
- Consejo Privado de Competitividad. (2015). *Índice departamental de competitividad 2015*. Bogotá: Zetta Comunicadores.
- Czinkota, M. (2002). *Marketing internacional*. México, D.F.: Prentice Hall.
- Czinkota, M. R., & Ronkainen, I. A. (2002). Marketing Internacional. En M. R. Czinkota, & I. A. Ronkainen, *Marketing Internacional* (pp. 224–241). México, D.F.: Pearson Educación.
- D'Andrea-O'Brien, C., & Buono, A. F. (2012). Building effective learning teams: Lessons from the field. *S.A.M. Advanced Management Journal*, 61(3), 4–10.
- Daniels, J. (2000). *Negocios Internacionales*. México, D.F.: Pearson Education.
- Daniels, J. D., & Radebaugh, L. H. (2000). *Negocios internacionales*. México, D.F.: Pearson Education.
- DIAN. (2016, January 8). *Sistema estadístico de comercio exterior*. Retrieved from <http://web-siex.dian.gov.co/>
- Fajnzylber, F. (2006). *Una visión renovadora del desarrollo de América Latina*. Santiago de Chile: CEPAL.
- Garelli, S. (2006). Competitiveness of nations: The fundamentals. *IMD World Competitiveness Yearbook 2006*. Retrieved from <http://www.imd.ch/documents/wcc/content/Fundamentals>
- Gaviria Muñoz, S. (2016). Una apuesta en la que todos ganan. *Revista Semana*, 162–164.
- Gómez Parada, E. J., & González Sarmiento, G. (2012). Modelo para la determinación del posicionamiento competitivo internacional: sector confecciones de Santander en el Mercado Norteamericano. *Lebret*, 4, 21–41. doi: <https://doi.org/10.15332/rl.v4i4.326>
- Griffin, R. W., & Ebert, R. J. (1997). *Negocios*. México, D.F.: Prentice Hall.
- Hamad, A. R., Kinson, N. G., & Shy, C. (2015). Export promotion enhances firm's quality reputation, product and service quality generating sales and profits: A structural equation modelling using AMOS. In K. Soliman (Ed.), *Proceedings of the 25th International Business Information Management Association Conference - Innovation Vision 2020: From Regional Development Sustainability to Global Economic Growth* (pp. 146–159). Amsterdam: IBIMA.
- Hill, C. (2001a). Negocios internacionales. En C. Hill (Ed.), *Negocios internacionales* (pp. 538–540). México, D.F.: McGraw Hill.
- Hill, C. W. (2001b). *Negocios internacionales. Competencia en un mercado global*. México, D.F.: Irwin McGraw Hill.
- PROCOLOMBIA. (2016, January 6). *Ruta exportadora*. Retrieved from <http://www.procolombia.co/ruta-exportadora>

- Jaramillo, H., Lugones, G., Salazar, M. (2001). *Manual de Bogotá: normalización de indicadores de innovación tecnológica en América Latina y el Caribe*. Retrieved from http://www.riicyt.org/manuales/doc_view/5-manual-de-bogota
- Johnson, R. C. (2014). Five facts about value-added exports and implications for macroeconomics and trade research. *The Journal of Economic Perspectives*, 28(2), 119–142. doi: <https://doi.org/10.1257/jep.28.2.119>
- Kuntz Ficker, S. (2004). The export boom of the Mexican Revolution: Characteristics and contributing factors. *Journal of Latin American Studies*, 36(2), 267–296. doi: <https://doi.org/10.1017/S0022216X04007436>
- Krugman, P. (2008). *The return of the economy of the depression and the current crisis*. London: Penguin.
- Long, C. S., Kowang, T., Chin, T., & Hee, O. (2016). Improving organizational performance through training function: A review. *International Business Management*, 10(4), 475–478.
- Lugones, G. (s. f.). *Módulo de capacitación para la recolección y el análisis de indicadores de innovación. Redes Banco Interamericano de Desarrollo BID*. Retrieved from <http://docs.politicasceti.net/documents/Doc%2008%20-%20capacitacion%20lugones%20ES.pdf>
- Ministerio de Cultura y Riego. (2016, January 8). *Oferta exportable*. Retrieved from <http://minagri.gob.pe/portal/objetivos/181-exportaciones/que-podemos-exportar/532-definicion-de-oferta-exportable>
- Miranda, J., & Toirac, L. (2010). Indicadores de productividad para la industria dominicana. *Ciencia y Sociedad*, 35(2), 235–290. doi: <https://doi.org/10.22206/cys.2010.v35i2.pp235-290>
- Nerí Vega, J. G., González Zarza, R., & González Neri, A. I. (2011). Innovación disruptiva: caso del sector autopartes en San Juan del Rio. *Lebret*, 3, 39–53. doi: <https://doi.org/10.15332/rl.v0i3.45>
- Nguyen, H., & Minda, A. (2012). Les déterminants de l'investissement direct étranger d'exportation-plateforme l'exemple du Vietnam. *Revue Economique*, 63, 69–91.
- OCDE-EUROSTAT. (2005). *Manual de Oslo*. Retrieved from <http://www.madrid.org/bvirtual/BVCM001708.pdf>
- Peláez Cano, M. J. (2011). *El desempeño exportador basado en la creación de capital social a través del uso de las tecnologías de la Información. Un estudio en el sector del plástico* [Tesis doctoral no publicada]. Universitat Politècnica de València. doi:10.4995/Thesis/10251/11035.
- Pires, L. (2011). Historical analysis of Spanish competitiveness in the European framework: 19th and 20th centuries. *Papeles de Europa*, 22, 5–38. doi: https://doi.org/10.5209/rev_PADE.2011.v22.1
- Porter, M. E. (1990). *The competitive advantage of nations*. Boston: Harvard Business School.
- Porter, M. E. (2002a). *Estrategia competitiva: técnicas para el análisis de sectores industriales y de la competencia*. México, D.F.: Compañía Editorial Continental.
- Porter, M. E. (2002b). *Ventaja competitiva: creación y sostenimiento de un desempeño superior*. México, D.F.: Compañía Editorial Continental.
- Procolombia. (1992). Retrieved from <http://www.procolombia.co/>
- Procolombia. (2016, January 7). *Bienvenido a la ruta exportadora*. Retrieved from <http://www.procolombia.co/ruta-exportadora>
- Programa de transformación productiva. (2016, March 24). ¿Cuándo se creó y en qué consiste el Programa de Transformación Productiva?

Retrieved from <https://www.ptp.com.co/contenido/contenido.aspx?catID=607&conID=1>

Rock, J. A. (2014). Exporting success factors: The case of Chilean firms. *Panorama Socioeconómico*, 28(41), 144–159.

Saavedra Garcia, M. L. (2012). Una propuesta para la determinación de la competitividad en la pyme latinoamericana. *Pensamiento & Gestión*, 33, 93–124.

Sánchez, F., & Acosta, P. (2001). *Proyecto Indicadores de Competitividad: Colombia*. Bogotá: CEDE Universidad de los Andes.

Sistema Nacional de Competitividad, Ciencia, Tecnología e Innovación. (2016, March 23). *Indicadores a nivel nacional*. Retrieved from <http://www.colombiacompetitiva.gov.co/sncei/Paginas/indicadores-nacionales.aspx>

Smith, A. (1776). *An inquiry into the nature and causes of the wealth of nations*. London: Liberty Fund.

Sosa Rodriguez, J., & Reyes, O. (2014). Competitividad de las pymes exportadoras del Estado de Colima. *Global Conference on Business & Finance Proceedings*, 9(1), 1264–1266.

Universidad del Rosario. (2009, September 9). *Fase Plan Exportador Continental Trade*. Retrieved from <http://repository.urosario.edu.co/handle/10336/1462>

Yip, G. S. (1992). *Globalización. Estrategias para obtener una ventaja competitiva global*. Bogotá: Norma.

Zapata Rotundo, G. J., & Hernandez, A. (2014). Origen de los recursos y ventajas competitivas de las organizaciones: reflexiones teóricas. *Utopía y Praxis Latinoamericana*, 19(68), 735–759.