

## Ecuadorian MIPYMES: A vision of their entrepreneurship, productivity and competitiveness for the sake of continuous improvement



### MIPYMES ecuatorianas: Una visión de su emprendimiento, productividad y competitividad en aras de mejora continua

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#### ABSTRACT

Small and medium enterprises in Ecuador suffer from effective mechanisms that allow them to be entrepreneurial and competitive, in order to improve their productivity. Studies on the measurement of these parameters are scarce, hence the need for in-depth research on this aspect. To this end, this work was carried out with the aim of proposing improvements for internal competitiveness in small and medium enterprises, for which the competitiveness of these enterprises was measured, by means of empirical methods in the fundamental, in order to contribute to their development and market positioning. The case study was conducted in the province of "El Oro", 170 officials were surveyed from 170 micro and small enterprises in the commerce and services sector, those engaged in agricultural production, specifically bananas, coffee, cocoa and shrimp; variables such as:

#### RESUMEN

Las pequeñas y medianas empresas en el Ecuador adolecen de mecanismos efectivos que les permitan su emprendimiento y competitividad, en aras de mejorar su productividad. Los estudios acerca de la medición de esos parámetros son escasos, de ahí la necesidad de realizar una investigación que profundice en tal aspecto. Para ello, se realizó este trabajo, con el fin de proponer mejoras para la competitividad interna, en la pequeña y mediana empresa, para lo cual se midió, mediante métodos empíricos en lo fundamental, la competitividad de dichas empresas para poder aportar a su desarrollo y posicionamiento mercantil. El estudio de caso se realizó en la provincia de "El Oro", se encuestaron 170 funcionarios de 170 micros y pequeñas empresas del sector comercio y los servicios, las dedicadas a la producción agropecuaria, específicamente banano,

planning, marketing, administration, accounting and finance, quality, human resources, environmental management and information systems were taken into account. The results indicated difficulties in the marketing variable, crucial for achieving competitiveness and business positioning, especially in the management of marketing and sales that corresponds to a marketing plan, research system and analysis of information about its competitors (prices, quality, image) and their customers, to meet their needs, as well as the allocation of resources for marketing their services (promotions, advertising material, others). In order to solve these difficulties, a plan of improvements was proposed to allow these companies to develop and evolve in all the sectors studied.

**Keywords:** small and medium-sized enterprises; competitiveness; entrepreneurship; market positioning

café, cacao y camarón; se tuvieron en cuenta variables como: planificación, comercialización, administración, contabilidad y finanzas, calidad, recurso humano, gestión ambiental y sistemas de información. Los resultados señalaron dificultades en la variable comercialización, crucial para lograr la competitividad y posicionamiento empresarial; especialmente en la gestión de mercadeo y ventas que corresponde a un plan de marketing, sistema de investigación y análisis de información sobre sus competidores (precios, calidad, imagen) y sus clientes, para satisfacer sus necesidades, así como la asignación de recursos para el mercadeo de sus servicios (promociones, material publicitario, otros). Para solventar dichas dificultades, se propuso un plan de mejoras que permita, a dichas empresas, desarrollarse y evolucionar en todos los sectores estudiados.

**Palabras claves:** pequeñas y medianas empresas; competitividad; emprendimiento; posicionamiento mercantil

## INTRODUCTION

Small and medium enterprises (MIPYME) refers to the classification of enterprises by size, an acronym that groups micro, small, and medium enterprises; enterprises that stand out in the generation of permanent employment and suppliers of basic products to the domestic market (Araque Jaramillo, 2012). Additionally, its proportion is around 98% in Latin American countries. In Ecuador, this situation is replicated and according to the National Economic Census, of every 100 business units, approximately 99 are classified as MIPYME and employ 75% of

the total labor force; hence its importance for the productive development of Latin American countries, especially in the case of Ecuador.

Prior to the respective analysis of the MIPYME sector, it is imperative to specify the classification parameters used to define it, hence it follows that the classification used is the one established by the Andean Community, with resolution N.-1260, of August 21, 2009, the same that is used by the National Institute of Statistics and Censuses (INEC),

mentioned by Araque (2012), which states that enterprises are classified according to the number of workers or the value of their sales. For the classification, depending on the number of workers, it is dominated which microenterprise employs between one and nine workers. The small enterprise employs between 10 and 49 workers; the medium enterprise employs between 50 and 199 workers, while the large enterprise employs 200 or more workers. The classification, in relation to sales volume, establishes that micro, small, medium and large enterprises have annual sales of \$1 to \$100,000; \$100,001 to \$1,000,000; \$1,000,001 to \$5,000,000 and from \$5,000,001, respectively.

The most evident effect of the inability of MIPYME to compete is expressed in the high mortality rate of entrepreneurships, 90% in 2014, higher than the established business rate of 7% (Lasio, Caicedo, Ordeñana, & Izquierdo, 2015), where the rate increases due to the lack of entrepreneurial skills and abilities to compete in an increasingly globalized market (Alianza para el emprendimiento e innovación, 2013).

The main problem of this sector is that it does not have a consolidated institutional structure, due, to a large extent, to the lack of specific regulations that allow its characteristics, conditions and operability to be delimited in Ecuador's economic and productive sphere, in addition to the fact that the last laws related to this sector date from 1973 (Law for the Promotion of Small Industry), which brings with it the lack of adequate public policies that develop or promote the SME sector.

Considering the above, it should be noted that the main challenge faced by MIPYME is the globalization of markets (Flores, Flores, & Olguín, 2012), which exerts

pressure towards efficiency and forces all participating agents to increase their competitiveness in order to at least remain in the increasingly volatile and demanding market (Cruz Ramírez, Pérez Castañeda, Hernández Zavala, & Quiroz Salas, 2012).

According to the literature, competitiveness is a multidimensional concept that is influenced by elements of micro, meso and macroeconomics. In this research, we study the internal factors of an enterprise that influence competitiveness and among which several authors agree in pointing out the strategic projection, marketing, human resources, economic and financial management and quality, to list the most recognized (Saavedra García, Milla Toro, & Tapia Sánchez, 2013).

According to data from the Economic Census (INEC, 2015), microenterprises represent 90.2%, small enterprises 7.7%, medium enterprises 1.6% and large enterprises only 0.5%. Regarding the economic sectors in which MIPYME operate in Ecuador, it should be noted that 53% are engaged in activities classified as trade, followed by the service sector, with 36% presence, 10% for manufacturing and less than 1% for other sectors. In terms of employment, Ecuadorian micro, small and medium-sized enterprises absorb 44%, 17% and 14% respectively, while in sales, MIPYME contribute 63% of the income from the sale of goods or services in the Ecuadorian business network.

Looking at the context of the case study, in the province of El Oro, the figure for small and micro enterprises is 97.9%. In this sense, the research on the competitiveness of the MIPYME sector is relevant, as it is an employment dynamizing agent and this situation is not foreign to the context of the province of El

Oro, where 99.7% of enterprises are distributed in: micro (89.5%), small (8.4%) and medium (1.8%) enterprises (INEC, 2015). In this research, organizations and enterprises of the province of El Oro would be linked and interested, such as: the territorial delegations of the National Institute of Popular and Solidarity Economy, Ministry of Industry and Productivity, Coordinating Ministry of Production, Employment and Competitiveness and the Ministry of Agriculture, Livestock, Aquaculture and Fisheries, as well as local governments and the owners of the enterprises themselves.

However, El Oro is a province with a strong agro-exporting heritage, with a contribution to GDP of 3.6%, where 93% of enterprises without legal personality subsist, mostly dedicated to trade (41%), followed in importance by enterprises dedicated to the service sector (34%), and agro-industry (15%) (INEC, 2015).

Competitiveness is an aspect that is becoming increasingly relevant in the field of business, which derives from the demands of the current economic environment, framed in the globalization process (Saavedra Garcia, 2012). Porter (2007), asserted that those who compete are enterprises, not nations; a country is made competitive by the competitive enterprises in it; therefore, these are the basis of competitiveness. Solleiro and Castañón (2005), affirm that competitiveness is the ability of an organization to maintain or increase its market share, based on new business strategies, sustained productivity growth, inter-enterprise capacity to participate in negotiations with different institutions and other enterprises within its environment, in a competitive environment determined by the sector and the consumer market and in policies introduced by national

governments and regional economic alliances.

In summary, according to Rubio and Aragón (2008), competitiveness is considered as the ability of a enterprise to compete with others to reach a favorable competitive position that allows obtaining a superior performance to competing enterprises.

According to Lall, Albaladejo and Mesquita (2005), enterprises compete to capture markets and resources; they measure competitiveness according to their relative market share or profitability and use the competitiveness strategy to improve their performance.

The main scientific problem, which emanates from the above, is: How to achieve an improvement in the competitiveness of the Ecuadorian MIPYME that allow them to position themselves in the market?

The objective of this research: to propose actions for continuous improvement in the internal competitiveness of Ecuadorian MIPYME.

## MATERIALS AND METHODS

Theoretical methods of documentary and analysis research were used to strengthen the theoretical framework of the project.

Basically, empirical methods were used to survey officials of MIPYME in the province of El Oro, including managers, secretaries, and accountants, among others. The sample size was determined according to the total number of workers; from them, officials were selected as managers and

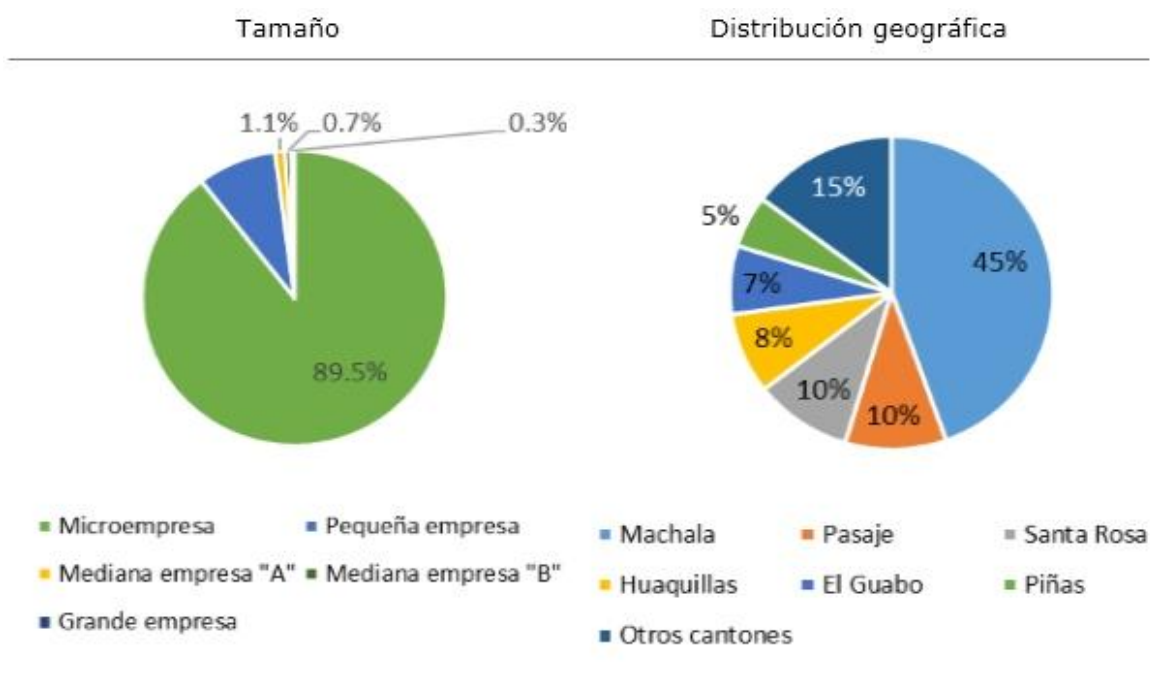
other directors of the 170 enterprises considered in the study.

A cross-sectional study was carried out with a descriptive approach, which served as a basis for establishing the baseline on which to propose proposals to improve specific aspects of the competitiveness of a MIPYME. The methodology is based on the Competitiveness MAP, applied by the Inter-American Development Bank (IDB), prepared by Saavedra (2012), which combines the compilation of existing information through a literary review and the compilation of a set of measures related to MIPYME, with the obtaining of new information (through a survey).

In order to develop the proposal for actions to improve competitiveness, the model of Cárdenas and Fecci (2007) is used, adapting it to the Ecuadorian context.

## RESULTS AND DISCUSSION

In the province of El Oro, the MIPYME also has a relevant representation (Graph 1). Of a total of 41,643 enterprises (INEC, 2015), the Province of El Oro represents 5.1% of the total and has a 3.64% share of GDP at the Ecuadorian level, where 99.7% is MIPYME; of this 99.7%, 89.5% corresponded to microenterprises; 8.4% to small enterprises and 1.8% to medium enterprises. It should also be mentioned that productive activity is concentrated in three of the fourteen cantons of the province (Machala, Pasaje and Santa Rosa), with 65% of the total number of enterprises in the province. The composition of the enterprises, by size of the province of El Oro, is very similar to the composition of Ecuador, where 99.5% is MIPYME.



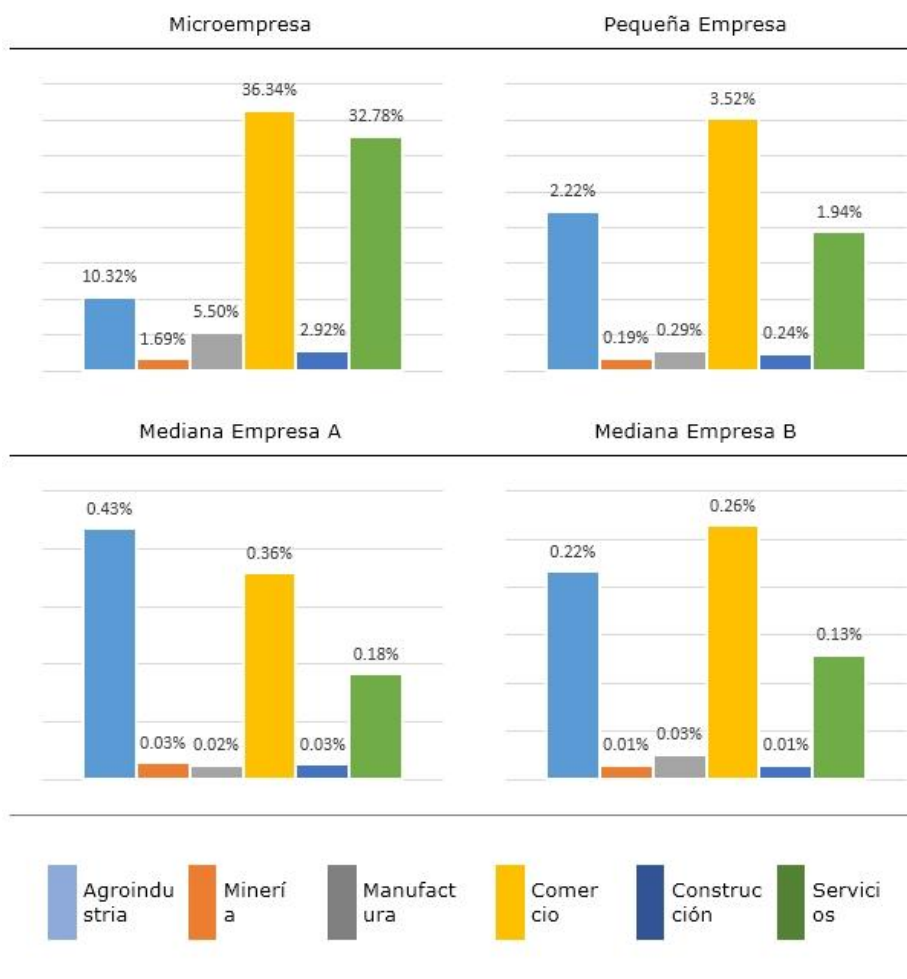
**Graph 1** - Size and geographical distribution of enterprises in El Oro  
 Source: INEC (2014) CEPAL/CELADE/Redatam+SP

**Note:** INEC makes a subclassification of the medium enterprise, identifying Median A: number of employees from 100 to 199 and sales from 2,000,001 and Median B: number of employees from 50 to 99 and sales from 1,000,001 to 2,000,000.

The contribution to El Oro's GDP is concentrated in Machala's economic activity, with an average of 64% from 2009 to 2014. Regarding exports, it can be mentioned that they represented, in 2014, 23% of the volume of economic activity of the province, with a concentration of

contribution of the canton Machala (80% in 2014) compared to the other cantons.

It is highlighted that it has a presence of 36.34% of the total of enterprises from Orense within the Commerce sector; another 32.78% belonging to the Services sector and 10.32% within the Agroindustry sector, giving a total of 79.45% of the total of enterprises in El Oro. In micro and small enterprises, the most important sector is Commerce, while for medium enterprises, the most important sector is Agroindustry (0.65%) (Graph 2).



**Graph 2** - Presence of enterprises by size and sector in Orense economy  
 Source: INEC (2015) CEPAL/CELADE/Redatam+SP

The study was conducted in 170 MIPYMES in the province of El Oro, distributed in the cantons of Machala, El Guabo, Santa Rosa, Pasaje and Huaquillas. Of a total of 5,017 workers of the enterprises considered in the study, 305 are civil servants and directors, determining the sample size to apply the surveys, which was 170, with  $\alpha = 0.05$  and  $d = 0.05$ , for a 95% confidence interval.

To measure the degree of competitiveness of the same and according to the

methodology of Saavedra (2012), the variables Planning, Marketing, Administration, Accounting and Finance, Quality, Human Resources, Environmental Management and Information Systems were considered and related questions were asked in each one, for which respondents rated from 1 to 5, and 5 was the highest value.

The elements contained in the map are the following (see table 1 below):

**Table 1** - Competitiveness Map. Areas of analysis and indicators

COMPETITIVENESS AREAS	INDICATORS
Strategic planning	Strategic Planning Process
	Implementation of the strategy
Production and operations, provisioning, logistics	Planning and production process
	Production capacity
	Maintenance
	Research and development
	Provisioning
	Inventory Management
Quality assurance	Location and infrastructure
	General aspects of quality
Merchandising	Quality system
	National Market: Marketing and Sales
	Services, Distribution
	Export Market: Export Plan
	Product, Competition and Marketing
Accounting and finance	International physical distribution, Negotiation aspects, Participation in missions and fairs
	Cost Monitoring and Accounting
	Financial Administration
Human Resources	Legal and Tax Rules
	General Aspects
	Training and Promotion of Personnel

	Organizational Culture
	Health Industrial and security
Environmental management	Enterprise Environmental Policy
	Strategy to Protect the Environment
	Awareness and Training of personnel on Environmental Issues
	Waste Management
Information system	System Planning
	Inputs
	Process
	Outputs

Source: Created from Saavedra (2012)

In addition to other necessary data such as control questions, they were organized, in the survey, as follows (Table 2):

**Table 2** - Basis for the design of the survey

<b>A.</b>	<b>PLANNING</b>
A1	The management and projection of the enterprise corresponds to a strategic plan.
A2	The decision-making process in the enterprise involves the people responsible for its execution and compliance.
A3	The enterprise has measurable and verifiable operational goals within a defined period of time, with the assignment of the person responsible for compliance.
A4	The enterprise has measurable and verifiable financial goals within a defined period of time, with the assignment of the person responsible for compliance.
A5	An analysis is developed when planning: Strengths and Threats, Weaknesses, Opportunities
A6	Frequently analyzes the environment in which the enterprise operates considering factors such as: new suppliers, new customers, new competitors, new products, new technologies and new regulations.
A7	In order to formulate its strategies, it compares its enterprise with those that implement the best practices of the market.
A8	The staff is actively involved in the achievement of the enterprise's objectives and in the implementation of the strategy.
A9	The enterprise's budget corresponds to the resource allocation formulated in its strategic plan.
A10	The enterprise has a vision, mission and written values, disclosed and known by all members of the organization.



<b>B.</b>	<b>MERCHANDISING</b>
B1	Merchandising and sales management corresponds to a marketing plan
B2	The enterprise has clearly defined the market to which it is directed (target-customers).
B3	The enterprise has defined strategies to market its services.
B4	The enterprise has in operation a commercial structure to fulfill its objectives and commercial goals.
B5	The enterprise has a research and analysis system to obtain information about its competitors (prices, quality, and image) and its customers to meet their needs.
B6	New products and/or services have generated a significant percentage of the enterprise's sales and profits over the past two years.
B7	The enterprise meets the requirements of quality and delivery time of its products to its customers
B8	The enterprise allocates resources for the marketing of its services (promotions, advertising material, others).
<b>C.</b>	<b>ADMINISTRATION</b>
C1	The enterprise has a defined diagram showing how it is organized.
C2	The information from the records of the application of the general procedures of the enterprise is analyzed and used as a basis for improvement.
C3	The enterprise involves controls to identify errors or defects and their causes, while taking immediate action to correct them.
C4	Management has a scheme to track and control people's work that allows them to make better decisions.
C5	The enterprise has defined the responsibilities, functions and lines of communication of the jobs or positions held by each of the collaborators.
C6	The people in the enterprise understand and can visualize the different work processes in which their work is immersed.
C7	People have full knowledge of who their internal client is, who their internal supplier is and what they receive and deliver to them.
C8	The enterprise has documented and written the various procedures for the administration of daily functions.
<b>D.</b>	<b>ACCOUNTING AND FINANCE</b>
D1	The accounting system or costs of your enterprise provides reliable, sufficient, timely and accurate information for decision making.
D2	General management receives reports of the accounting results according to the needs of the business.
D3	The enterprise has normal financial planning (income and expense budget, cash flow, financial ratios, break-even point, etc.).
D4	Financial results are compared with budgets, variations are analyzed and corrective actions are taken.

D5	The enterprise evaluates the usefulness of its investments, in equipment and other fixed assets and, in general, investment assets.
D6	The enterprise has a defined tax planning, knows the dates, approximate amounts to pay in the taxable period of the different taxes, rates and contributions.
D7	The enterprise applies the tax planning and the results are monitored.
D8	Complies with current labor obligations
<b>E.</b>	<b>QUALITY</b>
E1	The enterprise has a defined quality policy
E2	The enterprise develops a periodic analysis to identify critical processes (those that directly affect the quality of the product or service).
E3	The working methods related to the enterprise's critical processes are documented.
E4	The information from the records of the application of the enterprise's general procedures is analyzed and used as a basis for improvement.
E5	The enterprise involves controls to identify errors or defects and their causes, while taking immediate action to correct them.
E6	The enterprise has an action plan to execute the corrective and preventive actions necessary to guarantee the quality of the product or service.
E7	The enterprise has defined parameters for planning the purchase of equipment, raw materials, inputs and other goods.
E8	The enterprise strives to improve and strengthen its suppliers.
E9	The enterprise trains its employees in quality and continuous improvement.
E10	The customer satisfaction index is measured in the enterprise as the basis for improvement plans of the organization.
<b>F.</b>	<b>HUMAN RESOURCES</b>
F1	The enterprise has clear definitions (policies) and is guided by orderly steps (procedures) to carry out the search, selection and hiring of its workers.
F2	In order to fill a vacancy, the characteristics (competencies) that the person must possess are defined, based on a study of the job to be filled (description of tasks, human specifications and levels of performance required).
F3	In the selection of personnel, tests are applied (of knowledge or capacity of valuation of the aptitudes and attitudes and of personality) by suitable people to carry them out.
F4	The enterprise has an induction process for new workers and a reinduction process for old workers.
F5	The enterprise has a training program in practical and technical skills, human training and personal development for the best performance of its employees.
F6	Each job has defined how to measure the performance of the person (indicator) which allows its evaluation and development of improvement plans.

F7	The enterprise is alert to identify future leaders with high potential and collaborators with superior performance.
F8	The plant, processes, equipment and facilities in general are designed to provide a safe environment for the worker.
F9	The enterprise ensures that staff develop a sense of belonging and commitment.
F10	Communication between the enterprise's different levels of personnel (management, technical, administrative, etc.) is promoted, agile and timely.
<b>G.</b>	<b>ENVIRONMENTAL MANAGEMENT</b>
G1	In the enterprise, they have formally defined environmental policy as a management commitment.
G2	They consider environmental aspects in the planning of the enterprise.
G3	The enterprise knows the environmental regulations applicable to it and establishes the procedures and processes to comply with them.
G4	The enterprise measures environmental performance against selected targets and indicators.
G5	The enterprise has implemented strategies and measures to prevent, mitigate and correct the environmental impacts generated by the production process, taking into consideration environmental regulations.
G6	In the enterprise, they have introduced eco-efficient and clean technologies.
G7	The enterprise's workers have received training in environmental issues.
G8	Specific tasks, responsibilities, competencies and procedures are defined and documented to ensure compliance with both internal and external environmental regulations.
G9	The enterprise tries to minimize the consumption of energy, water and contaminating raw materials by improving its production processes, recycling, substituting inputs, preventive maintenance and the use of other technologies.
G10	The enterprise has measured the amount of waste, knows at what stage of the process it is generated and has formulated plans to reduce it.
<b>H.</b>	<b>INFORMATION SYSTEMS</b>
H1	The company is updated in terms of new developments, programs and computer equipment and has trained personnel to manage them.
H2	The technical and functional design of the system responds to the information needs of the company and is optimal in relation to process time and safety.
H3	The supporting documents in the different areas of the company are properly generated and archived.
H4	The information capture generates simultaneous operations in the different areas of the company, avoiding the double typing of the transactions in the different systems.
H5	As a policy, the company systematically backs up its most important files and stores them on secure sites.

H6	There are manual or automated contingency procedures in case of loss of electrical fluid, process equipment failures.
H7	The information generated by the system is reliable, timely, clear and useful and is used for decision making.
H8	Management has defined reports that indicate the type of data required for the decision-making process.

Source: Own elaboration

The main results of statistical processing are shown in graph 3 below:



**Graph 3** - Position of each of the dimensions of competitiveness studied

Source: Prepared by the authors based on the surveys applied

Graph 3 shows that the variables that work best, according to those surveyed, are: information systems; accounting and finance are the best valued indicators, followed by planning, administration, quality and human resources; finally, environmental management and marketing as elements, with greater difficulties.

The development of the Competitiveness Map by the Inter-American Development Bank (IDB), to be used in the organizational diagnosis of MIPYME (Saavedra García, 2012), is a diagnostic tool that is applied in the enterprise and allows to know its initial state against competitiveness and to identify the areas in which it has strength and those in which it has weakness, with the final purpose of developing action plans that lead to the

improvement of its competitiveness. One of the great advantages of this map is that it represents, graphically, the features and characteristics of competitiveness of the enterprise (Cabrera Martínez, López López, & Ramírez Méndez, 2011).

Once the internal competitiveness of Ecuadorian MIPYMES improves, the foundations will be laid for their positioning in the national and international market, perfecting quality parameters that lead to recognized certifications.

Since the main difficulties are in these two areas, the proposal for improving competitiveness will focus on them.

There are well-defined criteria for improving the competitiveness of enterprises, according to Luer (2018), so that customers perceive greater value in products and prefer competition. It is necessary to develop competitive advantages that position the best alternative for them.

When competing in a market, it is just as important to identify and know in depth those to whom you want to sell, as it is to all the competitors you face, i.e. all those who can directly or indirectly provide a value that will attract a customer who could potentially buy. That is why it is so important to make a significant effort to evaluate the strengths and weaknesses and identify the objectives and strategies of each competitor. Discovering the importance they attach to issues such as profitability, maintaining a market share, offering outstanding customer service or investing in technological development can help to know more precisely the reactions that the competitor would take to a given action by the offeror.

The better competitors are identified and their motivations, objectives, etc., the

more specific marketing strategies can be designed that translate into the development of one or more competitive advantages that provide superior value for the customer.

A competitive advantage is defined as a superior and strategic attribute that a product or brand has over its rivals, within the framework of its competitive industry. In other words, it is what an enterprise is better at than its competitors and with what it is able to deliver greater value to its customers.

Thus, developing a competitive advantage is essential for anyone who wants to stand out from the competition, attract and retain more customers. To make this advantage sustainable, it is essential to offer products with greater added value, as well as to have processes and/or offer customer service that cannot be duplicated or imitated by the competition.

Developing a competitive advantage can be done in several ways, however, there are three main approaches through which it can be developed more effectively:

1. It offers the best price: It implies to reduce, as much as possible, the production and distribution costs and to create an efficient and adequate value provision system, which allows to offer products of good quality, reliable and easy access to lower prices than those of the competition, in order to gain a greater market share.
2. It develops the best product: Offering a superior value to the competition, with the most innovative products that position the enterprise as a leader in its industry. If you want to use this approach, you must invest a considerable amount of resources

- to generate ideas and search for new solutions and have the ability to market new products quickly and efficiently.
3. It adapts its offer to its client: Focusing all efforts to satisfy better than anyone to specific segments, rather than serving the entire market. It involves accurately segmenting a market and adjusting products or services to meet the needs of customers in the segment.

It's important to know that whatever approach you choose, developing a competitive advantage takes time, not overnight. It should be noted that when developing a genuine and sustainable competitive advantage, it is not appropriate to try to excel in all criteria (low costs, better products and please everyone). Enterprises, which do not focus on a single criterion, generally end up not being better in any aspect and any competitor focused on a single aspect easily overcomes them (Luer, 2018).

### **Proposal for continuous improvement for internal competitiveness of Ecuadorian MIPYMES. Adaptation of the model of Cárdenas and Fecci (2007)**

#### Group 1. Actions aimed at enterprise managers (owners)

The aim of these actions is that managers (owners), through their own learning, are able to make all staff understand that quality orientation is a strategic choice, motivated and driven by management and that it will be established as a permanent policy.

- a) The management of the enterprises should fix its vision,

mission and establish its strategic objectives.

- b) At the administrative level, the importance of the training of directors must be assumed as a factor to improve the competitiveness of their enterprises, through their participation in Management Support Programs and, mainly, in those oriented to Strategic Planning.

#### Group 2. Motivation-oriented actions

Employee motivation is achieved by logically presenting the close relationship between total quality and people's job satisfaction.

- a) Stimulate personal growth (esteem and self-fulfillment)
- b) Improving hygiene in the working environment
- c) Motivate through participation, because in this way the creative potential of the staff is exploited
- d) Assign responsibilities and/or functions that are visible in tables and graphs
- e) To foresee a better organization of the work area
- f) To take care that positive positions are maintained in front of the problems, trying to motivate the group in the search of solutions
- g) Use criticism moderately and always to encourage work
- h) Establish a system of recognition and reward to reward staff who qualify in a specialty

#### Group 3. Actions aimed at encouraging Teamwork.

Team building is a process of planned and deliberate encouragement of effective working techniques, enabling the

development of processes and relationships for positive change and improved performance. The work system of the enterprises facilitates the formation of teams, since there are dependency relationships between one operation and another. Teamwork seeks to improve the inputs and outputs of different processes (Customer-Supplier).

#### Group 4. Actions aimed at the training and qualification of personnel

Enterprises need to train and educate staff in all areas and at all levels; this allows for the development of knowledge, skills and aptitudes, so that the organization is more efficient and competitive. The instruments that the enterprise can use for the education and training of its personnel can be: talks and courses, didactic material, specialized technical literature, instructive manuals, training in other areas, rotation of positions, expansion of positions, among others.

#### Group 5. Actions aimed at suppliers

A successful process of continuous improvement must take into account the participation of suppliers of inputs and raw materials. Any enterprise looking for production lines that run without interruption and with reduced inventory must first find ways to ensure that purchases of materials arrive in a timely manner, without affecting compliance with product delivery deadlines.

- a) Identify and qualify suppliers, considering quality, deliveries and costs
- b) Predict the need for material and organize suppliers in delivery times
- c) Ensure that the instructions on the order form are clear

- d) Carry out joint activities with the suppliers, so that they provide technical information regarding the materials (characteristics and properties)

#### Group 6. Actions aimed at waste management (Environmental Management)

The objective of waste management is to define procedures and plan activities related to the treatment of waste, from its generation to its final disposal or elimination, to safeguard people's health and minimize impacts on the environment.

- a) To carry out and/or participate in courses or talks referring to the importance of incorporating clean production practices that allow improving their processes and products in environmental and productive terms.
- b) It is proposed that enterprises present clean production projects.
- c) Establish a procedure and schedule to inspect incoming, stored or mixed chemical compounds and designate areas for spill and cleanup plans.

#### Group 7. Actions aimed at technological innovation

Technological innovation is presented as a key factor to achieve higher levels of productivity, profitability and competitiveness. In this regard, SMEs must improve their financial capacity to invest in research and development, allowing them to close the gap in the level of technology incorporation, with respect to large enterprises.

- a) In the event of acquiring a new machine, instrument or equipment, make sure that the

- supplier provides training for operators, in addition to sufficient technical information.
- b) Implement a documentation base that includes, for example, manuals or catalogues of equipment, machines or instruments.
  - c) Adapt or translate catalogs or manuals so that they are truly useful to the operators or managers.
  - d) Access the instruments available for financing technological innovation.
  - e) Prefer the legal "Software" because they allow: access to the technical manuals, warranty, technical support, training and free seminars offered by the brands.
- d) Conduct management clinics: entrepreneurs should meet to discuss common problems, exchange experiences, support each other for negotiations, keep abreast of what is happening worldwide that may affect their enterprises, assess their ranking position, among others.

Independently of the fact that it is important that all actions are carried out to achieve improvement in competitiveness, the set of actions, belonging to groups 7 and 8, are obligatory application in the Ecuadorian context, in the province of "El Oro".

#### Group 8. Actions aimed at economic-commercial performance

- a) Increase in sales and production
- b) Increase in productivity: productivity is defined as the ratio of total costs to units produced, i.e. total costs per unit of output.
- c) Making investments: investments are seen as an indicator of the economic performance and

The efficient implementation of this proposal undoubtedly leads to preparation and awareness, to internalize and materialize its content; in this sense, it is the task of a group of actors such as: university (developer of the proposal and responsible for training), support from the municipal and parish GAD, entrepreneurs, suppliers, among others.

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