Relationship of leadership, strategy and business environment of the Ecuadorian SME competitiveness

Relación del liderazgo, estrategia y entorno en la competitividad de la PyME ecuatoriana

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ABSTRACT:
This research aims to determine the factors linked to the need for survival and success in SMEs. The elements of Leadership, Competitive Environment and Business Strategy regarding the relationship with the Business Competitiveness of the Ecuadorian SMEs were considered. The results of the analysis were obtained through a model of structural equations of type PLS-SEM. The results determined that the factor of the Business Strategy is the one with the most significant direct influence on Competitiveness.

Keywords: SME, competitive success, leadership, competitive environment, business strategy, Modeling PLS-SEM

RESUMEN:
Esta investigación tiene como objetivo la determinación de los factores ligados a la necesidad de supervivencia y éxito en las pymes. Se consideraron la influencia de los factores de Liderazgo, Entorno Competitivo y Estrategia de Negocio sobre la Competitividad Empresarial de las pymes ecuatorianas. Los resultados del análisis fueron obtenidos a través de un modelo de ecuaciones estructurales tipo PLS-SEM. Los resultados determinaron que el factor de la Estrategia de Negocio es el de mayor influencia directa sobre la Competitividad.

Palabras clave: Pyme, éxito competitivo, liderazgo, ambiente competitivo, estrategia de negocios, modelamiento PLS-SEM

1. Introduction
Within business management, the topic of business competitiveness stands out for its importance for the permanence and generation of benefits of the company or firm. In a dynamic and volatile context to compete, it is necessary to consider several factors that influence competitiveness, but in this research, we considered three of them, in effect these factors are leadership, strategy, and competitive environment. Each element is examined in correspondence with business competitiveness, and we seek to determine its role and influence in small and medium enterprises (SMEs) of Ecuador.

The business structure of Ecuador is composed mostly of micro and small businesses. In the urban area, they employ approximately 20% of the economically active population (EAP), with a distinction of 14.5% and 4.2% for small and medium enterprises respectively (INEC, 2010). Regarding taxes and compensation, small businesses in proportion pay less total taxes than large ones. It is estimated that 50% of small enterprises occupy 10% of full employment but pay 2.5% of total taxes (Aguilar, 2013). It can also be mentioned that the employment rate of women in SMEs is 63%.

About the legal organization of the SME, in 2016 the companies of natural persons predominated with 88%, and only 12% were legally constituted as a legitimate company (INEC, 2016). Regarding the geographic area of influence, Onofa (2013) states that the majority of SMEs carry out their commercial activity within the city of domicile (44%). 26% can act in nearby provinces, 16% reach other provinces, 8% in provinces of the border and only 6% carry out export activities to other markets and countries. It highlights the ability of the
The literature offers several conceptualizations and theories about leadership, without existing a

1.3. Leadership

profitable (Saavedra, 2012).

While the research of Covin, Prescott, and Slevin (1990) and Rubio and Aragón (2007) consider the indicator

availability of competent and trained personnel for the performance of work (Sánchez and Acosta, 2001).

Quality as the level of excellence that has been chosen to reach

product, process, marketing method, organizational, internal practice, organization of the workplace

innovation related to novelty is revealed, with the introduction of a new

these measurements are consistent when the research deals with small and medium enterprises, using

correspondence with the multidimensionality of the concept, deriving, for this reason, many approaches and

leadership, business strategy and competitive environment on the business competitiveness of Ecuadorian

leadership in the business competitiveness of the Ecuadorian SME, which allows directing efforts and policies on aspects that contribute to the improvement of the competitiveness of the mentioned sector. After this first part that constitutes the introduction, the rest of the work is structured as follows. In the second part. In the third part. In the fourth part.

1.1. Literature review

The analysis of business competitiveness depends on a wide range of factors. In this sense, Laplane (1996),
cited by Tamayo and Calle (2005), states that they are subdivided into internal, structural and systemic

factors. The internal factors are those immersed in the power of decision of the company and for which it

seeks to differentiate itself. Structural elements are those that can be partially controlled by the company

and shape the competitive environment it faces. Finally, systemic factors are strictly external factors that can

affect the competitive advantage of the company and affect its competitive position. For Cabrera et al.

(2011), the competitiveness analysis of a company is determined by endogenous and exogenous factors, of

which competitiveness is the ability to distinguish and develop a competitive advantage with the internal and

external conditions existing in the industrial sector of performance. Framed in the literature it is established

that there are success factors that promote the competitiveness of the SME. Including the competitive

environment as an exogenous factor, and other factors much more complicated and dynamic, such as

leadership, business strategy and environment competitively defined as endogenous factors (Jasra, et al.,

2011). In this paper, a theoretical review of these three factors and their relationship with business

competitiveness is made.

1.2. Business competitiveness

There is a wide variety of definitions of business competitiveness, depending on the researcher’s approach.

Among the highlighted definitions, it can be mentioned that Alic (1987) and Chauca (2007) relate the

business competitiveness with the capacity of the companies to respond and act with advantage against the

competition of the international markets, that is, to compete at the same level with companies. And

industries from other countries. Other authors complement the above, including the durability or

permanence of the company within the market as a criterion of competitiveness (Vallejo, 1996, Lu and Beamish, 2001, Valero, 2004). Additionally, Rubio and Aragón (2007) consider that competitiveness is the

ability to generate sustainable competitive advantages, which allows the production of goods and services

with higher value and facilitate the company's performance in the market, by the level of rivalry provoked by

your relationship with other companies.

The literature establishes that the measurement of business competitiveness must be carried out in

correspondence with the multidimensionality of the concept, deriving, for this reason, many approaches and

forms of analysis (Uzcátegui and Solano, 2014). Although it is recommended, according to Martínez,

Charterina, and Araujo (2010). The subjective interpretation, since there is firm empirical evidence that these measurements are consistent when the research deals with small and medium enterprises, using

qualitative indicators; from which based on the results of Quinn and Rohrbaugh (1983), together with those

of Rubio and Aragón (2007). Innovation related to novelty is revealed, with the introduction of a new

product, process, marketing method, organizational, internal practice, organization of the workplace

(Martínez, Charterina, and Araujo, 2010). Quality as the level of excellence that has been chosen to reach

the market to which the product is aimed (Terregrosa, 2007) and human resources concerning the

availability of competent and trained personnel for the performance of work (Sánchez and Acosta, 2001).

While the research of Covin, Prescott, and Slevin (1990) and Rubio and Aragón (2007) consider the indicator

of individual quantitative performance: profitability, for which it is stated that a company is competitive if it is

profitable (Saavedra, 2012).

1.3. Leadership

The literature offers several conceptualizations and theories about leadership, without existing a
observe their competitors to acquire new ideas and adopt those that are most convenient (Castro, 2010) and experimenting with emerging trends, have the flexible technology, decentralized organizational structure, and agility to respond to changes quickly. The exploration strategy is characteristic of companies that are continuously seeking market opportunities and are flexible enough to respond to changes quickly. The typology of Miles et al. (1978) offers particular convenience in the study of the SME, facilitating the search for a pattern and the subsequent modeling of strategic behavior focused on achieving universal objectives and reducing randomness (García, 2011; Aragón, 1996). From the previous considerations, Miles et al. (1978) have described four types of environments that respond to the competition of the companies.

1.4. Transformational leadership
The transformational leader motivates his followers to work for goals beyond their personal interests for the good of the organization. Additionally, activates their higher order needs such as personal growth, self-esteem, and self-realization and can express a clear and inspiring vision towards others to make an effort to achieve it (Ivancevich, Konopaske and Matteson, 2006). The essential dimensions of transformational leadership are: a) Idealized influence, where the transformational leader acts in a way that his followers admire him, and they want to imitate him; becoming an idealized model, with a high degree of symbolic power, distinguishing itself from others by its prominent personality and its unique capabilities. b) Motivational inspiration, the leader creates a sharp and attractive vision for his followers through clear communication, convincing and for being exemplary in his way of acting. c) Intellectual stimulation, the leader promotes new approaches and new solutions to problems. d) Individual consideration, the leader considers the needs of each person to develop their potential by acting as a coach when giving learning opportunities; and, e) Psychological Tolerance, indicates that the leader must possess the capacity to tolerate the errors of others and promote tolerance.

1.5. Transactional leadership
Transactional leadership and transactional leadership are not ends, but dimensions of a single leadership (Burns, 1978). Taking into account this detail, transactional leadership is defined as the exchange of benefits and motivations in which the leader rewards the follower for specific behaviors, and performance that meets the expectations of the leader, and punishes or criticizes the response that does not match with expectations (Lussier and Achua, 2011). In short, the transactional leader is the one who rewards or punishes his followers in relation to the result of an assignment, and the main components of the transactional leadership are as follows. (Lusthans and Doh, 2009): a) Contingent reward, refers to the leader who clarifies what is expected of the followers, and what they will receive if they reach the expected levels of performance, delivering a reward associated with work well done and initiatives. b) Active exception, involves the leader who directs attention to failures to comply with the rules and also includes making the necessary corrections; and, c) Passive exception, refers to the leader who is passive, taking corrective action only after mistakes or failures have happened, and the problems have become severe.
According to O'Regan, Ghobadian, and Sims (2005), business performance is correlated with characteristics and leadership styles, where an active leadership style, regardless of what form, has a significant impact on the overall performance of the company. Otherwise, when weak leadership is verified. Although this influence has been suggested that it is not direct, according to Hsieh (2005), it is not possible to talk about the application of a business strategy in the absence of a leader; meanwhile, the presence of a leader with the right skills, pushes the systematic adoption of an appropriate approach.

1.6. Business strategy
The general guidelines on business strategy, argue that it is desirable that any company. Regardless of its turn, size or particular characteristics, select and implement the policy that guarantees a competitive advantage for success, this process is, in many cases, decisive for a company to achieve a sustainable competitive advantage (Kluvyver and Pearce, 2011).

The typology of Miles et al. (1978) offers particular convenience in the study of the SME, facilitating the search for a pattern and the subsequent modeling of strategic behavior focused on achieving universal objectives and reducing randomness (García, 2011; Aragón, 1996). From the previous considerations, Miles et al. (1978) have described four types of environments that respond to the competition of the companies. In a particular market and set behavioral patterns according to those environments, detaching from this dynamic four types of strategies: defending strategies used by companies with limited control over products and markets, trying to protect their competitive position, according to efficiency criteria (Miles et al., 1997). The exploration strategy is characteristic of companies that are continuously seeking market opportunities and experimenting with emerging trends, have the flexible technology, decentralized organizational structure, and flexibility in management style (Aragón, 1996). While companies with an analytical strategy observe their competitors to acquire new ideas and adopt those that are most convenient (Castro, 2010) and...
According to Miles et al. (1978), if the explorer, defensive and analyzer behaviors are implanted in the company correctly, they will lead to a practical result. In consideration of the above, García (2006) shows theoretically and empirically the relationship between strategy and business competitiveness, defining it as a critical factor for competitive consolidation. The consistent strategic behavior adopted by the company, and to a greater extent the SME, allows it to compete, innovate, develop and also increase the consistent generation of benefits (Franczak, Weinzimmer, and Michel, 2009).

1.7. Competitive environment
The microenvironment is also known as a competitive environment and is an essential element for the company so that its knowledge and study of its evolution are vital inputs when choosing a business strategy (García, 2003). According to Porter (2008), the essence of the formulation of a competitive plan is to relate a company to its competitive environment. Hence the model of the five forces, developed by the same author, is the most popular analytical tool used to analyze the competitive environment, describing the situation in five fundamental competitive forces (Martínez and Milla, 2012), namely:

a) The threat of new entrants, Porter (2008) determines that the entry of new entrants provides new capacities and desires to gain market share, in such a way that pressure is exerted on prices, costs, and investment rates required to compete. b) Client negotiation power, Porter (2008) defines it as the ability of clients to change their product for another with similar characteristics and functions. c) Power of negotiation of suppliers, Porter (2008) to push for the highest value on themselves, through the increase of prices, reducing the quality or reducing costs that affect the product. Suppliers have higher strength in specific segments or markets when the companies they provide cannot transfer the price increases to their customers. d) The threat of substitute products and services, Porter (2008) establishes that a substitute is a product that allows obtaining the same or similar function as the product offered by a specific industry. In such a way, that a substitute product is one that seems to be different, but that satisfies the same need as another. Substitutes limit the potential returns of an industry by placing a ceiling on the prices that the companies that operate in it can charge profitably. Also, to the extent that substitution costs are low, the effect on the industry will be more pronounced; and finally, e) Power of negotiation of clients, Porter (2008) defines it as the capacity that the clients have of changing of the product by another one of similar characteristics and functions, this allows that the consumer can press for the fall of the prices, being more evident when the price elasticity is high.

The relationship between competitive environment and business competitiveness is not direct, but on the contrary is indirect, and the point of connection is the strategy. Porter (2008) indicates that understanding the competitive forces of an industry is the first step in developing a coherent plan. Highlighting that all companies should take into account the average profitability of their enterprises and how it is evolving.

From the previous theoretical base, the following hypothesis arises, which suggests the influences of the business strategy, the leadership and the competitive environment on the business competitiveness of the Ecuadorian SME, in addition to the contrast between the respective variables involved in the theoretical relationship.

With the purpose of responding to the problem and the objectives of the present investigation, the following general hypothesis is formulated: There is influence between the business strategy, the leadership and the competitive environment on the business competitiveness of the best Ecuadorian SMEs. At the same time, we have the following hypotheses: The influence of the strategy on business competitiveness; There is the influence of the environment on business competitiveness; There is influence of leadership on business competitiveness; There is influence of the leadership on the strategy. Finally, there is influence of the environment on the approach; and There is influence of the situation on leadership.

2. Methodology
The present study has a quantitative character, with a non-experimental cross-sectional design, the scope is transversal correlational since the degree of relationship between the variables will be established, without contrasting their causality, so the level of variation observed in the study will be explored. Among them (León and Toro, 2007). The hypothetical-deductive method was used, which consists of formulating a hypothesis about the possible solutions to a research problem and contrasting it with the available data, if they are acceptable or not statistically (Cegarra, 2011).

While the technique used was modeling with Partial Least Squares (PLS-SEM), a second generation multivariate technique that is appropriate to explain sophisticated theoretical and empirical relationships, typical of Social Sciences (Mateos and Morales, 2011). It also allows the use of key elements of an empirical model by including qualitative data through surveys (Kenneth and Salini, 2012).

According to Cepeda and Roldán (2004), the PLS-SEM modeling must meet certain conditions, of which in the present investigation the following are met: the objective is predictive. Since it seeks to identify the capacity of the influence of the variables leadership, environment and strategy in the behavior of the business competitiveness variable; the theoretical framework is still under development.
Due to the research on business competitiveness within the Ecuadorian context is limited and limited; on the distribution of variables, there is no certainty of normal distribution behavior, making the application of SEM modeling impossible. Competitiveness has a complex character, typical of the constructs/variables of social science studies; and reduced sample size, due to the operational, economic and temporal difficulty of carrying out a more extensive research.

2.1. Variables and data
The empirical context is constituted by the SMEs included in the ranking of best SMEs in Ecuador of the Ekos Magazine corresponding to the years 2012, 2013 and 2014; of which 300 were randomly contacted. The favorable responses obtained were 56 (18.6%), the contact medium used was a combination of direct visits to companies (42 visits in situ to companies in El Oro, Guayas, and Azuay); telephone calls and emails (258). The complete questionnaires and without filling defects accounted for 54 (18%) of SMEs domiciled in the Provinces of Guayas. (14); The Gold (7); Pichincha (15); Azuay (11); Manabí (3); Tungurahua (2); Emeralds (1); and Imbabura (1).

The validation of the survey questionnaire was carried out using the qualitative technique "Content Validity Index" (IVC) (Lawshe, 1975). Which allowed identifying relevant and relevant aspects of the study factors, both of the transformational leadership. (influence idealized, motivational inspiration, intellectual stimulation, individual consideration, and psychological tolerance); of transactional leadership. (contingent reward, active exception, and passive exception); of the strategy (scout, defender, analyst, and reactive); of the environment (new entrants, competition, customers, suppliers, and substitutes); and business competitiveness (economic profitability, innovation, quality, and human resources). The reliability of the instrument was also determined, obtaining a general Cronbach’s alpha of 0.774, which according to Hernandez et al. (2006) is acceptable and consistent. Finally, the validated instrument included 26 items, on a Likert scale that ranged from 1 (Never) to 5 (Always), and was applied to managers, owners and line managers of the selected SMEs.

The first step to raise the structural model involves defining the type of variables that are counted, whether reflective or formative, the wrong identification of the kind of variable affects the estimation process of the model, obtaining erroneous interpretations at a theoretical and empirical level. To solve this problem, the study factors were contrasted with the decision rules designed by Petter, Straub, and Rai (2007). From these, it was established that the environment, strategy, and competitiveness have a formative character, the change of one indicator does not modify the other indicators, others can not exchange the indicators. The signs do not show much covariance and each sign defines different characteristics of the construct. While the leadership factor, with its transformational and transactional dimensions, has a reflective nature, a change in one indicator modifies the others, the indicators can be exchanged and show high covariance. With this, a structural model such as the one shown in Figure 1 can be considered.

![Figure 1](PATH Model PLS-SEM Specification Model)
Once the structural model was defined, the sample size could be determined. Considering Hair et al. (2014), the sample must be ten times the most significant number of indicators that measure a formative variable, or ten times the most significant number of paths directed towards the endogenous variables of the model. It was established that environment is the training variable with the most indicators, five in total, defining a sample equal to or greater than 50 cases. While the paths directed to the endogenous variable is equal to four, therefore the sample must be similar to or greater than 40 cases. Matching both conditions, it was determined that the cases should be more than 50. Finally, for the treatment and modeling of the data, the SmartPLS 3.0 software was used, a tool developed by the professors of the University of Hamburg: Christian Ringle, Wende Sven and Jan- Michael Becker (Ringle, Sven, and Becker, 2014).

The conditions for the model to be optimally involved evaluating the reliability of the latent variables (external model) and the significance of the variables using the t statistic (internal model) with at least 10% significance with two tails.

Taking into account that the environment, strategy, and leadership exert influence on the competitiveness of the company. Therefore, it is established as a null and alternative hypothesis to contrast the following: H0: the t-value analyzed is equal to zero, and H1: the t-value analyzed is greater than zero. The procedure that will be used to obtain the t statistic was the Bootstrapping with samples of size 500 and 1,000 iterations. As already indicated, the validation was carried out in two stages, including another consideration, as the model includes formative and reflective variables, the validation was carried out separately for each part of the
Validation of the external model involved two separate evaluations, one corresponding to the reflective variables, and a second related to the training variables. Petter et al. (2007) state that the formative variables must be validated at the level of content and reliability of the construct; for the first point. It is commonly done by identifying the theories underlying the research problem addressed, which allows establishing the relationships between variables and for the second point an examination was carried out using the VIF (Variance Inflation Factor) and the corresponding value- $t$ for each indicator. The analysis was carried out with Smart PLS 3.0 software, obtaining the results shown in Table 1: 

Table 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Indicator</th>
<th>Weight</th>
<th>VIF</th>
<th>$t$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>Entrants</td>
<td>X1</td>
<td>0.703</td>
<td>1.406</td>
<td>9.814*</td>
</tr>
<tr>
<td></td>
<td>Competition</td>
<td>X2</td>
<td>0.650</td>
<td>1.605</td>
<td>10.359*</td>
</tr>
<tr>
<td></td>
<td>Customers</td>
<td>X3</td>
<td>0.706</td>
<td>2.328</td>
<td>16.105*</td>
</tr>
<tr>
<td></td>
<td>Suppliers</td>
<td>X4</td>
<td>0.834</td>
<td>2.854</td>
<td>14.629*</td>
</tr>
<tr>
<td></td>
<td>Substitutes</td>
<td>X5</td>
<td>0.625</td>
<td>1.196</td>
<td>13.665*</td>
</tr>
<tr>
<td>Strategy</td>
<td>Explorer</td>
<td>X14</td>
<td>0.296</td>
<td>1.950</td>
<td>17.541*</td>
</tr>
<tr>
<td></td>
<td>Defender</td>
<td>X15</td>
<td>0.300</td>
<td>2.568</td>
<td>17.200*</td>
</tr>
<tr>
<td></td>
<td>React</td>
<td>X16</td>
<td>0.347</td>
<td>2.469</td>
<td>15.876*</td>
</tr>
<tr>
<td></td>
<td>Analyst</td>
<td>X17</td>
<td>0.351</td>
<td>1.604</td>
<td>11.334*</td>
</tr>
<tr>
<td>Business</td>
<td>Cost effectiveness</td>
<td>Y1</td>
<td>0.306</td>
<td>1.251</td>
<td>9.295*</td>
</tr>
<tr>
<td>competitiveness</td>
<td>Innovation</td>
<td>Y2</td>
<td>0.283</td>
<td>1.887</td>
<td>18.691*</td>
</tr>
<tr>
<td></td>
<td>Quality</td>
<td>Y3</td>
<td>0.321</td>
<td>1.470</td>
<td>12.843*</td>
</tr>
<tr>
<td></td>
<td>HR</td>
<td>Y4</td>
<td>0.449</td>
<td>1.722</td>
<td>12.070*</td>
</tr>
</tbody>
</table>

*  = 0.05 level of significance

Petter et al. (2007) suggest that FIV must have values below 3.3, while $t$-values must be more significant in absolute value than 2. In this case, as shown in Table 1, according to the construct reliability of formative variables, these two conditions are fulfilled for all the indicators, indicating that they are significant and useful to include them within the estimation of the structural model.

On the other hand, the validation of the reflective variable, leadership with its transformational and transactional dimensions, is identified using the Average Extracted Variance (AVE), the internal consistency and the respective loads for each indicator (Ladings) (Welzels, 2009). This process was carried out by loading the PLS algorithm, which is an option of the Smart PLS 3.0 software, and the results found are shown in Table 2.

Chin (1998) states that a reflective variable must reach an AVE higher than 0.5, a CR higher than 0.7, and the loadings of the indicators must be higher than 0.7. The condition of the AVE and the CR is met, while for the loads the passive exception indicator does not reach the suggested cut-off point, but its value is not far from the reference and is accepted. All the indicators show statistical significance by contrasting their $t$-values, which is why they are suitable to be included in the model.

Table 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Indicator</th>
<th>AVE</th>
<th>CR</th>
<th>Charge</th>
<th>$t$- Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
For the internal validation, the coefficient of determination, path coefficients, and redundant cross-validation were calculated. As the coefficient of determination, an R² was obtained with a value of 0.349. This fact represents moderate modeling since 35% of the business competitiveness variance is explained by the exogenous variables included in the model. The majority of path coefficients were greater than 0.2, a value suggested by Chin (1998), while others such as transformational-environment, transaction-strategy, and transformational-strategy were conserved due to their conceptual contribution to the model. Also, in all cases, a relevant t-value was found to be included in the model, as shown in Table 3.

**Table 3.** Path coefficients of the structural model

<table>
<thead>
<tr>
<th>Relación entre variables</th>
<th>Coeficientes</th>
<th>T Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment -&gt; Business Competitiveness</td>
<td>-0.305</td>
<td>11,200</td>
</tr>
<tr>
<td>Environment -&gt; Strategy</td>
<td>0.560</td>
<td>2,903</td>
</tr>
<tr>
<td>Environment -&gt; Transactional</td>
<td>-0.453</td>
<td>2,366</td>
</tr>
<tr>
<td>Environment -&gt; Transformational</td>
<td>-0.058</td>
<td>7,093</td>
</tr>
<tr>
<td>Strategy -&gt; Business Competitiveness</td>
<td>0.608</td>
<td>2,382</td>
</tr>
<tr>
<td>Transactional -&gt; Business Competitiveness</td>
<td>-0.258</td>
<td>6,365</td>
</tr>
<tr>
<td>Transactional -&gt; Strategy</td>
<td>-0.007</td>
<td>4,489</td>
</tr>
<tr>
<td>Transformational -&gt; Business Competitiveness</td>
<td>0.120</td>
<td>9,882</td>
</tr>
<tr>
<td>Transformational -&gt; Strategy</td>
<td>0.400</td>
<td>2,487</td>
</tr>
</tbody>
</table>

* = 0.05 level of significance

The cross-validation (Q²) is a statistic that establishes the predictive relevance of the internal model; it is also known as the Stone-Geisser test. The (Q²) is compared with the value zero (0), being that the furthest the value of the statistic from zero is, it reflects a higher capacity of the exogenous variable to predict the behavior of the endogenous variable, without taking into account the quality of the prediction (Hair et al., 2014). In general, it was possible to verify that all the values of (Q²) are greater than zero, that is, there is predictive capacity on the part of the variables included in the model. The variable with the most relevance is a strategy (0.676), followed by transactional leadership (0.365), transformational leadership (0.320), and environment (0.020), which has the least predictive influence.

### 3.1. Discussion

The literature states that there are factors that promote the success of the SME, including the environment, exogenous factor, and other variables much more complicated and dynamic, such as leadership, strategic
Considering all the influences resulting from the model, we highlight the ability of the strategy to explain the performance in business competitiveness with a path coefficient of 0.608, which indicates that to the extent that consistent and planned actions are consolidated to compete in the market, it is expected to have a positive result on business competitiveness. This variable explains 60% of the business competitiveness on average for the chosen business strategy, as indicated by Kluyver and Pearce (2011).

The second variable with the most indirect influence is the competitive environment (-0.329), and its repercussion indicates that as the conditions of the competitive environment deteriorate, the business competitiveness of SMEs will also decline, according to Porter’s (Porter, 2008).

On the other hand, the estimated model foresees a response in the opposite direction in business competitiveness as a result of leadership. In particular, a negative variation of 25.8%, when the transactional dimension excels in which a high commitment to vision predominates; that followers develop trust, loyalty, respect, and motivation to do more than what is initially expected of them (Yulk, 2012). While the transformational dimension of leadership only explains 12% of business competitiveness, which confirms the theoretical presumption that argues, according to Bass (1990). The existence of a cost-benefit relationship between the leader and his followers. That is when there is a leader of lower quality the results are more noticeable than when there is a good leader. Additionally confirms what the literature highlights, not only a good leader makes the company more competitive, but it is necessary to have a good strategy.

4. Conclusions
The research aims to contribute academically contributing knowledge from the business competitiveness, being the SME an essential sector of the national economy, highlighting its participation according to the size allowed to rescue and obtain information through calculations that showed the factors to achieve success so Competitiveness in the business activity of the Ecuadorian SME. Additionally, we sought to credit the tree of knowledge with a basis for future research on predictive or confirmatory models related to business competitiveness. The objectives set out in this research allow us to reach the following conclusions:

4.1. Hypothesis 1
Concerning the hypothesis that states that there is a steady level of influence between the Strategy and Business Competitiveness. The evidence found in this paper suggests a significant relationship, so it is concluded that the hypothesis can not be rejected (it is affirmative) because there is statistical evidence of a
steady level of structural correlation between these two latent variables. Moreover, it seems that this influence of these two variables is evidently the strongest among Ecuadorian SMEs. Supported by this statistical statement, it can be deduced that Ecuadorian entrepreneurs are competitive or become competitive when they can react in time to several changes, being analytical before these, especially when there are economic, financial, political and social changes. The entrepreneur of SMEs is competitive because he knows how to adequately defend the alterations that the company lives continuously and continuously explores new solution alternatives to maintain his business or company. These factors are what allow Ecuadorian SMEs to have Business Competitiveness. These results support the findings of Kluyver and Pearce (2011), Miles et al. (1978) and García (2006).

4.2. Hypothesis 2

Concerning the second hypothesis, which affirms the existence of a strong influence of the environment on business competitiveness, it is inferred in the research that the hypothesis is rejected in the specific case of study. In this sense, there is statistical evidence to show that the structural correlation between these factors of influence is low. It seems that aspects of the microenvironment such as competition, suppliers and substitute goods, indirectly affect the business competitiveness of Ecuadorian SMEs in the study period. This result is contrary to the postulates of Porter (2008) about the five environmental forces and their influence on the company.

4.3. Hypothesis 3

The third hypothesis raised in this research affirms that there is a high influence of leadership on business competitiveness, it is concluded that this hypothesis is rejected according to the results found. In this sense, there is statistical evidence that the correlation of the structural model of leadership, both transactional and transformational, does not directly influence the business competitiveness of Ecuadorian SMEs. It should be noted that the incentives, inspiration, and influence of SME entrepreneurs are not as effective or almost not perceived at this level. It can be deduced that the employees of these companies see in their bosses, more than a leader, only as a manager of a business.

The results found here regarding the relationship between leadership and competitiveness in Ecuadorian SMEs are contrary to what was theoretically expected according to O'Regan, Ghobadian, and Sims (2005).

4.4. Hypothesis 4

To conclude with the last hypothesis of this work, which argues that there is a level of influence of leadership, business strategy and the competitive environment on the business competitiveness of Ecuadorian SMEs. Is concluded that it is affirmative, although there is a factor (Strategy) that significantly influences the influence generated by the other two. For this case, and as was maintained in hypothesis one, the Strategy is the factor that influences concerning Competitiveness in Ecuadorian SMEs. These results are in line with the theory and evidence of other works (Kluyver and Pearce, 2011).

This study opens new lines of research since it is possible to carry out studies that can be verified in other locations of Ecuador and temporal horizons with the same factors. It is proposed that research of this type be carried out in other regions and other countries, to corroborate the theory through empirical evidence. It is also recommended the inclusion of other factors that can measure competitiveness, such as the sector that is most competitive, the entrepreneur experience, the educational level, as well as factors of product innovation.

Finally, it is also proposed to use other multivariable techniques in this study, such as Logistics models; Artificial Neural Networks and Classification Models such as Discriminants, which are techniques some of which are not based on parametric statistics and can help verify these results are true, regardless of the nature of the data.

Bibliographic references


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