ABSTRACT
This paper aims to analyze the complex factors of the operative context of small and medium enterprises (SMEs) in metal-mechanical sector in the state of San Luis Potosí, México. To achieve this aim, the study intends to analyze the relationship between competitiveness, strategic planning and innovation. The analysis responds to the question What is the correlation between strategic planning, competitiveness and innovation of Small and Medium Businesses in the metal-mechanical sector at the capital city of San Luis Potosi, Mexico? To measure the magnitude of the variables, it was required to divide them into specific components. The findings of this analysis considers human resources have an impact on the competitiveness growth variables and innovation is not decisive impacting the variables growth and competitiveness in micro, small and large companies at metalworking sector in San Luis Potosi.
KEY WORDS: *MSMEs; competitiveness, innovation, strategic planning.*

RESUMEN
Este trabajo tiene como objetivo analizar los factores complejos del contexto operativo de las pequeñas y medianas empresas (Pymes) en el sector metalmecánico en el estado de San Luis Potosí, México. Para lograr este objetivo, el estudio pretende analizar la relación entre competitividad, planeación estratégica e innovación. El análisis responde a la pregunta ¿Cuál es la correlación entre la planeación estratégica, la competitividad y la innovación de las pequeñas y medianas empresas en el sector metalmecánico en la ciudad capital de San Luis Potosí, México? Para medir la magnitud de las variables, fue necesario dividirlas en componentes específicos. Los hallazgos de este análisis consideran que los recursos humanos tienen un impacto en las variables de crecimiento de la competitividad y que la innovación no es decisiva y tiene un impacto sobre las variables crecimiento y competitividad en las micro, pequeñas y grandes empresas del sector metalúrgico en San Luis Potosí.
PALABRAS CLAVE: *MIPYMES; competitividad, innovación, planificación estratégica.*

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CORRELACIÓN DE PEQUEÑAS Y MEDIANAS EMPRESAS ENTRE COMPETITIVIDAD, INNOVACIÓN Y PLANIFICACIÓN ESTRATÉGICA EN EL SECTOR DE LA METAL MECÁNICA EN SAN LUIS POTOSÍ, MÉXICO

SMALL AND MEDIUM ENTERPRISES CORRELATION BETWEEN COMPETITIVENESS, INNOVATION AND STRATEGIC PLANNING AT METAL MECHANICAL SECTOR IN SAN LUIS POTOSÍ, MÉXICO

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INTRODUCTION

In order to analyze the correlation between competitiveness, strategic planning and innovation in SME´s; it is necessary to understand complex factors that describe the operative context from the variables integrating the relationship.

San Luis Potosi (S.L.P.) is classified, according to its geographic position regarding Mexican territory, as a highly productive state mainly due to the following reasons. It is connected to the three principal urban centers (Mexico City, Monterrey and Guadalajara). In addition, it hosts NAFTA trade corridor involving Mexico-Chicago-Toronto and a vast territory of 62, 850 km and 58 municipalities.

Moreover, metal-mechanical sector is a pillar for the economic development statewide. S.L.P., contributes to Gross Domestic Product. 29% (4,769 million pesos price of 2009) from manufacturing industry (INEGI: 2009). It is overpassed only by the manufacture of food and beverage products (34%).

Then; it is expressed the general objective of the investigation:

"Does exist a relation between Small and Medium Enterprises, competitiveness, innovation and strategic planning at metal mechanical sector at the capital city of San Luis Potosí, Mexico".

Following; are described the specific objectives of the investigation:

- To analyze the correlation among Marketing, Manufacturing, Human Capital and innovative activity in small businesses in San Luis Potosi.
- To determine the degree of influence of variables impacting competitiveness at Micro, Small and Medium businesses in San Luis Potosi.
- To determine the degree of influence of variables impacting growth at Micro, Small and Medium businesses in San Luis Potosi.

The research question is focused on explaining: What is the correlation between strategic planning, competitiveness and innovation of Small and Medium Businesses in the metal-mechanical sector at the capital city of San Luis Potosi, Mexico?

The statement of hypothesis appears as follows:

H1. In terms of competitiveness considering strategic planning decisions, innovative activities manage by Human Resource department are equally important.

H2. In terms of competitiveness, they are equally important Human Resources management, without taking into account the strategic planning decisions.

H3. Regardless strategy planning decisions, it is far outweigh aspects of innovation activities.

H4. Under the approach of exploratory strategy, it is more important innovative activities rather aspects of marketing for competitiveness.

H5. Under the approach of an analyzer strategy, it is more important productive innovation for growth aspects.

H6. Under the approach of a defensive strategy, there are equally important Manufacturing aspects rather Human Resource management for competitiveness.

STRATEGIC BUSINESS MANAGEMENT BASIC PREMISES

Strategy is understood as a classic way to take action that goes back to the times of war used for the army in battle. It was considered in order to have the most favorable conditions and to operate them similarly.

Then, it is thought that customers will appraise the market supply. As a consequence, it is a challenge for managers to create value for them and manage it over the life cycle of the company.

In that case, Martelo Barroso and Cepeda (2011) pointed in recent decades that companies have found a new highly complex competitive environment in which customers increasingly and insistently call for the creation of value.

The concept of strategy, within the administrative theory has had different definitions that differ in scope, specificity, guidance and motivation of the people responsible for decision making in business. Disputes in administrative theory, define the strategy in several ways. Listed below are some of these concepts:

- Ansoff (1965) states that strategies are operational expressions within the administrative process. The author stated the operational criteria as the basis of the specific programs that can be designed, selected and implemented. In such a way that the author introduced the idea that companies have a common thread between the actions taken and the achievement of the objectives for the reasen it was created.
- Mintzberg & Quinn (1996) indicated that a strategy is not just a notion of how to deal with competitors in a specific market; it also can be a way to reconcile the principles of the organization. The purpose seeks to obtain a collective and uniform perception for searching competitive advantage or survival of the organization through schemes and healthy communication resources for effective use of the strategy.
- Haugstad (1999) consider the strategy as a model of actions that integrate the goals and procedures of an organization. Consequently, a sequence of the coherent actions will allow the organization to use its resources in a viable state based on their internal powers anticipating changes in the business environment and actions of competitors.
- Hambrick & Fredrickson (2001) pointed out that elements of a strategy are the axes that company dominates, and thus they can identify their distinguishing features, competitive advantages and logic and economic way they propose its implementation. Under this framework, companies can maintain the relationship with the fundamental principles of the company taking into account external factors

(business environment, mechanisms to obtain resources, materials and competitive position).

- Koontz & Weihrich (2004) noted that the strategy is the determination of their mission or primary purpose and basic long term objectives of a company. Strategy includes adoption of courses of action and allocation of resources to achieve these ends.

It can be defined strategy as a set of concrete and coherent objectives, goals, policies of the company shares to strengthen the business environment that can create greater competitive advantage for positioning product or service in the consumer preference (Quinn & Voyer, 1998).

Types of strategic configurations Miles & Snow

The typology of Miles & Snow (1986) is one of the organizational configurations from a holistic perspective. It provides a precise description associated with each strategy. In a different sense. Porter's model is the most popular expression of the paradigm: structure –behavior– performance; they all related to industrial economy. It takes a structuralism approach that aligns the company with its environment.

Particularly, in terms of positioning strategies in the market Miles & Snow, (1978 and 1986) cited by Thomas & Ramaswamy (1989), Das, Zahra & Warketin (1991), Parnell & Wright (1993), Pleshko, Hejens & Stanwick (1995) and Tan, Weston & Tang (2006) recognized and conceived a typology for the efforts of organizations, classifying (analyzer, Defensive, Scouts and Reactive) by strategic actions, in response to generic problems of management, engineering and entrepreneurship.

The following typology from Miles & Snow (1986) regarding the position of the companies, seek constantly innovate to achieve and maintain their products and services on the market available to customers. It creates the advantage for consumer recognition. The process of adjusting strategies at challenging and changing business environment is highly complex because it involves a large number of decisions and behavior at various levels of the organization. The typology proposed by Miles & Snow (1978), is defined under the characteristics listed below:

- The analyzer organizations have developed some market and sales dominance of their products or services. They are relatively stable and have the strength to concentrate on their operations efficiency through highly formalized structures and processes.

- The defender organizations have narrow market dominance. Its executives are experts in their specific processes do not seek out new opportunities for the organization. They focus primarily on the efficiency of its operations with the strength in manufacturing cost and value of their products or services.
- The prospector organizations are continually looking for new market opportunities, regularly experimenting with some emerging trends. Its strength lies on focusing on innovation of products and services and are not necessarily highly efficient because they prefer flexibility in search for innovative capabilities.
- The reactor organizations have managers perceiving changes in a business environment. Nevertheless, they are unsuccessful to respond effectively to such changes because their businesses are lack of consistency in adapting to environmental change.

By means of an analyzing exercise, each classified organizations will be largely successful depending on the business environment they have to face. For example in a changing environment and high degree of uncertainty, analyzers organizations will be benefited because of their orientation on efficiency and low costs. Their stability in business environment will prevail because they have achieved a high degree of maturity. In the meantime, prospector organizations have the advantage of its flexibility. They either have guidance to development products or services at a stable environment where products services do not suffer major changes or innovations. Finally, defenders organizations may have certain advantages because for their knowledge in the processes compare to reactor organizations that does not show a consistent strategy.

COMPETITIVENESS AND GROWTH AT THE BUSINESS ENVIRONMENT

Business Competitiveness overview

Every time there is a greater number of companies that recognize the concept of customer value, mentioned by Martelo, *et al.* (2011). Therefore, it becomes a key factor when looking for new ways to achieve and maintain a competitive advantage. This means, in essence, strategic work of managers is to understand the competitive environment according to Dess & Lumpkin (2003), Bateman & Snell (2004), and Hill & Gareth (2009). Others refer the study from Porter, (1980-2008) as the leading exponents of competitive forces analysis. It will be

remembered that goals of any competitive strategy for a business unit, company or organization, are to reach a position to defend itself from these five competitive forces or to take them on their favor.

Nonetheless, setting these five competitive forces will have specific differences depending on the industry being analyzed since there are no universal consumption habits and weight values for each force at different contexts. The overall importance of the five forces determines potential profit in an industry considering it in terms to measure the return on capital investments. It is understandable that not all industries have the same capacity regarding the return on investment.

Therefore, it has to be considered as an additional model of competitive forces. Although, it recognized for its contribution to the evolution of the theory of international competitiveness, Cho and Moon (2005) argued that initially the model was tested in a limited number of industrialized countries, once moved to smaller or developing countries, the determinants of international competitiveness may vary.

Ryan (1990) and Grant (1991) indicated a lack of precision in defining concepts and variables, plus they affirmed the existence of certain subjectivity when it comes to the classification of existing clusters in competitive sectors of the country. They argued that other factors should be considered besides those proposed by the Porter diamond to maintain competitive advantage (technological sophistication, capabilities and customer relationships).

So this argument is heading towards the assumption that abundance of production factors creates competitive advantages but also disadvantages incentivizing the improvement of competitive advantage. It is the same action to point out each of the apexes of the diamond influenced by the others, although the cause-effect relationship is not clear. Finally, it should be noted that model of Porter regarding the proposed models in classical economic theory lies in giving importance to the dynamic aspects of competition.

Generalized double diamond model by Moon, Rugman and Verbeke (1995) believes that competitiveness of a nation needs partly local and partly foreign diamond where their companies are related. It is aimed to incorporate multinational activity and government within the model. The size of the global diamond is fixed within a predictable period, but the size of the local diamond varies according to the size of the country and its competitiveness considering that in a country the added value sustainable results from local and foreigner organizations.

On the other hand, the model of nine factors was developed by Cho (1994) as another extension from diamond Porter. It makes a division between human factors (representing workers, politicians, entrepreneurs and professionals) and physical factors (resources inherited, local demand, related and allied industries) being not included as an exogenous parameter but internal to the same model. It stresses the relative competitive position among countries as a significant element in the competitiveness of a nation.

The opportunity of not being included as exogenous parameter internal to the same model but. It stresses the relative competitive position among countries as a significant element in the competitiveness of a nation.

According to Cho (1994) it cannot be considered a nation internationally competitive if its industries are strong due to some external factors. The difference between the new model and diamond Porter is both: division of factors such as the addition of new ones. The diamond included natural resources and work under the conditions of factors, but the model includes nine natural factors within the inherited resources, while work is inserted into the category of workers.

General concepts of business growth

According to Garcia (2003), growth of a company can be measured using parameters such as shareholder value, earnings per share, profits and sales. It can also be defined by the expansion made by the company into new markets, geographically and in the number of consumers served.

Likewise, Menguzzato and Renau (1995) related business growth with the different stages of the life cycle of the company by separating growth strategies. These authors pointed out the strategy of stable growth it is characterized by few risks because the lack of competition enables the consolidation of operations which strengthens the capacity to endure.

According to Whetten (1987), Boulding (1950) was one of the pioneers at incorporating organizational growth. He made an approach between biology and economy where society was describes as a large ecosystem. Each organization behaves according to the interaction between an inner law of growth and the survival in a hostile environment with other organisms.

From this perspective, supported by Greiner (1972), the company will evolve in phases where each phase is a result of a revolution of the previous one which generates a gradual growth curve, with growth periods interrupted by volatile crisis.

According to the research conducted by Weinzimmer, Nystrom and Freeman (1998) a common factor have distinguish growth variable. Both authors stated that growth variable is related to the increase in sales due to more a concept of verifiability and practicality in it measurement. To this end, elements from the financial analysis are also used such as:

- Cash flows;
- Rate of Return on Investment;
- Inventory turnover rate; and,
- production increased index.

Rojo and Gonzalez (2007) stated that business growth is built through new investments in the company or the acquisition or establishment of participation agreements with other companies.

Blazquez, *et al.* (2006) reported that growth must come also supported by sound financial planning allowing the company to balance the action plan to be undertaken. Adopting a growth strategy allows the company to distinguish, on the one hand, qualitative problems origin related to the need of changes in their structure. On the other hand, quantitative problems generate the arising of investment and financing resource demands that growth generates.

MICRO, SMALL AND MEDIUM BUSINESS CONTEXT FROM THE INDUSTRIAL MECHANICAL-METAL SUBSECTOR

Micro, small and medium enterprises (MSMEs) companies represent worldwide the segment of the economy that contributes the largest number of economic units and employed personnel.

Hence, the relevance of their performance is fundamentally affecting the overall performance of national economies. In fact, in the international context, we can say that 90% or a higher percentage of total economic units consists of MSMEs. However, Jimenez and Dominguez (2009) said that they are usually referred by means of a vague concept.

A company is considered MSMEs in some countries being less than 250 people. In those same countries could be considered a MSMEs industry household appliance with less than 500 people and a steel industry less than 1,000 as shown in table 1.

Characterization of companies in Mexico

In order to classify the small company in the present investigation, we will stick to the classification made at Official Gazette on December 2002. It establishes the different sectors according to number of people who are working within companies and sectors, according to what the table 1 shows U.S.

Table 1. Business classification according to the Official Gazette.

	Industrial.	Commerce.	Services.
Micro	0-10	0-10	0-10
Small	11-50	11-30	11-50
Medium	51-250	31-100	51-100
Large	More than 251	More than 101	More than 101

Source: Official Journal of the Federation (D.O.F.) on December 13, 2002.

According to National Institute of Statistics, Geography and Informatics (INEGI); there is another classification of MSMEs in the manufacturing sector as we can see in te table 2, published at 2009 by INEGI. It classified MSMEs in the manufacturing sector taking into account two important factors: the volume of sales and number of employees working. It can be observed that service industry in the macro size has the highest percentage of employees. Consequently, the same sizes of companies are found at service industry.

Table 2. Composition of size and sector of companies (percentage share).

Size		Sector	Services*	Total
	Industry	Commerce	97.4	2,844,308
Micro	94.4	94.9	1.6	95.7
Small	3.7	4.0	0.5	3.1
Medium	1.7	0.9	0.4	0.9
Large	0.4	0.2	100	0.3
Total	100	100		100

Source: Prepared by the authors on the basis of data supplied by INEGI, 2009.

Therefore, the percentage distribution of economic and staff units occupied by the size of the company registered a percentage domain among small and medium enterprises at same manufacturing sector, let's see it in table 2 and 3. (INEGI, 2009).

Table 3. Economic structure of businesses in Mexico.

	Economic units	Total employed persons
0-10 people	95.5%	42.1%
11-50 people	3.5%	14.7%
51-250 people	0.8%	15.1%
251 and more people	0.2%	27.1%

Source: (INEGI, 2009).

Table 4. Gross production and personnel occupied by manufacturing sector in Mexico.

Strata of employed personnel		Economic units occupied.		Total	%	Total gross production	%
		Absolute	%	Absolute.		Thousands of pesos	
Total manufactures		328,718	100	4,198,579	100	2,732,718,051	100
0-10	Micro	298,678	90.9	762,103	18.2	92,382,063	3.4
11 a 50	Small	19,754	6	431,768	10.3	154,773,830	5.7
51 a 250	Medium	7,235	2.2	810,095	19.3	474,197,082	17.4
251 & more	Large	3,051	0.9	2,194,613	52.3	2,011,365,076	73.6

Source: Prepared by the authors on the basis of data supplied by INEGI, 2009.

Regarding the geographical distribution of manufacturing establishments in Mexico, the region Center-West concentrates 26.3% of economic units, 22.2% of total employed people and 23.2% of total gross production (INEGI, 2011).

The State of San Luis Potosi is located in the Center-West. However, there are other states such as Guanajuato, Jalisco and the municipality of Michoacán de Ocampo that exercise a numerical leadership on key indicators. However, the trend varies in relation to the other two concepts: total employed people and total gross production, of which the municipality of Michoacán de Ocampo reflects a low turnout. The city of Queretaro Arteaga and the State of San Luis Potosi reflect an outstanding numerical concentration.

San Luis Potosi had 63,820 economic units in 2003 (INEGI, 2011). Comparing this figure with the figure reported in 1998, there was an increase of 9.4%. These units provided employment to 308, 813 people, and 24.8% more than the staff employed in 1998 by the previous economic censuses.

Currently, the state of San Luis Potosi statistics show (see Table 5) that commerce sector is one where companies are registered the most quantitative number. The industry sector takes second place and finally the services sector the third place. According to the table below, it is shown that 87.2% of the total employed people of the entity focused on the economic commerce activities (31.6%), manufacturing (28.2%) and services (27.4 percent).

Table 5. Percentage of employed persons by sector.

Sector	Total personnel occupied (percentage)
Commerce	31.6
Manufacturing	28.2
Services	27.4
Rest the sectors	12.8
Total	100.0

Source: Prepared by the authors on the basis of data supplied by INEGI, 2009.

METHODOLOGY AND INSTRUMENT OF THE STUDY

To measure the magnitude of the variables, it was required to divide them into specific components (although, the presented results will be compound by all components taking out the corresponding dependent variable) from where the instrument of data collection will be obtained. Dependent variables designs are presented as follow:

- *Competitiveness.* Porter (1980), Roca and Bou (2007), Afuah (2009):
  - Generic factors (place),
  - Costs,
  - Generic factors (product, price),
  - Suppliers,
  - Generic factors (promotion); and,
  - Competitive Advantage.

- *Growth*. Blazquez, Dorta and Verona (2006) Camisón, Garrigós and Palacios (2007) Rivera & Monia (2011):
  - Profitability,
  - Financing / debts,
  - Cash flow; and,
  - Growth compared.

While the independent variables are defined in components to be individually assessed (at the time of statistical analysis will be excluded a component based on their significance).

- *Marketing aspects*. Martin and Navas (2006) Ross, Westerfiel and Jordan (2011):
  - Product,
  - Price,
  - Place,
  - Promotion; and,
  - Supply chain.

- *Productive aspects*. Zapata (2004) Claver, Quer and Molina (2005)
  - IT,
  - Processes / equipment,
  - Productivity,
  - Quality; and,
  - Maintenance.

- *Human capital*. Prahalad and Hamel (1990 & 1994) Hamel (1996)
  - Stability,
  - Orientation to results,
  - Incentives,
  - Competences; and,
  - Capabilities.

- *Innovation*. Hadjimanolis (2000):
  - Product and Process Innovation,
  - Knowledge Innovation pathway; and,
  - Organizational innovation.

It defines the basic construct, however the results in light of other variables were analyzed (in this case functions as variable selection) referred to the

strategic positioning of the company. Taking a single type of four elements, so it will be repeated the analysis for each variable.

- *Strategy*. Miles and Snow (1986):
  - Analyzer Strategy,
  - trategy,
  - Prospector Strategy; and,
  - Reactor strategy.

To facilitate the integration of the variables described, the instrument occupied for the present research responds to a data collection instrument used by Aguilera, Gonzalez and Rodriguez (2010). They mentioned authors applied as a first phase, 41 surveys to see the reliability of the instrument.

Then, 110 surveys were applied to different businesses from the previous validated survey within the metropolitan area of the city of San Luis Potosi according to 2009 INEGI census. Sampling from the study was not randomized since it was first called for companies to make the invitation to participate in the study. These surveys were conducted within an appointment with managers and the researcher.

DATA ANALYSIS

The information obtained from 110 surveys answered by the managers was taken to start the procedure toward to fulfill the aim intended. Basically; the objective was to find empirical evidence regarding the link of variables and to respond the hypothesis and objectives stated.

Within the pilot, we observed that Alfa has a 92.7% confidence level, let´s see it in table 2 and 3. However, the more it approaches to its maximum value (1), it can be assured that the instrument is reliable since a general context Alfa tests are accepted by 70% (depending on the source).

Table 6. Case processing Summary of. (Alpha Cronbach Coefficient).

		N	%
Cases	Valid cases	102	92.7
	Excluded[a]	8	7.3
	Total	110	100.0

a. Elimination based on all process variables list.

Source: Prepared by the authors.

Total of 110 surveys were capture implanting SPSS software. Concerning pilot surveys, they were discarded being not part of the final study. The final validation result assured only 65 companies with the sole intention of being able to validate the occupied instrument.

Table 7. Analysis of R Square for Competitiveness.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.809a	.655	.642	.4560	2.079

a. Predictors: (Constant), MeanINNov, MeanMKT, MeanRH, MeanAP
b. Dependent Variable: MEAN_Comp

Source: Prepared by the authors.

Table 8. Anova Analysis for Competitiveness.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	41.468	4	10.367	49.867	.000b
	Residual	21.829	105	.208		
	Total	63.297	109			

a. Dependent Variable: MEAN_Comp
b. Predictors: (Constant), MeanINNov, MeanMKT, MeanRH, MeanAP

Source: Prepared by the authors.

Table 9. Curve (Coefficients) of Competitiveness.

Model		Unstandardized Coefficients		Standardized Coefficients	*t*	Sig.
1	(Constant)	B	Std. Error	Beta		
	MeanMKT	-.058	.249		-.235	.815
	MeanAP	.219	.066	.251	3.297	.001
	MeanRH	.236	.087	.226	2.724	.008
	MeanINNov	.436	.075	.428	5.849	.000
		.086	.065	.089	1.319	.190

a. Dependent Variable: MEAN_Comp

Source: Prepared by the authors.

Table 10. Analysis of R Square for Growth.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.801[a]	.641	.628	.4236	1.792

a. Predictors: (Constant), MeanINNov, MeanMKT, MeanRH, MeanAP
b. Dependent Variable: MEAN_Crec

Source: Prepared by the authors.

Table 11. Anova Analysis for Growth.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regres-sion	33.715	4	8.429	46.968	.000b
	Residual	18.843	105	.179		
	Total	52.558	109			

a. Dependent Variable: MEAN_Crec
b. Predictors: (Constant), MeanINNov, MeanMKT, MeanRH, MeanAP

Source: Prepared by the authors.

Table 12. Curve (Coefficients) of Growth.

Model		Unstandardized Coefficients		Standardized Coefficients	*t*	Sig.
		B	Std. Error	Beta		
1	(Constant)	.449	.231		1.938	.055
	MeanMKT	.180	.062	.226	2.913	.004
	MeanAP	.158	.080	.167	1.969	.052
	MeanRH	.498	.069	.536	7.189	.000
	MeanINNov	.017	.060	.020	.286	.775

a. Dependent Variable: MEAN_Crec

Source: Prepared by the authors.

Table 13. Analysis of the variable Competitiveness under the approach of Miles & Snow: Defender strategy.

Model		Unstandardized Coefficients		Standardized Coefficients	*t*	Sig.
		B	Std. Error	Beta		
1	(Constant)	.933	.471	.118	1.983	.056
	MeanMKT	.084	.128	.405	.658	.515
	MeanAP	.340	.152	.312	2.231	.032
	MeanRH	.256	.118	-.007	2.168	.037
	MeanINNOV	-.006	.107		-.057	.955

a. Classification = 1 Defender, b. Dependent Variable: MEAN_Comp

Source: Prepared by the authors.

Table 14. Curve (Coefficients) of the Prospector Strategy for Competitiveness.

Model		Unstandardized Coefficients		Standardized Coeffi-cients	*t*	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.214	.545		-2.229	.041
	MeanMKT	.319	.182	.268	1.752	.099
	MeanAP	.436	.202	.343	2.163	.046
	MeanRH	.458	.174	.387	2.641	.018
	MeanINNOV	.081	.143	.078	.564	.581

a. Classification = 2 Prospector
b. Dependent Variable: MEAN_Comp

Source: Prepared by the authors.

Table 15. Curve (Coefficients) of the Analyzer Strategy for Competitiveness.

Model		Unstandardized Coefficients		Standardized Coefficients	*t*	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.879	.582		-1.512	.146
	MeanMKT	.314	.147	.350	2.133	.046

Continuation table 15.

Model	Unstandardized Coefficients		Standardized Coeffi-cients	*t*	Sig.
	B	Std. Error	Beta		
MeanAP	.063	.228	.055	.274	.787
MeanRH	.808	.228	.579	3.540	.002
MeanINNOV	.093	.147	.096	.636	.532

a. Classification = 3 Analyzer.
b. Dependent Variable: MEAN_Comp

Source: Prepared by the authors.

Table 16. Curve (Coefficients) Reactor Strategy for Competitiveness.

Model		Unstandardized Coefficients		Standardized Coefficients	*t*	Sig.
		B	Std. Error	Beta		
1	(Constant)	.304	.422		.721	.479
	MeanMKT	.250	.114	.278	2.196	.040
	MeanAP	.040	.129	.040	.308	.762
	MeanRH	.577	.134	.662	4.313	.000
	MeanINNOV	.023	.138	.021	.166	.870

a. Classification = 4 Reactive
b. Dependent Variable: MEAN_Comp

Source: Prepared by the authors.

Table 17. Analysis of Growth variable under the approach of Miles & Snow: Defender strategy for Growth.

Model		Unstandardized Coefficients		Standardized Coefficients	*t*	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.042	.402		2.590	.014
	MeanMKT	.130	.109	.202	1.192	.242
	MeanAP	.132	.130	.172	1.010	.320

Continuation table 17.

Model		Unstandardized Coefficients		Standardized Coefficients	*t*	Sig.
		B	Std. Error	Beta		
	MeanRH	.345	.101	.461	3.415	.002
	MeanINNOV	.074	.091	.099	.811	.423

a. Classification = 1 Defender.
b. Dependent Variable: MEAN_Crec

Source: Prepared by the authors.

Table 18. Curve (Coefficients) of the Explorer Strategy for Growth.

Model		Unstandardized Coefficients		Standardized Coefficients	*t*	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.591	.427		-1.385	.185
	MeanMKT	.316	.143	.283	2.215	.042
	MeanAP	.059	.158	.050	.374	.713
	MeanRH	.798	.136	.718	5.871	.000
	MeanINNOV	-.003	.112	-.003	-.024	.981

a. Classification = 2 Prospector.
b. Dependent Variable: MEAN_Crec

Source: Prepared by the authors.

Table 19. Curve (Coefficients) of Analyzer Strategy for Growth.

Model		Unstandardized Coefficients		Standardized Coefficients	*t*	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.172	.651		-.265	.794
	MeanMKT	.290	.165	.336	1.761	.094
	MeanAP	.243	.255	.222	.952	.352
	MeanRH	.758	.255	.564	2.970	.008
	MeanINNOV	-.203	.164	-.217	-1.234	.231

a. Classification = 3Analyzer
b. Dependent Variable: MEAN_Crec

Source: Prepared by the authors.

Table 20. Curve (Coefficients) Reactive Strategy for Growth.

Model		Unstandardized Coefficients		Standardized Coefficients	*t*	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.172	.651		-.265	.794
	MeanMKT	.290	.165	.336	1.761	.094
	MeanAP	.243	.255	.222	.952	.352
	MeanRH	.758	.255	.564	2.970	.008
	MeanINNOV	-.203	.164	-.217	-1.234	.231

a. Classification = 4 Reactive
b. Dependent Variable: MEAN_Crec

Source: Prepared by the authors.

CONCLUSIONES

Human Resources are the most important aspects regardless of the type of strategy that the company follows. They are the most important issue impacting the competitiveness growth variables. On the contrary aspects of innovation are the aspects not decisive impacting in the study from the variables growth and competitiveness in micro, small and large companies at metalworking sector in San Luis Potosi.

In addition, it is possible to observe that values for competitiveness, without taking into account the type of strategy, the independent variables are of great significance except aspects of innovation. On the subject of variable growth, without taking into account the type of strategy, the most important aspects are human resources and marketing aspects. Finally, the aspects that are less significant are from innovation.

Validations of hypotheses are described as follows:

H1. Hypothesis rejects Human Resources activities as the most important for competitiveness rather aspects of innovation.

H2. In the case of competitiveness and growth, Human Resource management has the same significance. Hypothesis is not rejected, but it is important to note that for both variables of Human Capital are significant and they explain the behavior of the variable.

H3. Aspects of innovation are those with the lowest weight to explain the variable of growth without considering the strategic decisions. Therefore, the above hypothesis is rejected.

H4. Aspects of innovation under the approach of exploratory strategy for competitiveness are less important than the marketing aspects, which the hypothesis is rejected.

H5. Under the approach strategic decisions analyzer innovation aspects are more important than production activities. Therefore, the hypothesis is rejected.

H6. Aspects of human and productive resources are almost equally important under a strategy for competitiveness. Therefore, the hypothesis is not rejected.

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