

Post-pandemic changes of COVID-19 in micro, small, and medium-sized enterprises (MSMEs) in Encarnación, Paraguay

Cambios pospandemia de la covid-19 en micro, pequeñas y medianas empresas (mipymes) de Encarnación, Paraguay

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ABSTRACT

Objective. To identify the changes in business management of MSMEs in the city of Encarnación, Paraguay, in the period after the COVID-19 pandemic.

Methods. The study was of quantitative approach, of fieldwork, using surveys as the data collection instrument. The population consisted of approximately 400 MSMEs and the sample consisted of 73 MSMEs, selected through convenience sampling, using formalization as the main selection criterion.

Results. The research evidenced changes in administrative management during the pandemic, highlighting organizational management in the first place (37%), followed by planning (33%) and control (16%). Regarding investment in technology, the implementation of promotion and sales strategies through WhatsApp (28%), Instagram (23%), and Facebook (22%) was identified. Likewise, companies were forced to adopt new distribution channels, such as telephone orders with in-store pickup (35%) and delivery service (34%). **Conclusions.** It is concluded that the pandemic not only generated changes in administrative and commercial strategies, but also consolidated practices that MSMEs maintain to this day due to positive results.

Keywords: business management; pandemic; MSMEs; changes; strategies.

RESUMEN

Objetivo. Identificar los cambios en la gestión empresarial de las mipymes de la ciudad de Encarnación, Paraguay, en el periodo posterior a la pandemia de la covid-19. **Métodos.** El estudio fue de enfoque cuantitativo, de campo, utilizando encuestas como instrumento de recolección de datos. La población estuvo conformada por aproximadamente 400 mipymes y la muestra estuvo conformada por 73 mipymes, seleccionadas mediante un muestreo por conveniencia, utilizando la formalización como principal criterio de selección. **Resultados.** La investigación evidenció cambios en la gestión administrativa durante la pandemia, destacando en primer lugar la gestión organizacional (37 %), seguida de la planificación (33 %) y el control (16 %). En cuanto a la inversión en tecnología, se identificó la implementación de estrategias de promoción y ventas a través de WhatsApp (28 %), Instagram (23 %) y Facebook (22 %). Asimismo, las empresas se vieron obligadas a adoptar nuevos canales de distribución, como los pedidos telefónicos con retiro en el negocio (35 %) y el servicio de delivery (34 %). **Conclusiones.** Se concluye que la pandemia no solo generó cambios en las estrategias administrativas y comerciales, sino que también consolidó prácticas que las mipymes mantienen hasta el día de hoy debido a los resultados positivos.

Palabras clave: gestión empresarial; pandemia; mipymes; cambios; estrategias.

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INTRODUCTION

Micro, small, and medium-sized enterprises (MSMEs) are a pillar of the economy at the regional level in Latin America, as well as in Paraguay, where they account for approximately 90% of the companies in the country and generate 70% of the labor supply and approximately 11% of national turnover (Development Bank of Latin America and the Caribbean, 2023). Due to their importance, they are a first-order actor in economic development and the sophistication of labor demand.

The flow of information on covid-19 had a significant impact on companies in the region. Changes occurred in their organizational structures, supply chains, relationships with customers, and human talent management (Mora Amado et al., 2022). In Paraguay, most MSMEs had to adjust their sales targets, carry out cost maintenance, and make entrepreneurial decisions. All of this had a direct impact on profitability, productivity, and employment levels (Sánchez Báez et al., 2021; Development Bank of Latin America and the Caribbean, 2023).

Numerous studies state that, during the pandemic, companies acquired new learning and adopted management approaches to face uncertainty, ensure liquidity, and minimize financial and operational risks (Montenegro Cueva and Chaluisa Chaluisa, 2021; Soledispa-Rodríguez et al., 2022). These changes include the reorganization of processes, the incorporation of strategic planning, task delegation, and the use of digital technologies, especially in the areas of marketing, administration, and customer service (Aguilar Morales, 2022; Fierro Moreno, 2021; Mora Amado et al., 2022). The use of digitalization and technologies became relevant for the continuity of MSMEs. The digitalization of commerce and online purchases led to the implementation of new sales and distribution channels by companies. This trend is observed in the city of Encarnación, where traditional commerce underwent changes due to mobility restrictions and border closures (Economic Commission for Latin America and the Caribbean [ECLAC], 2020; Díaz de Astarloa et al., 2021; Huilcapi Masacón et al., 2020).

Esteche et al. (2020) and Esteche et al. (2023) have explained that, in Encarnación and in the department of Itapúa, small and medium-sized enterprises had some structural difficulties before the public health crisis, but were able to develop innovative strategies to face the impact of the crisis. However, there is little empirical evidence on the changes that these companies are experiencing in the post-pandemic stage.

For Saavedra and Hernández (2008), MSMEs play an important role in Latin America as drivers of employment and in reducing the problem of unemployment. They also constitute a tool of social stability by providing

employment opportunities to semi- or low-skilled people. Therefore, MSMEs are fundamental for the generation of economic opportunities for the Paraguayan population and the development of the country (Sánchez Báez et al., 2021).

Based on this framework, the objective of this research was to identify the impact of changes in the management of MSMEs in the city of Encarnación, Paraguay, after the covid-19 pandemic, focusing on changes in administrative, commercial, and distribution management, and the current support of these practices.

METHODS

Type and area of study

The research was conducted under a quantitative approach; it was basic and non-experimental, with a cross-sectional design. The sampling used was non-probabilistic by convenience, considering formalized MSEs located in the central area of the city of Encarnación. The execution period of the entire research was from August 2023 to March 2024.

Population and sample

The research was carried out in the city of Encarnación, department of Itapúa, Republic of Paraguay, and focused on the central area as the geographical scope of study, where approximately 4,585 MSMEs were identified, according to the report of the Ministry of Industry and Commerce (2023).

The study population consisted of around 400 MSMEs located in the downtown area of the city of Encarnación. The sample consisted of 73 MSMEs, selected through non-probabilistic convenience sampling, considering only those companies with tax formalization (Single Taxpayer Registry [RUC]).

Variables and data collection instruments

The central variable of the study was post-pandemic business management in MSMEs, operationalized into three dimensions: administrative management, commercial management, and economic results (income and human resources adjustment).

The data collection instrument was a survey with response options composed of twenty-two questions, and this was validated by the Research and Documentation Center of the Universidad Autónoma de Encarnación (CIDUNAE), where experts in the area evaluated the clarity, relevance, and coherence of each item with the study variables. After the review, the suggestions made were incorporated, ensuring content validity and the adequacy of the questionnaire to the objectives of the research.



Techniques and procedures for data collection

The measurement instrument was applied in person by conducting visits to the MSMEs and proceeding to read the informed consent, and the owners who agreed to be part of the sample completed the survey.

Data analysis

The data were processed through a count of the printed documents and transferred to an Excel spreadsheet, where the calculations were performed and represented by means of tables.

Ethical aspects

In this research, the ethical principles established in the International Code of Ethics for Researchers (CIOMS) and the bioethical principles of respect, justice, and beneficence were respected. For the application of the data collection instrument, an informed consent was used that explained to the participants the purpose of the study, the voluntary nature of their participation, the confidentiality of the data, and the exclusive use of these for academic purposes. Participants were informed that completing the survey implied acceptance of these conditions, thus guaranteeing respect for their rights and the transparency of the process. In addition, the availability of the results at the end of the research was highlighted, ensuring responsible conduct in the management and communication of the information obtained.

RESULTS

Administrative strategies to face the pandemic

This section presents the most important results of the analysis of companies from different fields, particularly the grocery, textile, restaurant, electronics, and hardware sectors, among others, which include a wide variety of activities.

The research offers a comprehensive account of the changes that companies have undergone as a result of the pandemic and is categorized by different management fields. Organizational restructuring stands out more than the others, which apparently indicates that a good number of companies have transformed their structures to face the new challenges. The second most important is planning, since the research shows that a large number of companies have placed strategic planning at the center of their attention as a consequence of the pandemic.

With regard to the control variable, which turns out to be one of the most important aspects of management, 16% of the companies in the sample state that they have modified or redesigned their control mechanisms. This percentage indicates that there is probably a relevant number of companies that have decided to

redouble their control and monitoring efforts of change management during the crisis. Finally, improvements in management and in other aspects are mentioned, such as the reduction or optimization of resources. These results document the capacity of MSME administrations to diagnose their problems and to make the necessary decisions to adapt to changing environments.

Eleven percent of the companies do not report change behaviors. These businesses, although a minority, may be in many scenarios: some were already in optimal conditions to adapt to a changing environment; others did not know how to respond effectively; or they simply did not suffer a negative impact of such magnitude and did not require changes (see Table 1).

Table 1

Changes implemented as a consequence of the pandemic

Changes	n=73	
	fi	%
Planning	24	33
Organization	27	37
Direction	1	2
Control	12	16
Others	1	2
None	8	11

It was observed that a significant number of companies had to make investments that were not contemplated before the pandemic. This proportion corresponds to 34%, because they did not consider them a priority or already had the necessary resources. However, 66% of the sample had to make some type of investment, distributed as follows: 20% acquired computer equipment, another 20% contracted internet services, 14% purchased mobile phones, 8% contracted telephone services, and 4% made other investments related to infrastructure, depending on the characteristics of their businesses (see Table 2).

Table 2

Implementation of unplanned investments or expenses due to the pandemic

Investments	n=73	
	fi	%
Purchase of computer equipment	15	20
Purchase of mobile phones	10	14
Contracting of telephone services	6	8
Contracting of internet services	15	20
Other	3	4
It was not necessary	24	34

Changes in commercial management in MSMEs in the city of Encarnación as a consequence of the COVID-19 pandemic

In the present study, commercial management is understood as the set of *marketing*, promotion, and customer relationship actions, which include communication strategies through social media and other dissemination media adopted during the pandemic.

In this context, the results show a diversity of *marketing* strategies implemented during the pandemic, which reflects the different approaches adopted by companies to maintain their relevance and promote their products or services amid the crisis. It was observed that companies opted, first, for the implementation of WhatsApp (28%), followed by Instagram (23%) and Facebook (22%), as the main means of promotion. This indicates a strong commitment to the use of social media.

On the other hand, 16% of the companies analyzed did not make any changes to their *marketing* or commercial strategies because they did not consider them necessary according to the sector in which they operated (pharmacies, trade in basic necessity items, etc.). Radio advertising represented 8%, while television reached only 2%. In addition, 2% of the companies implemented other unspecified strategies.

It should be noted that the presence of companies that chose not to modify their commercial strategies is significant, which suggests that some organizations managed to maintain stability in their promotional approaches without the need to make adjustments (see Table 3).

Table 3
Changes in marketing strategies during the pandemic

Commercial management	n=73	
	fi	%
Implementation of radio advertising	6	8
Implementation of television advertising	1	2
Implementation of Facebook as a promotional medium	16	22
Implementation of Instagram as a promotional medium	17	23
Implementation of WhatsApp as a promotional medium	20	28
Other	1	3
No changes were made	12	16

Various strategies implemented by MSMEs to adapt to the changing needs of customers during the pandemic are highlighted, where it is shown that telephone orders and delivery service were the main distribution strategies adopted during that period.

The implementation of telephone orders and the option for customers to pick up products at the establishment respond to the demand of customers who wished to avoid crowds but still preferred to personally collect their purchases. On the other hand, the growth of the *delivery* service reflects a trend toward convenience and safety in the shopping experience, with consumers who opted to receive products in the comfort of their homes.

However, a significant number was recorded that did not make changes to their distribution channels, in most cases because they did not consider them necessary, as they were already implementing appropriate strategies (see Table 4).

Table 4
New distribution channels implemented during the pandemic

Distribution channels	n=73	
	fi	%
Delivery	25	34
Telephone orders and customer pick-up	26	35
Customer approaches and places the order from the vehicle	6	8
Other	0	0
None	16	23

The research offers a relevant view on the sustainability of the changes implemented in response to the pandemic in the business environment. The results show that, after the pandemic, 85% of the companies that introduced changes in their administrative processes and 78% that implemented new distribution channels continue applying these strategies in the post-pandemic period, and it is highlighted that 71% had to adjust their workforce by hiring more employees, which is an indicator of business growth (see Table 5).

Table 5
Persistence of the changes implemented during the pandemic in the post-pandemic period

Variables	Yes	No
Administrative processes	85%	15%
Number of human resources	71%	29%
Distribution channels	78%	22%

DISCUSSION

Many MSMEs were forced to modify their strategies as a consequence of the pandemic. In general, the research reveals that the pandemic prompted adjustments in administrative management, with special emphasis on organization and planning, in commercial management

by changing *marketing* strategies and distribution channels, in addition to investment in technology to optimize administrative and commercial management. These findings underscore the importance of adaptability and responsiveness in the face of unexpected crises, confirming what was stated by Montenegro Cueva and Chaluisa Chaluisa (2021), who affirm that during the outbreak of covid-19 new learnings were acquired and management approaches emerged that contributed to coping with uncertainty and minimizing financial and operational risks in companies.

The research demonstrated that companies made investments in computer equipment, internet services, and mobile phones, highlighting the fundamental role of technology and connectivity in the adaptation of companies to new forms of work during the pandemic (Soledispa-Rodríguez et al., 2022; Fierro Moreno, 2021; ECLAC, 2020). This agrees with what was proposed by Córdoba Castillón (2015), who maintains that the incorporation of new technologies can become a key strategy to strengthen the productivity and competitiveness of MSMEs.

The results indicate that companies had to adapt and modify their business strategies. In this sense, Montenegro Cueva and Chaluisa Chaluisa (2021) state that organizations are aware of the need to reinvent themselves, adapt to changes, and develop in the new normality. Likewise, they were forced to innovate, review their operational processes, and transform their business models, which coincides with what was proposed by ECLAC (2020) and Robertson (2020).

This is also explained according to what was stated by Esteche et al. (2023), who point out that microenterprises in Itapúa, Paraguay, have demonstrated that their innovative approach regarding products focuses on understanding customer needs and expectations through the active search for information. In relation to *marketing* innovation strategies, it was observed that, during the covid-19 pandemic, microentrepreneurs also focused on establishing research processes to understand customer satisfaction, thus strengthening their connection with them. For this reason, it is understood that the majority percentage of companies maintain or even improve their relationship with their customers.

After the pandemic, most companies continue with the changes implemented during the crisis, mainly administrative management and distribution channels, which indicates the sustainability of these strategies to improve business processes. These results coincide with what was affirmed by Mora Amado et al. (2022), who maintain that, despite the return to normality, the changes implemented will continue to be necessary to ensure success.

Likewise, the main limitations of the study include the use of non-probabilistic convenience sampling, which

reduces the ability to generalize the results to all MSMEs in Encarnación. In addition, the information was collected through a survey designed for a particular moment, so it is not possible to study the temporal progression of the changes implemented. Future studies may implement longitudinal designs with probabilistic sampling so that comparisons between sectors and cities can be carried out.

CONCLUSIONS

The research made it possible to recognize the main changes in the management of MSMEs in the city of Encarnación in the post-pandemic period of covid-19. Regarding the organizational dimension within administration, adjustments were made in organizational and internal planning processes; in the commercial dimension there were significant changes with the incorporation of digital marketing strategies centered on social networks (WhatsApp, Instagram, and Facebook), and in distribution the receipt of orders by telephone and delivery were incorporated. The vast majority of the changes made persist even now and evidence the adaptive skills and resilience of MSMEs by consolidating strategies within their viable administrative retention practices in the market.

Recommendations

This research highlights the importance of supporting and strengthening MSMEs after the pandemic. Therefore, it is recommended to implement support measures, such as training programs and business advisory services, to help these companies overcome current challenges and build a more resilient and sustainable future.

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Authorship contribution

MVF: conceptualization, data curation, formal analysis, investigation, software, supervision, visualization, writing—original draft. PRARD: investigation, resources, writing—original draft. IJVW: methodology, validation, writing—original draft. YNGW: writing—review and editing.

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