The entrepreneur as human capital and its impact on the survival of Mypes**El empresario como capital humano y su impacto en la supervivencia de las Mypes**

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Abstract

The analysis of micro and small enterprises in Mexico (mypes) is considered as a fundamental element due to its relevance in the economy. This paper focuses its study on companies that have closed operations and seeks to identify the main factors that strengthen or weaken their growth and development, particularly considering the Director and his performance as an important factor for this to occur. Among the results found, it stands out that the skills, abilities, experience and knowledge of the director or entrepreneur contribute greatly to the success or failure of a business, but above all, it was found that there are important functions of the mypes that are not performed, what which is an internal determining factor in the closure of companies, which makes it necessary for the directors of the mypes to be trained and supported by experts to carry out their functions, in addition to establishing governmental training and accompaniment strategies to strengthen to the micro-entrepreneur

Resumen

El análisis de las micro y pequeñas empresas en México (mypes) se considera como un elemento fundamental debido a su relevancia en la economía. El presente trabajo centra su estudio en las empresas que han cerrado operaciones y busca identificar los principales factores que fortalecen o debilitan su crecimiento y desarrollo, considerando particularmente al Director y su desempeño como un factor importante para que esto ocurra. Entre los resultados encontrados, destaca que las habilidades, destrezas, experiencia y conocimiento del director o empresario contribuyen en gran medida al éxito o fracaso de un negocio, pero sobre todo, se encontró que existen funciones importantes de las mypes que no se realizan, lo que es un factor interno determinante en el cierre de las empresas, lo que hace necesario que los directores de las mypes se capaciten y se apoyen de expertos para llevar a cabo sus funciones, además de que se establezcan estrategias gubernamentales de capacitación y acompañamiento para fortalecer al micro-empresario.

Human Capital, Mypes, Survival**Capital Humano, Mypes, Supervivencia**

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Introduction

The analysis of micro and small companies in Mexico (mypes) is considered as a fundamental element due to their relevance in the economy, since they make up 98.8% of the economic entities that exist in Mexico (INEGI, 2014), which have a Life expectancy at birth of 7.8 years in the country. This paper focuses its study on companies that have closed operations and seeks to identify the main factors that strengthen or weaken their growth and development.

Researchers in the economic-administrative area have established various hypotheses regarding the factors that provide the survival elements to the Mypes; According to Arias and Quiroga (2008), these factors can be classified into three groups: (a) those that are characteristic of the company, (b) those belonging to its competitive environment and (c) those associated with the employer's human capital. In this case, the aspects associated with the characteristics of the entrepreneur's human capital are considered.

Literature Review

In recent decades, studies related to the survival of mypes in various Latin American countries have intensified; In Chile, for example, Álvarez and Vergara (2007) analyzed the relationship between the size of the company and the chances of survival in companies in 25 manufacturing sectors, finding that there is high heterogeneity in the impact of the size on survival.

On the other hand, in Colombia, Arias & Quiroga (2008) analyze whether the initial size of the company influences the probability of survival of the company and concludes that large companies are more likely to survive. In their analysis carried out during the period 2000-2004 in the metropolitan area of Cali, the authors classify the factors into three groups: a) those that are characteristic of the company, b) those belonging to the competitive environment and c) those associated with Human capital of the entrepreneur. Their analysis was focused on the characteristics of the companies and their competitive environment, finding that large companies start with a 100% probability of surviving at the beginning of operations and after the fifth year they arrive with 89%, compared to mypes, which begin with approximately 92% and end the fifth year with a 53% chance of survival.

In the case of the industrial sector of Colombian mypes, Martínez (2006) performs an analysis referring to the business mobility model with passive learning proposed by Javanovic (1982) of which four relevant aspects are established: a) the size of the company and the Industry concentration seems to be positively correlated with the rate of return, b) the correlation over time of the rates of return is higher for large firms in concentrated industries, c) the variability of the rates of return increases with the concentration of the market and d) the high concentration supposes high margins for the big companies but not for the small ones, to finally validate that there is a relationship between the life cycle of the industry and the survival of the companies in the sector to which they are incorporated, being companies that enter mature markets those that have a lower survival function and those that enter sectors i Less mature industries, which have higher survival functions.

In another sense, Parra (2011) in its analysis of the variables that can be determinants on the probability of closing a company, classifies them into macroeconomic and microeconomic and concludes with respect to the size of the companies, that the probability of closing is inversely proportional to the size of these; that is, microenterprises are the most prone to premature closure. Parra himself did not find evidence on the location location as an influence on its probability of closing, but in the sense that market saturation and great competition increase the probability of bankruptcy.

On the other hand, Martínez (S.F.) analyzed the fragility of the companies through the financial analysis and mentions that the reasons for profitability and indebtedness are the main indicators that can differentiate fragile companies from non-fragile ones; in that sense, Parra (2011) states that weighing heavily on debt is more important than being highly profitable. Peña, Aguilar & Posada (2017) in their comparative analysis of the active and inactive mypes of Mexico and Colombia classify the factors into internal and external. Within the inmates they mention financial, market and related aspects of people and administration. Regarding external factors, they consider variables such as:

The increase in costs in suppliers, the increase in the exchange rate, the problems of insecurity and violence, the political conditions of the country, the lack of funding sources, the price increase in fuels, inflation in general and technology.

In the analysis carried out they conclude that external factors generate great concern in directors and contribute significantly to the closure of micro and small businesses.

The factors that were identified as having the greatest impact are the lack of capital, followed by insufficient income to survive. Taking up the classification carried out by Arias & Quiroga (2008), different studies related to the impact of the factors attributable to the company or its competitive environment with the probability of survival can be identified, however, those associated with the entrepreneur's human capital have been little in-depth analysis from this approach. In this regard, Peña, Aguilar & Posada (2017) define the study variable "People and Administration" as:

It involves those items referring to aspects considered in the administrative functions of planning, management, organization and control (Chiavenato, 2000), and which are factors that when neglected or not carried out become a risk for the closure of an organization.

Linked are the aspects that consider the influence that human resources can have on the closure of a company, that people "are the ones who make the materials become goods or services that meet the specific needs of customers" (Posada, Aguilar & Peña, 2016, p.4) The problems that arise in the aspect of personnel are fundamental, since as Chiavenato (2000) points out, this is the only living and dynamic resource of the company, therefore, its quality It is largely due to the quality of its human resources, becoming a permanent factor of advantages or disadvantages (Gómez-Mejía, Blakin and Cardy, cited in Barreto, Azeglio, Cannizzaro, Lizurek, Pereyra & Uriel, 2014). Referring to human capital Sánchez, Sánchez & Santos (2015), in their quest to analyze intellectual capital and its components, they carry out the contextualization of human capital as follows:

Human Capital consists of knowledge, skills, attitudes, ability to innovate and the experience of employees and managers to solve tasks. This knowledge is acquired through the process of education (formal and informal), socialization, recycling and updating of its activity (Rodríguez, 2012). Cañibano, Sánchez, García-Ayuso and Chaminade (2002) recognize that human capital is the knowledge that the employee takes when he leaves the company. It includes the knowledge, skills, experiences and abilities of the people who make up the organization.

Based on the above, this research seeks to answer the question: Is the Director considered as human capital of a mype an important factor that determines the closure of a company?

Methodology

This study was carried out as a collaboration in the research published in the book Factors that determine the closure of micro and small companies, Comparison between active and inactive companies in Mexico and Colombia (Peña, Aguilar & Posada, 2017). The data presented are part of an investigation conducted by the Latin American Network of Administration and Business (RELAYN) applied to mypes of Mexico and Colombia, which was carried out from a mixed approach, starting with the qualitative method, in which it was interviewed to people who had a micro or small business and who had closed in recent years, from which the categories for the instrument, quantitative non-experimental, in descriptive cross-sectional form emerge (Hernández, Fernández and Baptista, 2010).

The questionnaire was applied to the directors of the mypes located in 113 municipalities that were grouped in 74 zones. Each zone consisted of one or several municipalities that had common characteristics whose sample was determined using the following formula for finite population (Aguilar, 2005) in each of the zones:

$$n = \frac{N Z^2 pq}{d^2 (N - 1) + Z^2 pq}$$

Where:

N = population size

Z = confidence level (95%)

p = expected probability of success (50%)
q = probability of failure (50%)
d = absolute precision level

33,983 valid questionnaires were applied in person as a sum of the individual samples of the 74 zones. To validate the reliability of the instrument, Cronbach's alpha and Hotelling's square T test were applied. A sample of 33,297 companies was randomly made up of various sectors, of which 24,867 were active and 8,430 inactive companies. For the present study, the sample of 8,430 companies was taken and only the companies whose directors mentioned having been born in Mexico (question 20 of the questionnaire) were selected, finally leaving a sample of 6,418 inactive companies. The information was collected and captured from February 15 to March 31, 2017.

The analysis is based on section 6 of the questionnaire called Organizational Structure, using 15 of the 227 items that make up the RELAYN research cited above. The items analyzed are presented as affirmation, which should be assessed by the director of the participating mypes and provide a response from their point of view, using a seven-level scale where: 0 = I do not know what it refers to or did not apply to my company, 1 = No one did it, 2 = Someone outside the company did it, 3 = The director did it (sometimes with support), 4 = Anyone who was available at the time did it, 5 = A special person with several functions he did it, 6 = A special person dedicated only to that function did it and 7 = Several people dedicated only to that function did it. For the analysis of those 15 statements presented here, only the responses valued with 2 were quantified because they were functions that were not performed in the company, as well as those estimated with 3 because they are the options that allow the decisions made by the director to be assessed of the company.

Results

For the purposes of analyzing the information, the companies were grouped by years that lasted in operation, making four segments: from 0 to 2 years, the second segment of 3-5 years, from 6-10 years and those that managed to survive more than ten years. The information obtained shows us as a result that the average number of years a company operates in Mexico is 5.27 years, with a standard deviation of 5.84 years.

The highest percentage of companies closes in the first two years of operation (42%), as shown in the following graph, so this period is considered the most vulnerable time for Mypes in Mexico.

Graphic 1 Time the companies were active
Source: Own elaboration (2019)

The type of association that best describes the inactive companies analyzed is that they had only one owner and did not have their registration in the hacienda; in the case of companies that lived from 0-2 years, 71.2% did not have a registry, hence it is clear that there is a high percentage of mypes that started and closed without registering in the hacienda, the case is similar for companies that had the longest active life, as can be seen in graph 2, section B, which represents the highest percentage.

Graphic 2 Type of association
Source: Own elaboration (2019)

The vast majority of companies started with 5 or less workers, showing slight evidence that companies with more employees managed to survive longer.

Graphic 3 Number of permanent workers at the start of the company
Source: Own Elaboration

The results obtained regarding the relationship of the director with the founder of the company reflect that 71.78% of the Mypes were initiated by the director himself, although in the companies with greater seniority in greater proportion they were established by a relative or acquired from someone known or unknown who was the previous owner.

Graphic 4 Relationship with the founder of the company
Source: Own Elaboration (2019)

Regarding the main causes that the directors or owners of the company mentioned that influenced their decision to close their business, they are without significant difference with respect to the number of years that the lack of income to survive, the losses were in operation or zero sales, lack of capital to invest and various debts; however, where a greater difference can be observed is in the aspects of experience in the management of the company and the lack or poor planning.

Graphic 5 Causes of mype closure
Source: Own Elaboration (2019)

For the analysis of these 15 statements related to the organizational structure of the mypes, only the responses valued with 2 were quantified because they were functions that were not carried out in the company, as well as those estimated with 3 because they are the options that allow to assess the decisions taken by the director of the company, finding in general terms a similarity in their behavior, regardless of the time they were in operation.

	0-2 years		3-5 years old		6-10 years old		More than 10 years	
	The director did it (sometimes with support)	Nobody did	The director did it (sometimes with support)	Nobody did	The director did it (sometimes with support)	Nobody did	The director did it (sometimes with support)	Nobody did
Human Resources (hire, pay, etc.)	31.7%	52.8%	31.8%	49.5%	32.9%	48.5%	31.4%	51.3%
Market analysis (meet customers)	25.0%	53.7%	24.7%	53.1%	26.4%	50.8%	25.3%	54.5%
Supplier Selection	50.0%	22.1%	52.7%	17.8%	52.3%	20.1%	52.8%	19.8%
Purchases	52.8%	12.0%	53.3%	9.3%	51.3%	11.9%	56.3%	10.4%
Payments	55.6%	11.6%	55.3%	8.6%	54.5%	11.6%	55.2%	10.5%
Accounting and Finance	42.5%	28.8%	40.8%	25.1%	38.4%	26.4%	35.9%	25.7%
Strategic planning (planning growth)	30.8%	49.9%	30.3%	48.4%	29.7%	47.3%	30.4%	49.2%
Plans to increase sales	33.8%	44.8%	34.1%	42.4%	34.4%	39.8%	33.0%	44.3%
Sales	35.1%	15.7%	34.5%	14.4%	34.3%	16.3%	36.6%	15.3%
Customer service (e.g., handling complaints)	29.2%	28.6%	29.1%	24.7%	31.4%	25.5%	33.3%	28.6%
After Sales Service	20.4%	51.6%	21.4%	44.5%	21.4%	44.1%	22.2%	47.6%
Analyze and set prices	51.9%	18.1%	53.5%	15.8%	51.3%	16.3%	52.9%	15.7%
Promotion of products and services	33.1%	36.7%	35.4%	33.4%	32.8%	35.1%	35.1%	34.5%
Logistics and distribution (warehouse, transport)	24.4%	51.9%	25.5%	47.4%	25.5%	46.3%	26.7%	45.8%
Product improvement	35.7%	39.9%	39.3%	34.7%	36.9%	34.0%	36.8%	35.8%

Table 1 Personnel responsible for performing strategic functions
Source: Own elaboration (2019)

Discussion

In previous studies related to the causes or factors that impact the survival of mypes it has been shown that there is evidence that the size of the company at the beginning of operations is a factor that can be decisive to achieve its survival.

In the present investigation, the microenterprises were subdivided into 3 sections to analyze their behavior, with which it was observed that the companies that started with more than 5 workers had more active life time; However, there is not enough certainty to affirm that the greater the size of the company at the beginning of operations decreases the risk of closing.

When questioning the directors of the mypes in Mexico, they refer to the cause of the closure of their company that the income was not sufficient to subsist as well as the various debts acquired, which coincides with the revised literature, since this is mentioned on financial aspects of profitability and indebtedness as the main indicators of vulnerability in the mypes.

Another factor mentioned by the directors or owners of the mypes, were the low or zero sales and the lack or deficient planning in the company, in the latter with percentage variations with respect to the years that the company was active. When analyzing the person responsible for performing these functions in the company, it was possible to identify that on average 43.3% of the mypes do not make plans to increase sales nor did they have people assigned to perform this function and 33.8% of the directors of the mypes They refer to them making those decisions. Similarly, 49% do not carry out strategic planning focused on the growth of their business and only 30.4% of the directors performed this function.

Conclusions

The search for information and analysis related to mypes is significant in recent decades due to their relevance in the country's economy. In that sense, clearly identifying the causes of closure of Mexican mypes allows us to highlight the main challenges that entrepreneurs in our country face every day, being attentive to their environment to make decisions that defend and strengthen their business, analyze the market and administration aspects with the purpose of identifying the factors that could affect their sales or financial indicators, as well as the external environment that significantly influences the closing of the mypes in Mexico.

With respect to the research question, is the Director considered as human capital of a mype an important factor that determines the closure of a company? it is evident that the skills, abilities, experience and knowledge of the director or entrepreneur contribute to the success or failure of a business, but above all, there are important functions of the mypes that every entrepreneur must know and not lose sight of in order to assign the necessary personnel to support it. On the other hand, it is also important that government training and accompaniment strategies be established to strengthen the micro-entrepreneur, as well as to emphasize future managers or entrepreneurs of the importance of developing their knowledge and skills which will directly influence the company and through it in the economy of our country.

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