

Business innovation fosters the continuity of Mexico's Micro and Small Business**La innovación empresarial propicia la continuidad de la Micro y pequeña empresa de México**

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Abstract

The purpose of this research is to know, to identify and to analyze the factors that determine the closure of the micro and small business of Mexico Micro and Small Business (MSB) specifically in the application of business innovation, after reviewing the characteristics of the company, general information of the director, system's inputs, processes and system results. According to data from the National Institute of Statistics and Geography (NISG) in Mexico 99% of companies are micro, small and medium-sized, contribute to the country's growth with 52% of gross domestic product (GDP) and generate 74% of jobs. For Mexico these companies are an indispensable link for their growth, they are the basis of the Mexican economy. (INEGI, 2016) Despite its importance for the Mexican economy, these companies do not have the necessary means to develop themselves when facing problems that accelerate their closure causing the life expectancy of these companies to be 7.8 years in average trend that to this date has not been possible revert, so its consolidation in the national market is unlikely.

Micro small business, Clousure, Innovation**Resumen**

La presente investigación tiene como objetivo conocer, identificar y analizar los factores que determinan el cierre de la micro y pequeña empresa de México (MSEs) específicamente en la aplicación de innovación empresarial, previa revisión de las características de la empresa, información general del director, insumos del sistema, procesos y resultados del sistema. Según datos del Instituto Nacional de Estadística y Geografía (INEGI) en México el 99% de las empresas son micro, pequeñas y medianas, contribuyen al crecimiento del país con un 42% del producto interno bruto (PIB) y generan el 74% de empleos. Para México estas empresas son un eslabón indispensable para su crecimiento, son la base de la economía mexicana. (INEGI, 2016) A pesar de su importancia para la economía mexicana estas empresas no cuentan con los medios necesarios para desarrollarse al enfrentar problemas que aceleran su cierre provocando que la esperanza de vida de estas empresas sea de 7.8 años en promedio tendencia que a la fecha no ha sido posible revertir por lo que es poco probable su consolidación en el mercado nacional.

MSEs, Cierre, Innovación

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Introduction

The economic development of a country depends on factors such as the ease of undertaking business under a stable, competitive and innovative context, to strengthen economic activity. According to Drucker it is considered that the entrepreneur, thanks to his capacity for inventiveness, where others see difficulties, he sees opportunities for development. The innovator turns the problems of the company into sources of innovation. (Drucker, 1986).

Currently the Mexican economy is part of a changing and globalized market, so that companies, especially MSEs under study, initiate a process of adaptation and change towards the realization and satisfaction of the marked, growing and varied needs of their customers. For some authors like Kalthoff, (1998) the innovation is all activity directed to the generation and application of new knowledge, for its part Mansfield, offers us this definition which has two clearly differentiated parts: the creation of the idea and its exploitation; where the creation of the idea tries to find a new or non-conceived way of doing something, a new knowledge. On the other hand, exploitation includes commercial development, application and transfer of knowledge and results; this will be the fundamental stage in the innovative process, since "it leads to the full assessment and use of an invention". (Mansfield, 1968).

Given the economic environment in which micro and small businesses participate, it is important to create strategies and support mechanisms, that is, they must have a strategy that facilitates and encourages business innovation that allows them to access new business opportunities. (INADEM, 2018)

This paper presents the quantitative results obtained through the application of the survey to know the factors that determine the closure of the micro and small business in Mexico. (Peña Ahumada, Aguilar Rascón, & Posada Velázquez, 2017) specifically in the innovation section, identifying the result between the MSEs that continue in the market and those that have closed.

Justification

Micro and small businesses face daily problems that become challenges. For these companies, business innovation represents a challenge and an obligation. Relearning and changing the way of doing work, allows organizations to adapt to changes, develop new ways of working, make efficient tasks that were routine. Innovation enables employees to carry out a greater number of activities by contributing ideas of improvement that generate benefits to the organization, becoming productivity and competitiveness. Thus, innovation is the bible and competitive advantage of the MSEs for the permanence in the market, where the statistics are not very encouraging and based on the fact that the companies in question are the backbone of the economy in Mexico, hence its importance for your analysis and study.

Problem

The belief of the directors of micro and small enterprises about "innovate represents technology" that means cost. The innovation in these companies is of processes and management models. (Ponce Regalado & Zeballos Vallejos , 2008)

Innovation is a factor that encourages the continuity of micro and small businesses in Mexico, it is convenient to know if they are carrying it out or not and with what results.

Are MSEs innovating in order to survive? and the MSEs that did not survive applied the innovation in their activities?, if the continuity of the companies in study must have as a main competitive advantage the innovation it is important to know the results of this investigation where the statistics of the micro and small are shown companies that use business innovation.

Investigation questions

Do the directors of the micro and small companies in Mexico promote that employees propose changes in products, services and processes?

Do you offer new products or services based on suggestions from your customers?

Do they focus on offering innovative products or services that distinguish the company?

Do they develop or pay to innovate in production and distribution processes in products and services?

Do they propose and practice new procedures in the form of the organization of the company?

Do you attend fairs, courses, congresses and other activities related to the business?

Hypothesis

The directors of micro and small companies do not implement business innovation to stay in the market, which makes them too vulnerable and causes the disappearance of many of them.

Overall objective

To know if the directors of micro and small companies implement business innovation, to promote the continuity of the MSEs in Mexico and the effect that implementation has on the closing of operations of these companies in recent years.

Theoretical framework

Globally, business innovation is considered the key to success and competitive advantage for the company. According to the Global Innovation Index 2018, Mexico is on site 56 of an analysis of 126 countries, where place number one is occupied by Switzerland, site 126 is for the country of Yemen. Each year, the Global Innovation Index classifies the innovation performance of almost 130 economies around the world. Next, we present the leading countries and main regions in innovation by score. In North America, the United States and Canada are leaders in innovation; in Europe in the first place is Switzerland, followed by the Netherlands and Sweden; in North Africa and Western Asia, Israel, Cyprus and the United Arab Emirates occupy the first innovation sites; In Southeast Asia, East Asia and Oceania, the leading innovation countries are: Singapore, the Republic of Korea and Japan; In Latin America and the Caribbean, the leaders in innovation are the countries of Chile, Costa Rica and Mexico; in Sub-Saharan Africa the leading countries are South Africa, Mauritania and Kenya; in Central Asia and South Asia the first places in innovation are: India, Iran and Kazakhstan. Global Innovation Index (Soumitra Dutta, 2018).

Continuing with the analysis of business innovation, we continue with the definition of Medina "The term" innovate "etymologically comes from the Latin innovare, which means to change or alter things by introducing novelties. (Medina Salgado & Espinoza Espíndola, 1994). Meanwhile the concept of innovation introduces him to the economic world Joseph Schumpeter by saying that innovation is to impose a technical or organizational innovation in the production process and not just to mention inventions. Quoted by (Montoya, 2004).

Reaffirming the concept of business innovation, the OECD tells us that "Innovation consists of the introduction of new products, goods, services and processes, or the introduction of a method of marketing or organization applied to business practices to the organization of work or relationships. external. " Definition proposed by the Organization for Economic Cooperation and Development (OECD) becoming standard for its members. The Oslo Manual points out. (Zozoya, 2005).

For this research innovation is to do the same thing that everyone does in a different way and with their own creativity in their products, processes and administration.

Below are the types of innovation in this research:

1. Product innovation, represents new products and services or important changes in its characteristics, functional, technical specifications, components and materials.
2. Process innovation means a new production method or distribution or with a high degree of improvement. It includes important improvements in techniques, equipment and / or software.
3. Organizational innovation is the implementation of a new method of organization, applied to business practices, the workplace or external relations of the company.
4. Marketing innovation indicates the implementation of a new marketing method, its presentation, or its positioning, promotion or price policy, reflects the implementation of new marketing methods. (OECD, 2005).

Business innovation is part of the main competitive advantages for many of the MSEs that excel and survive the discouraging statistics. With the previous types of innovation in the product, process, organization and marketing, the companies under study will have several business innovation options that help them to be successful MSEs.

Therefore it is very important to mention the "diagnosis of micro and small business in Mexico" By Solleiro (1998). In this diagnosis of the micro, small and medium-sized company carried out by Dr. José Luis Solleiro and M.I. Rosario Castañón of the Institute of Engineering of the UNAM in 1998, identify the problems facing MSMEs, expressed by employers and classified by the authors in nine major areas and that to this day are still not resolved in its entirety:

1. Problems related to education such as:
Lack of training and business culture
2. Problems related to fiscal policy
3. Problems related to information
4. Disinformation with respect to supports
5. Problems related to financing. High interest rates.
6. Problems related to technological assistance.
7. Problems related to marketing
8. Problems related to legislation
9. Problems related to the business environment. (Institute of Legislative Research of the Senate of the Republic, 2002)

It is clear that one of the challenges and competitive advantage is innovation in the micro and small business. One of the main problems experienced by MSMEs in Mexico is the lack of innovation. Many times they cannot cope adequately with competition because they lack design, innovation and development strategies. Achieve success in the current environment of the business world with high level of competitiveness, demand effort, useful knowledge, communicable and applicable in the implementation of innovation strategies, design and development.

Therefore, the micro and small companies require value created in their products specifically value-knowledge that consists of adding knowledge within the products, but also within the entire organization.

Knowledge about the national and international environment, about the ways of consuming, about the ways of producing, about the way of relating to customers, suppliers, intermediaries and competitors, about ways to protect its usefulness and expand your business. (Castellanos Méndez, 2003)

Therefore innovation is generated by people, if they have an excellent academic training with adequate academic programs and are prepared for the development of skills that favor their formal education, they will be enabled to innovate.

At the same time systems for education and professional training require reforms to ensure that they are efficient and meet the needs of today's society. Improving teacher quality is especially important to improve results. Institutions of higher education are fundamental to the innovation system; produce and attract the human capital necessary for innovation.

On the other hand, higher education institutions are fundamental to the innovation system; they produce and attract the human capital necessary for innovation. Entrepreneurs, governments and countries in more open and wider innovation systems are indispensable bridges between the participants.

It is concluded that entrepreneurs have a special place as they are participants that help turn ideas into practical applications. Education and training policies should help foster an entrepreneurial culture by instilling the skills and attitudes necessary for a creative and innovative push. (OCDE, 2010)

Methodology

In January 2016 the Network of Latin American Studies of Administration and Business (Relayn) was created with the objective of studying micro and small in Mexico. In 2017, based on the systemic analysis of these companies, it was determined to identify which factors analyzed the reasons why the companies close or because they believe the directors of companies that are operating that could close.

In February 2017 the pilot test was carried out with a quantitative instrument, for which 60 students of the Technological University of San Juan del Río were trained, assigned to the Business Engineering and Business Management of the sixth semester for the collection and data capture according to the protocol, and 82 valid Mype questionnaires were collected from 53 open and 29 closed companies.

In March, Relayn members carried out the gathering of information collected. 33983 valid questionnaires were applied in person in establishments of the MSEs, located in 113 municipalities and grouped into 74 zones, with the support of 9413 students. (Peña, Aguilar, Velázquez, 2017)

The questionnaire was designed to be answered on paper by the director of the company; the students who participated were responsible for capturing the data collected on a platform, via Internet, created for that purpose.

The present investigation was carried out using a mixed method, starting with the qualitative method, in which people who had a micro or small business and who had closed in recent years were interviewed. The quantitative instrument mentioned above was used as the study investigates factors that determine the closure of micro and small enterprises in local contexts and to know if there is a difference between active and inactive companies with respect to the application of innovation in them. (Peña, Aguilar, Velázquez, 2017)

Results

An analysis of the results obtained from the system processes section in the innovation section will be carried out. The instrument was made up of five variables:

1. Financial aspects with 7 items
2. Market aspects with 4 items
3. People and administration with 5 items
4. External factors with 5 items
5. Technology with 3 items

All with a Likert scale of 4 points, (Peña, Aguilar, Velázquez, 2017) where 5 is very agree, 4 agree 3 disagree, 2 strongly disagree 1 Do not know / Does not apply / Did not answer

33,297 questionnaires were applied, of which 25,867 were active companies and 8,430 were inactive companies.

Once the reliability tests of the applied and registered instruments were carried out, they yielded the following results:

Of the companies that closed 51%, it was run by men and 49% by women. The average age of the directors who closed their company is between 40 and 44 years old married by 62% and their educational level as a maximum of secondary and high school concluded, having been the founders.

Now we present the statistical results of this investigation starting with table number one.

Scale	Percentage of companies	
	Active	Closed
Strongly agree	20%	14%
In agreement	37%	31%
In disagreement	19%	25%
Strongly disagree	6%	11%
I do not know, he did not answer	18%	19%

Table 1 I encourage employees to propose changes in my products, services and processes.

Source: Self Made

In table 1. The results indicate that 57% of entrepreneurs who own active companies, agree to receive proposals from their employees about products, services and processes. In the case of owners of companies that have closed they do not agree to receive such proposals at 25%, a percentage that is higher for the case of companies that are still operating.

Next we present table number two.

Scale	Percentage of companies	
	Active	Closed
Strongly agree	28%	20%
In agreement	46%	40%
In disagreement	13%	21%
Strongly disagree	4%	7%
I do not know, he did not answer	9%	12%

Table 2 I frequently offer new products or services based on suggestions from my clients.

Source: Self Made

With respect to the generation of new products and services based on customer suggestions, 75% of the owners of active companies agree, understanding that customers are the basis of any business, they acquire from companies what they they need. Companies that have already closed their opinions disagreed by 60%, as shown in table 2.

Now we present table number three.

Scale	Percentage of companies	
	Active	Closed
Strongly agree	28%	18%
In agreement	41%	35%
In disagreement	15%	24%
Strongly disagree	4%	8%
I do not know, he did not answer	12%	15%

Table 3 I focus a lot on offering innovative products or services that distinguish the company.

Source: *Self Made*

According to table 3, 69% of the companies visited, their owners thought that they focus on offering innovative products or services that distinguish their company, since it is one of the characteristics that generate competitiveness in companies and allows his stay in the market. The companies that have closed agree with only 53%. It is important to note that staying in the market is closely related to innovation.

Now play the place to table number four

Scale	Percentage of companies	
	Active	Closed
Strongly agree	15%	9%
In agreement	30%	22%
In disagreement	22%	30%
Strongly disagree	8%	14%
I do not know, he did not answer	25%	26%

Table 4 Development or payment to innovate my production or distribution processes.

Source: *Self Made*

Table 4 shows how the owners of companies that are currently operating, agree in 45% to develop or pay to innovate in production and logistics processes, versus 31% of the companies that have closed.

Below is table number five.

Scale	Percentage of companies	
	Active	Closed
Strongly agree	15%	8%
In agreement	31%	22%
In disagreement	22%	29%
Strongly disagree	8%	14%
I do not know, he did not answer	24%	26%

Table 5 Development or payment to innovate the products or services that I offer.

Source: *Self Made*

Developing or paying to innovate in products and services represents 46% of the directors who agree to active companies, which allows them to generate income and 30% in the case of companies that have closed.

Now table six is presented.

Scale	Percentage of companies	
	Active	Closed
Strongly agree	15%	9%
In agreement	30%	22%
In disagreement	21%	29%
Strongly disagree	8%	13%
I do not know, he did not answer	26%	27%

Table 6 Development or payment to innovate the way in which I sell my product or service. (Design, packaging, promotion, form of quotation, etc.)

Source: *Self Made*

Regarding Table 6, 45% of the respondents of active companies, say they agree to develop or pay to innovate in the way of selling; On the other hand, the companies that have closed, only 31% agree.

Below is table number seven.

Scale	Percentage of companies	
	Active	Closed
Strongly agree	13%	7%
In agreement	29%	20%
In disagreement	23%	31%
Strongly disagree	9%	14%
I do not know, he did not answer	26%	27%

Table 7 Development or payment to innovate the way in which I organize the company.

Source: *Self Made*

Develop or pay to innovate in the way of organizing the company, the active companies are in agreement in 42%, while those that already closed only agree in a 27% according to the table 7.

Touch the turn to table number eight.

Scale	Percentage of companies	
	Active	Closed
Strongly agree	16%	9%
In agreement	25%	18%
In disagreement	20%	26%
Strongly disagree	11%	16%
I do not know, he did not answer	28%	30%

Table 8 I attend fairs, courses, congresses, or other activities related to the business.

Source: *Self Made*

Finally attending trade fairs, courses and congresses related to the business allows to know market trends and meet new products, 41% of the directors of active companies agree and in the case of companies that have closed, only 27% are in agreement.

Conclusions

According to INEGI, most of the micro and small companies belong to the commercial and services sector. One of the main problems they face is competition, this challenge is greater when they face medium and large companies, which excel them among other things: greater negotiation capacity and competitiveness, which hinders their growth and consolidation.

Micro and small companies, do not spend much capital or effort on the issue of innovation, this causes their life in the market is extremely short.

The development market of the MSEs is generally limited to local sales that allow them to satisfy the demand of their customers. The income they generate covers the operating costs of their activity, therefore it is difficult for them to compete nationally and internationally.

Innovation is a strategic risk, which represents change, improvement, movement and promotes the continuity of companies in the market.

A company initiates innovation when: It implements new distribution and logistics production processes, implements new methods in the organization of the company, improves its products and services and finally, when it changes the way of marketing its product.

It is essential that the managers of the micro and small business recognize the need and importance that this tool has to ensure its growth and permanence in the market.

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