

Competitive strategies of micro-entrepreneurs in southern Tamaulipas after the Covid-19 pandemic

Estrategias competitivas de microempresarios del sur de Tamaulipas después de la pandemia por Covid-19

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Abstract

The largest and weakest sector of an economy is that of microenterprises, as they generally operate in isolation and lack the administrative training necessary to optimize business management, nor do they have the financial resources to systematize or invest in technology. This paper presents the exploration phase of a research project aimed at identifying the profile of micro-enterprise leaders in the urban area of southern Tamaulipas. A questionnaire was used, and a stratified convenience sample was selected. Findings reported here include the average age of these leaders belonging to the millennial generation, with an average level of education exceeding high school completion. However, technologies and marketing strategies are not widely adopted. 76% attribute their competitive strength to the knowledge and guarantees offered by their products, and 60% recognize that listening to their customers is paramount. 76% of businesses are family-owned.

Resumen

El sector más grande y débil de una economía es el de las microempresas, ya que generalmente operan de forma aislada y carecen de la capacitación administrativa necesaria para optimizar la gestión empresarial, ni de los recursos financieros para sistematizar o invertir en tecnología. Este trabajo presenta la fase de exploración de un proyecto de investigación destinado a identificar el perfil de los líderes de microempresas en la zona urbana del sur de Tamaulipas. Se utilizó un cuestionario y se seleccionó una muestra estratificada por conveniencia. Los hallazgos reportados incluyen la edad promedio de estos líderes de la generación millennial, con un nivel promedio de educación superior a la preparatoria. Sin embargo, la adopción de tecnologías y estrategias de marketing no es generalizada. El 76% atribuye su competitividad al conocimiento y las garantías que ofrecen sus productos, y el 60% reconoce que escuchar a sus clientes es primordial. El 76% de las empresas son familiares.

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Objetivos	Methodology	Key findings / Contribution
<ul style="list-style-type: none"> Characterize micro-entrepreneurs (n=25) Identify competitive strategies, use of technology and management Recognize strengths and areas for improvement Online, telephone and paper survey 	<ul style="list-style-type: none"> Cross-sectional, non-experimental, qualitative & interpretative Universe: 7,942 micro-businesses (Tampico, Cd. Madero, Altamira) Convenience stratified sample (90% confidence) Validation: 5 experts + pilot (n=5) Analysis: graphs in Excel + qualitative coding 	<ul style="list-style-type: none"> Millennials predominate; medium-to-high education level Family businesses; long working hours (12.2h) Customer needs guide strategies Reliable local suppliers Use of Internet, barcode, computer

Retail trade, urban economy, formal and informal employment

Estrategias competitivas de microempresarios del sur de Tamaulipas después de la pandemia por Covid-19

Objetivos	Metodología	Hallazgos clave / Contribución
<ul style="list-style-type: none"> Caracterizar a los microempresarios (n=25) Identificar estrategias competitivas, gestión y uso de tecnología Reconocer fortalezas y áreas de mejora Encuesta en línea, telefónica y en papel 	<ul style="list-style-type: none"> Estudio transversal, no experimental, cualitativo e interpretativo Universe: 7,942 micronegocios (Tampico, Cd. Madero, Altamira) Muestra estratificada por conveniencia (90% de confianza) Validación: 5 expertos + piloto (n=5) Análisis: gráficas en Excel + codificación cualitativa 	<ul style="list-style-type: none"> Predominan millennials; escolaridad media-alta Negocios familiares; jornadas largas (12.2 h) Las necesidades del cliente guían las estrategias Proveedores locales confiables Internet, código de barras, computadora

Comercio minorista, economía urbana, empleo formal e informal

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Introduction

The general population requires information to make the most appropriate decisions for their needs. Business owners or managers can perform better and make their work more efficient if they have the right tools to organize their activities. Strategic planning, which necessarily includes data and statistical recording and adequate logistics in business operations, always brings short- and long-term benefits, whether for a large company or a micro-enterprise.

Records of all types of businesses or economic units in Mexico are available online through the National Statistical Directory of Economic Units (DENUE) of the National Institute of Statistics and Geography (INEGI) (INEGI, 2021b). The Ministry of Economy categorizes companies according to their size, which includes the number of people employed and the amount of their annual sales, but also by their economic activity, associated with the 2013 North American Industrial Classification System (Dini & Stumpo, 2020). This stratification is used by INEGI in its instruments such as the National Survey on Productivity and Competitiveness of Micro, Small and Medium-sized Enterprises (INEGI, 2019) and economic censuses.

According to the aforementioned indicators, micro-enterprises have between 0 and 10 employees and an income of up to \$222,517.20 USD in annual sales (Dini & Stumpo, 2020; Ministry of Economy, 2009). The economic activity sectors stratified by INEGI (2016) are shown in Figure 1, where manufacturing industries accounted for 23.6% of the Gross Domestic Product -GDP- and the trade sector was the fastest growing in real terms at 4.4%.

The 2019 economic census in Mexico showed that Micro, Small and Medium-sized Enterprises -MSME- accounted for 93.6% of all economic units in the private and parastatal sectors and employed 43.3% of the workforce (INEGI, 2021a). Of this universe of MSMEs, 97.5% are micro-businesses, while small businesses represent only 2.4% of the total and medium-sized businesses 0.1%.

Considering the economic activity of MSMEs in 2019, as shown in Figure 1, 46.4% of the total corresponded to trade, 40.6% to non-financial private services, 12.4% to manufacturing, and 0.6% to other economic activities (INEGI, 2021a). Thus, commercial activity was predominant in micro-enterprises, mainly because it was an affordable economic alternative for almost any type of person.

Box

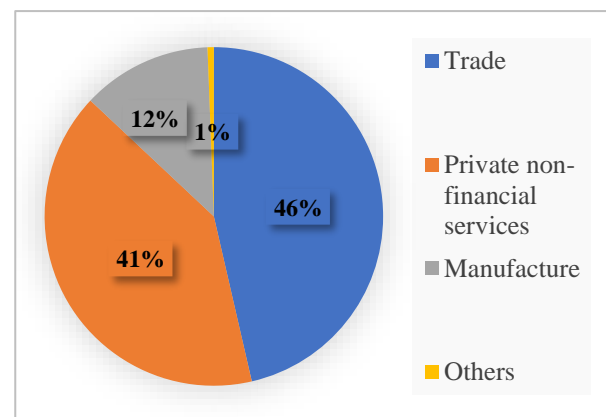


Figure 1

Economic activity of MSMEs in Mexico

Source: Owned based on (INEGI, 2021a)

1. Background

In Latin America, MSMEs are a fundamental component of business fabrics. However, their contribution to GDP is only 30%, which means that, due to their heterogeneous structure and low value-added products, there is a productivity gap (Stezano, 2020). These gaps include organizational and administrative capacities, technical and technological resources, management, and positioning on social media.

Productive development for the MSME sector in Latin America has been promoted through a strategy that includes: 1) defining its importance based on heterogeneous characteristics, potential for each subgroup, and scope of the project; 2) clarity of economic and competitiveness objectives, in addition to social objectives; 3) the location of these objectives within national economic policy; and 4) the sustainability of the project through its continuity, evaluation, feedback, and strengthening towards the institutional maturation of the instruments (Stezano, 2020).

In Mexico, the importance of MSMEs was significant in 2013 due to: productivity in the manufacturing sector, 48% of the total; the number of companies in the trade sector, 48.3% of establishments; and a certain predominance of the service sector as an employer, 38% of total employed personnel, while for the trade sector it is 29.6% (Stezano, 2020).

Micro-enterprises contributed 7.08% to GDP, while medium-sized enterprises contributed 7.47% and small enterprises 13.15%. Although the share of census value added to production was much higher in the commerce sector for micro-enterprises (67%) compared to other sectors or company sizes, this sector experienced difficulties in productivity and profitability, with indicators of decline of -4.6% and -10.2%, respectively, during the period 2008-2011 (Stezano, 2020).

1.1 MSMEs in Tamaulipas

In 2018, the state of Tamaulipas, in northeastern Mexico, was home to 2.27% of Mexico's MSME establishments, with 2.34% of the employed workforce (INEGI, 2021a). Tamaulipas ranked 10th out of 32 states in terms of GDP per capita, with \$10,623.94 USD and in terms of GDP growth (-0.2%). Tamaulipas ranked 14th in average income for full-time workers with \$437.15 USD and 13th in terms of people with incomes below the welfare line (0.99% of the employed population).

However, it ranked 8th in terms of people with incomes above the state average in relation to the employed population (28%). In terms of the economically active population receiving job training (2%), it ranks 25th in the country (IMCO, 2021a).

In particular, the southern metropolitan area of Tamaulipas, comprising Tampico, Ciudad Madero and Altamira, Tamaulipas, together with the Veracruz municipalities of Panuco and Pueblo Viejo, had a population ranging from 500,000 to one million inhabitants, and ranked 14th out of 25 in the 2021 Urban Competitiveness Index of the Mexican Institute for Competitiveness, a non-governmental organization. This area ranked 19th out of the 69 analyzed in terms of people below the welfare line of the economically active population, with 13.5%. The monthly salary for full-time workers was \$441.82 USD, above the average for Tamaulipas (IMCO, 2021b).

Thus, southern Tamaulipas had 47.5% of the employed population in informal employment, ranking 42nd out of the 69 analyzed, while 22.5% of the employed population had no income, placing the area 27th out of 69. In terms of technological access, 93.3% of households have mobile phone lines, but only 36.3% of households have a computer and internet access (IMCO, 2021b).

During 2019, the economic census in Tamaulipas showed that 45.6% of male owners and 50.6% of female owners of MSMEs were aged 41 or older. Meanwhile, the educational level of the staff of these establishments was basic education in 46.3% of cases for female owners and 42.8% for male owners, both below the national average. In terms of staff training, the census also showed that only 0.9% of female owners did so at a higher rate than the national average, while 1.5% of male owners did so at a lower rate than the national average. In terms of staff turnover, in both cases of female and male owners, the averages are higher, 14.6% and 14.2%, respectively, than at the national level (INEGI, 2021a).

Regarding the technological resources used by MSMEs, only 10.3% of female owners and 20.3% of male owners had computer equipment, while 8.7% of female owners and 17.5% of male owners used the internet in their establishments. Based on the above, it is understood that only 2% of MSMEs made sales over the internet; while 91.2% of female owners and 82.1% of male owners used cash as a means of payment for their purchases, and 92.9% of female owners and 83.9% of male owners did the same for their sales (INEGI, 2021a).

The proportion of informal MSMEs was 78.4% for female owners and 64.2% for male owners. This means that they do not pay employer contributions or social benefits to their staff, nor do they have accounting, legal or administrative services, nor do they spend on marketing or business advice. Of all the staff employed by female owners, 65.2% are in informal MSMEs, compared to 45.5% of staff employed by male owners (INEGI, 2021a). In other words, women tend to be more informal than men in MSMEs.

These differences between male and female micro-business owners in Mexico have been studied and mainly affect business continuity, based on their level of education. However, if the business was started with the aim of practicing their profession, then women are more stable (Ortiz Rodríguez, Picazzo Palencia, & Alvarado Lagunas, 2020).

This allows us to visualize a dynamic, heterogeneous, but competitive area, since in some areas it is in a medium-high position and very few elements are in a low position, such as the gender gap in the workforce and wage inequality in the same sense - for which it ranks 60th and 64th, respectively, out of 69 (IMCO, 2021b). Of no less importance during 2022 was the impact of human migration flows, generally from Central America.

In this context, retail trade is one of the most common activities in this geographical area of southern Tamaulipas, and retail stores are a business model where senior citizens seem to be the usual owners, as well as the next generations of their families. Women also play a very important role, often without receiving a salary, and empiricism predominates, as training or administrative education, for example, is not common (Varela Villegas, 2008).

1.2 Other studies on MSMEs

In various studies that have been carried out on the characteristics of leadership in MSMEs, the heterogeneity of this productive sector itself and in the different regions of Mexico can be noted because some choose to let their employees make certain decisions without supervision, which Rojero-Jiménez, Gómez-Romero and Quintero-Robles (2019) call *laissez-faire*.

Although its scope is ambiguous, the authors point out that it is the 'result of the activities achieved by subordinates, due to an almost indecipherable mixture of trust in their leader, whom they want to imitate and who knew how to sell them a shared vision that, without being permanently close to them, taught them what to do and how to do it' (p. 185).

In addition to the above characteristics, Rojero-Jiménez and his colleagues in the state of Durango found that the leader's concern for improving the living conditions of their employees is a statistically significant factor with the type of employees they have.

This is related to: learning and acceptance of change, effective communication, contribution to the group, emotional intelligence and ease in supporting others, and flexibility (2019).

Márquez Gómez, Bobadilla Beltrán, and Carreño Saucedo (2020) found in the state of Mexico that the level of leadership of MSME entrepreneurs is low for 38.9% of the sample, which implies the need for training in motivation, teamwork, innovation, and risk-taking. However, the percentages are higher for attitudes such as challenging processes with 42.5%, encouraging others, 43.7%, enabling others to act with 45.8%, modelling the way, 46.7%, and inspiring a shared vision with 49.7%. This involves knowledge, skills, and attitudes when designing training for microentrepreneurs.

A study in the state of Aguascalientes on business philosophy in MSMEs links leadership characteristics with total quality management models in organizations. Loza-Covarrubias and Hernández-Castorena (2021) studied leadership associated with the European Model of Business Excellence, concluding that it is partially established that senior management leaders—owners, managers, directors—are the ones who establish the mission, vision, values, and ethical principles, so that they can be the reference model for their employees. These results barely exceed half of the required score in companies of all three sizes—micro, small, and medium—but it is noteworthy that they are not far off, ranging from 55% to 63%.

According to the results of this research, MSMEs have weaknesses in terms of leadership, including: a) having a clear vision for the future and a well-established mission, b) having a leader who acts as an example to employees in terms of organizational values, c) having clear objectives in organizational management so that the leader can establish an effective strategic route, d) evaluating the performance of leaders in the organization to bring about continuous improvement. The leaders of micro-enterprises have an entrepreneurial profile, so the improvement of their skills must be based on their areas of opportunity and the context in which they operate. Leadership in the organization is the ability to achieve sustainable results over time, which requires defining a strategic direction that allows it to develop competitive advantages (Gutiérrez Pulido, 2020).

Formal programs have been proposed for the development and professionalization of leaders of small and medium-sized enterprises (IMCO, 2021c) with the primary objective of integrating them into production chains. Something similar could be proposed for micro-enterprises in their context.

On the other hand, the social responsibility of MSMEs is a characteristic that leaders must bear in mind in order to maintain a relationship with the environment that allows for sustainable development, which enhances both their financial and social development (Cañizares Arévalo, 2020). This aspect is very important because micro-entrepreneurs generally focus on economic factors and customer satisfaction, which are linked, followed by employees, and almost never on the environment.

The results of this study by Cañizares Arévalo show the need to sensitize and raise awareness among business units to ‘create a culture of environmental and social responsibility, where real commitments are made to the rational use of natural resources geared towards sustainable development’ (2020, p. 114). This study also found that micro-enterprises do not apply good governance practices – ethical behavior 23%, transparency 19%, respect for human rights 13% – nor do they have a culture of solid waste separation. However, micro-entrepreneurs expressed their willingness to move towards corporate social responsibility.

Considering that the scarce resources of households become the main asset for obtaining survival income without visualizing their development, at least in a formal micro-business (Ramírez López, 2019), these initiatives remain between economic, fiscal and labor formality and informality.

During 2023, female workers predominated in microeconomic units with 50.5%, compared to 49.5% of men (INEGI, 2025). The characteristics outlined above are particularly noticeable in marginalized or rural areas (Alonso Olivares, 2020). This leads to the identification of the need for micro-enterprise owners or leaders to have the skills to improve the performance and productivity of their businesses.

One of the basic elements is the recognition of the need for ongoing training to exchange knowledge and increase the competitiveness of the business (Alcívar Mero, Alarcón Chávez, & Ferrin Schettini, 2020).

One of the aspects that evolved exponentially in micro-businesses survived and improved during the pandemic, and those that were created because of it, is technology and marketing methods, including social media, for example. The digital transformation of microbusiness processes has involved requirements for computer equipment or mobile devices, but also various types of applications, innovative services such as payments and bank transfers, the use of barcodes or QR codes, and many others that have also triggered the need to anticipate very sensitive issues such as information security or cybersecurity (Garduño Guevara, 2025). This is no small task, and owners must be trained to do it.

The challenge or utopia will be to use all resources effectively and consistently, to develop the organization’s capabilities, so that knowledge management – embodied in manuals and procedures, for example – advances to give rise to a learning organization (Adams & Schmelkes, 2008).

1.3 Context of the study

The objective of the present study was to identify the characteristics of microentrepreneurs located in the southern urban area of the state of Tamaulipas, which includes the municipalities of Ciudad Madero, Tampico, and Altamira, by applying a questionnaire and a semi-structured interview to a sample of those registered by INEGI. This proposal made it possible to qualify the environment of the most vulnerable business sector in the southern part of Tamaulipas, which led to the design of a relevant training proposal for this sector of microentrepreneurs as an alternative for development.

In addition, the study was conducted after the long period of lockdown due to the Covid-19 pandemic, in the summer of 2022. During this process, people changed their habits in every way, including those related to the purchase of goods, which triggered new business models with online shopping, but also closed commercial options that did not adapt to the new circumstances.

In accordance with the federal policy to promote MSMEs (Ministry of Economy, 2024), this project was proposed as a social benefit for micro-entrepreneurs located in the urban area of southern Tamaulipas.

2. Methodology

This work is a cross-sectional study, as the information was collected in a short period of time. It is non-experimental, qualitative, and interpretive (Hernández Sampieri, Fernández Collado, & Baptista Lucio, 2014), and aims to identify the characteristics of microentrepreneurs engaged in retail trade through shops in the urban area of southern Tamaulipas.

The universe to be studied includes 7,942 retail establishments with 0 to 5 employees, registered with DENUÉ (INEGI, 2021b) for the area under analysis, distributed as follows: 4,611 in Tampico, 2,054 in Ciudad Madero, and 1,277 in Altamira. A convenience sample was chosen for reasons for personal safety of the researchers.

The Survey on Competitiveness Strategies for Microbusinesses by Meléndez and Sotalero (cited by Alonso Olivares, 2020) was used as the base instrument, which was properly validated for application in the context under investigation. The semantics and scope of the instrument were reviewed by a panel of five experts. The recommended modifications were made and captured in the Google Forms application. It was applied to five microentrepreneurs who did not belong to the selected sample to validate the interpretation and receive feedback.

This instrument included indicators to recognize the competitive and differentiating strategy used by microentrepreneurs - identification of their customers' requirements, their sphere of influence, benchmarking and their strengths vis-à-vis the competition, as well as their marketing strategies and the technological resources they use—how they manage their businesses—planning their activities, personnel management, leadership and decision-making—and what their strengths are vis-à-vis the competition—supplier network and its effectiveness, as well as areas for improvement.

The final instrument was initially sent as an online electronic questionnaire to each of the microentrepreneurs in the sample, either by email or via a mobile social network, according to publicly available information. In cases where these communication channels did not work, telephone contact was established, and in several cases the questionnaire was administered in person in a semi-structured interview format. The responses to the questionnaire were then recorded.

The collection of information was a challenge, given the doubts and fears of microbusiness managers and owners. The process was slow and fraught with difficulties beyond the scope of this study. Some of these difficulties may be associated with the irregular fiscal situation in which they find themselves, as they are associated with family work, as identified by Ramírez López (2019).

This document presents an exploratory and cross-sectional approach carried out in the summer of 2022. The findings were organized using Excel and analyzed. A basic analysis of the open-ended responses was also carried out to qualitatively interpret the characteristics of micro-entrepreneurs.

3. Results

This section presents and analyses the results of each of the aspects considered in the questionnaire applied during the research and finally provides a general profile.

3.1 Demographics of microentrepreneurs

In this study, 25 responses were collected and captured for exploratory analysis. 11 responses were from men and 14 from women. 8 of them live in Tampico and 17 in Ciudad Madero. 15 of the 25 respondents were born in southern Tamaulipas. 3 of the people who answered did not indicate their place of birth.

The average age of the owners is 40.84 years with a standard deviation of 11.36, with a minimum of 21 years and a maximum of 77 years. In this case, it can be observed that the millennial or 'Y' generation (Iberdrola, 2017) is the predominant one. This situation had not been established as a hypothesis at the start of the research.

Half of the people (13/25) are single, 9 declared themselves married, and only 3 divorced or separated.

The educational level of the people was measured using a Likert scale, where 1 is primary school completed, 2 is secondary school, 3 is high school, 4 is an incomplete bachelor's degree, and 5 is a completed bachelor's degree. The average educational level of the sample is 3.52, which implies that the level of schooling is higher than high school, with a standard deviation of 1.26.

Something that caught our attention was the responses about speaking another language. This question was included with the expectation of finding someone of Indigenous origin who spoke the language of their parents, for example. The result was nil in that regard, but four people were found who speak English and two of them speak another language like French or Portuguese. Above all, the case of Portuguese is unexpected, unless there are immigrants among the surveyed population.

3.2 Micro-enterprises

The line of business of the surveyed businesses, as shown in Figure 2, is retail grocery stores, such as convenience stores or mini-supermarkets (10), stationery shops (4), bakeries or tortilla shops (3), computer and printing services (3), laundries or dry cleaners (2), flower shops (2) and a café. All have a maximum of five employees (1), although most (10) have only one employee, and six have none, because they are the ones who directly run the microbusiness.

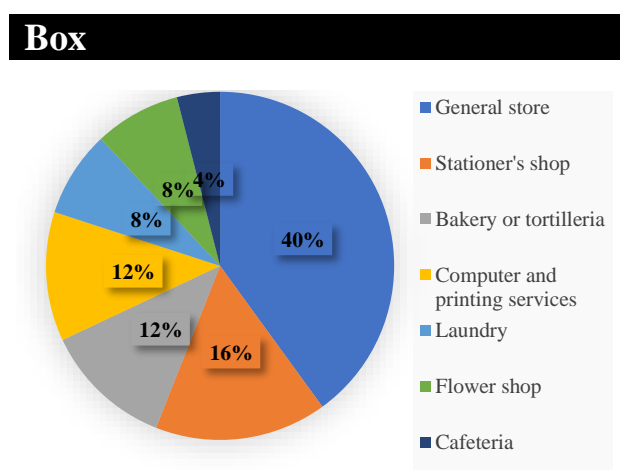


Figure 2

Business focus of micro-enterprises

Source: Owned

In relation to the demographics of the micro-enterprises surveyed: 19 out of 25 are family-owned micro-enterprises, 3 are non-family-owned, and 3 preferred not to answer.

The average age of the business is 10.26 years, with a minimum of six months and a maximum of 30 years. However, one-fifth of the total has been in existence for six months and four have been in operation for 20 years. Therefore, the standard deviation is 9.94 years.

Family members work in micro-enterprises with the following frequency: 11/19 have one family member, mainly a spouse or child; 5/19 have two family members, and 1/19 have three family members. This implies that most employees (89.5%) are family members.

The number of hours per day spent working in the micro-enterprise averages 12.24 hours, with a standard deviation of 2.93. The most common are 12 hours (4), 14 hours (4) and 16 hours (4), which is the maximum value. Meanwhile, 18 of the 25 micro-businesses surveyed operate every day of the week, and 7 of 25 operate only six days a week.

3.3 Competitive strategies for micro-businesses

Almost half of micro-entrepreneurs (11/25) say that their main strategy for increasing sales is to listen to their customers' suggestions, 7/25 compare themselves with the competition, and others ask their customers directly (4/25) or analyze the characteristics of the best-selling products (3). Customer needs are the basis for improving sales.

Thus, when asked about the characteristics that set them apart from their competitors, 10/25 mentioned knowledge of the qualities of their products as a priority, 9/25 said a good relationship with the supplier or the guarantee of their products, 7/25 said a good relationship with the customer, 6/25 said their prices are low, 5/25 said they have experience in the field, and also those who have customized products. It is therefore possible to identify that their main differentiating factor is based on the qualities of the products they offer and their guarantee.

Respondents were then asked about customer loyalty, and 22/25 said that customers always or almost always return to their business. However, as shown in Figure 3, only 17/25 carry out some marketing activities such as: internet and/or social media posts (7/25), posting advertisements on cardboard signs or blackboards outside their business (4/25), posting advertisements on banners (2/25) and some with cards or flyers that they distribute or through a commission to people to bring in customers.

Box

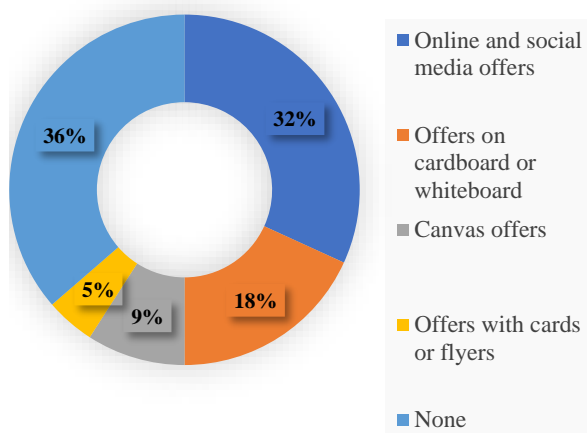


Figure 3

Marketing actions of micro-enterprises

Source: Owned

However, when respondents were asked about the reasons why they do not carry out certain marketing activities, most did not answer, and only two people commented that it was due to cost issues. When asked in more detail about the effectiveness of their marketing mechanisms, 12/25 stated that the activities and means they use for this purpose always or almost always work.

Microentrepreneurs were also asked about the technological resources they used for their businesses. As shown in Figure 4, half of them use the internet, but 44% do not use any technological resources. However, those respondents who stated that they did not use technology said that they did not have the means (3/25) and that they were not interested or did not need it (3/25). Perhaps, they also lack the training to do so.

These last three elements show how some microentrepreneurs are using certain technologies that benefit the visibility and management of their businesses. For many others, there is room for improvement in the use of information technologies, because it is very likely that all microentrepreneurs have a smart mobile device.

Box

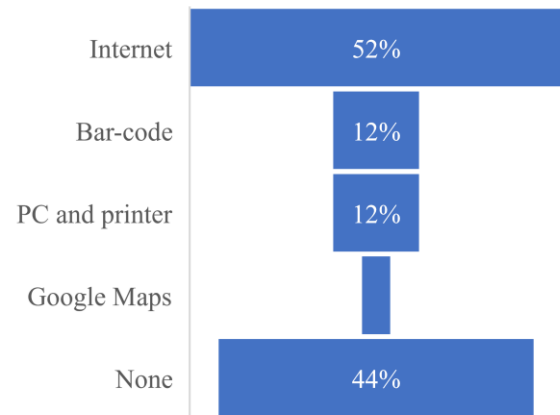


Figure 4

Technological resources used by micro-enterprises

Source: Owned

3.4 Microenterprise management

Regarding planning business activities, 17 out of 25 microentrepreneurs said they always or almost always do so, while only one said they never do. About staff turnover, 20 out of 25 respondents confirmed that there had been no changes during the last year. This could also be explained by the fact that most of these are family businesses.

Associated with the above, when microentrepreneurs were asked about how they motivate their employees, the responses were, in order of priority: 7/25 with good salaries, 7/25 with flexible hours, and 6/25 with commissions. 9/25 of them did not answer, even though they were given options to choose from in a menu. Perhaps the fact that the vast majority are family businesses is associated with a lack of specific attention to staff working conditions.

3.5 Competitive strengths of micro-enterprises

For 20/25 of micro-entrepreneurs, their suppliers are local and always or almost always deliver on time and in accordance with the contract, which means they can guarantee the expected service.

At the same time, they fulfil their commitments to their customers in the same way. This is one of the strengths of their businesses. Another one is that, in 18/25 cases, the micro-entrepreneur personally manages their business, while in another 6/25 cases it is managed by their partner or a family member, which means they have continuous monitoring of the processes related to its operation. Decisions are made in the same way.

Finally, when it comes to visualizing improvements to their business, microentrepreneurs assert that the priority is: a change in appearance and/or furniture and equipment (8/25), training and performance of their employees (7/25), and attention to products (3/25). One person stated that they needed a loan to improve. It is noteworthy that 7 of the 25 microentrepreneurs did not propose anything or said that they would do something else but did not specify what. Here again, the respondents had a menu of options to choose from and an open opportunity to express themselves, but they did not complete it.

4. Conclusions

As these are the results of an exploratory exercise, carried out during a unique period due to the Covid-19 pandemic, some of the findings have been unexpected. However, they have not been far removed from those found in the report for Latin America (Stezano, 2020).

Indications have emerged regarding the necessary attention, especially associated with the use of technologies and marketing strategies. For example, by identifying in this exercise that the average age of microentrepreneurs is in the so-called millennial generation, one would expect a wider use of these resources.

Above all, because the level of education is not low either, as the average is above high school graduation. Therefore, these indicators will need to be analyzed.

Another specific area of research is family micro-enterprises, with their very specific characteristics and problems, to interpret many of the responses and address this area in a focused manner.

Likewise, the complete characterization of the profile of these micro-entrepreneurs in the area has made it possible to design a training and refresher program for them and the people they designate, as a strategy to enhance their strengths, but also as an opportunity to overcome their weaknesses.

The areas of opportunity for training these micro-entrepreneurs are strategic business planning, the use of technology and social media for commercial and promotional purposes. Today, it is even easier to design and implement a micro-enterprise development program using Artificial Intelligence resources, for example.

Declarations

Conflict of interest

The authors declare that they have no conflict of interest. They have no known competing financial interests or personal relationships that could have appeared to influence the vehicles reported in this article.

Contribution of the authors

Soto-Hernández, Ana María: Contributed to the project idea, research method, writing and editing.

Alonso-Olivares, Saúl Emmanuel: Contributed to the research technique, and data analysis.

De la Garza- Saldívar, Sandra: Contributed to the research on context analysis.

Availability of data and materials

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Abbreviations

DENUE	National Statistical Directory of Economic Units
GDP	Gross Domestic Product
INEGI	National Institute of Statistics and Geography
MSME	Micro, Small and Medium-sized Enterprises

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