### Competitiveness of medium-sized white line service center companies in the COVID-19 pandemic

# Competitividad de las empresas medianas de centros de servicios de línea blanca en la pandemia de COVID-19

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#### Abstract

The situation of the COVID-19 pandemic has generated new obstacles and challenges for the competitiveness of various organizations. This article will analyze the impact it has had on white line service center companies. These companies, as well as various SMEs, have found it necessary to implement strategies or actions that increase competitiveness in the workplace. The objective of this study is to observe the performance of competitiveness in white line service centers through the environment of the COVID-19 pandemic. The tool that was used was an observation of medium-sized companies in the implementation of the visit to the white line service center, for the collection of different observations of teamwork. It is important to mention that a positive response was obtained, showing a specific analysis of competitiveness as a result of the new strategies that medium-sized white line companies applied to maintain competitiveness with the new COVID-19 environment.

## Competitiveness, White line service centers, COVID-19

#### Resumen

La situación de la pandemia COVID-19, ha generado nuevos obstáculos y retos para la competitividad de diversas organizaciones. En este artículo se analizará el impacto que ha tenido en las empresas de centros de servicios de línea blanca. Estas empresas, así como diversas pymes, se han visto en la necesidad de implementar estrategias o acciones que aumente la competitividad en los centros de trabajo. El objetivo del presente estudio es observar el desempeño de la competitividad en los centros de servicio línea blanca a través del entorno de la pandemia COVID-19. La herramienta que se utilizó fue una observación de las medianas empresas en la implementación de la visita al centro de servicio de línea blanca, para la recopilación de diferentes observaciones del trabajo en equipo. Es importante mencionar que se obtuvo una respuesta positiva en donde se muestra un análisis concreto de la competitividad a raíz de las nuevas estrategias que las medianas empresas de línea blanca aplicaron para mantener la competitividad con el nuevo entorno COVID-

## Competitividad, centros de servicio línea blanca, COVID-19

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#### Introduction

According to Ferraz, Kupfer and Haguenauer (1996), competitiveness can be defined as the ability of a company to create and implement competitive strategies and maintain or increase its product share in the market in a sustainable manner.

Competitiveness does not arise spontaneously: it is built and achieved through a process where different actors play their role: suppliers, employees, the physical and economic environment, our local, regional and national administrators, shareholders and especially, managers, etc.

Although it is true that the duration of the pandemic has been longer than expected (ECLAC, 2020), we do not know when the end of the health crisis will be or what the economic, environmental, social and political impact will be (Fu & Zhu, 2020; Gallen, 2020). Therefore, the challenge for organizations is to generate strategies to face future scenarios.

The determinations of these strategies will become the "route map" of the management of these medium-sized companies.

### **Background**

Before the COVID-19 pandemic changed the rules of strategies and the perspective of competitiveness, competition between organizations was stronger than in other environments. Although technologies are evolving, the competitiveness of medium-sized companies is an important issue in globalization.

The competitiveness of the mediumsized companies of the white line service centers, like most organizations, have as their objective: economic and cultural success, the fulfillment of the mission, vision, etc., as well as the wellbeing of their collaborators and of those who benefit directly or indirectly through the services or products they offer.

The analysis of the concept of competitiveness seen from the perspective of different authors, will allow us to verify that sustainable competitiveness over time requires the implementation of a variety of policies that allow overcoming the existing obstacles to achieve it.

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Understanding the concept of competitiveness in all its dimensions important, given its value in explaining and dealing with the problem posed by the creation of the necessary factors so that development processes, or at least growth, are viable in underdeveloped economies. some sectors. A company is competitive if it can produce products and services of superior quality and lower cost than its domestic and international competitors. Competitiveness is synonymous with long-term profitable performance, the ability to compensate its employees, and provide above-average returns on investment to its shareholders (The Aldington report, 1985).

At the microeconomic level, competitiveness refers to a company's ability to grow in size, market share, and profitability. Traditionally, production costs determined relative competitiveness, but other factors have been proving important, such as: skills and motivation of the workforce, research and development capabilities, skills to adopt new technologies, organizational and administrative factors, relationships with other actors. such as customers, suppliers, other companies, etc. (Clark and Guy, 1998).

Polevnsky (2003) points out company-level competitiveness is the ability to sell more products or services and maintain or increase market share without sacrificing profits or wages or damaging the social or natural environment. Market participation is common element in the definitions profitability or profit participation, workers' wages and care for the environment are elements of competitiveness. Coriat (1998) presents a complex notion of competitiveness that includes multiple cost and non-cost factors. The former include the cost of work, which includes direct and indirect salaries; the cost of capital, made up of interest rates and equipment occupancy rates and quality of work; input prices; and economies of scale to reduce costs. Among the non-cost dimensions, he proposes the profit margin of companies; the quality of products and services; installed capacity; the ability to adapt to technical standards and product differentiation; delivery times; specialization towards markets with growing demand; and network efficiency. Ditto marks a company's relationship with the selecting factors industry by intercompany networks and just-in-time delivery time.

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Porter (2003) proposes to analyze the competitiveness of the company through the analysis of the value chain. This model tries to detect the sources that can generate a competitive advantage, by examining the activities that a company develops. The analysis includes two dimensions: primary activities and support activities. The primary activities in turn are divided into five areas of analysis: inbound logistics, operations, outbound logistics, marketing, and sales and service.

Support activities are divided into four of analysis: acquisitions, technology areas development, human resource management, and enterprise infrastructure. Idem does not indicate why these activities were selected as critical in the value chain, leaving out the area of finance, which is essential for the operation of the company. Aktouf (2004) criticizes him because he does not include factors such as corporate culture, worker morale, level of communication, teamwork, leadership and interpersonal skills to maximize the potential of workers. These factors are more difficult to analyze and modify than those identified in the value chain, although they are also sources of competitive advantage.

Prahalad and Hamel (1990) point out that there are core competencies that give the company competitive advantages, but they indicate that these are different for each company. For its part, the resource-based theory includes among the variables that are identified as a competitive advantage: total quality, technology, knowledge management, innovation and mainly, the human element (Aktouf, 2004).

Castañon (2003) proposes that competitiveness is a function that results from six dimensions within the company:

- a) Business; identifies the way in which strategic planning is carried out.
- b) Strategy and financial management; analyzes planning regarding financial resources.
- c) Market; analyzes the company's decisions regarding the maintenance and expansion of current markets, as well as access to new markets.

- d) Technology; identifies the relationships between technological strategy and competitive strategy.
- e) Operations Management; the way in which the company coordinates supply with equipment and human resources for the efficient manufacture of products.
- f) Computing and information technology: activities associated with the use and updating of computer equipment and programs to carry out various tasks in different areas of the organization.

These dimensions are measured in various companies; then the results of a company are compared with the average of companies analyzed. It is a useful proposal that justifies having selected these dimensions after applying the instrument in two previous investigations and coincides with Porter's proposal in three of the dimensions: marketing, technology and operations.

### **Competitiveness of white line service centers**

When change is a constant in the environment, the success of any organization lies in its ability to anticipate and adapt to changes, so it is necessary for any organization to know how and to what extent the evolution of the market will affect the company. Even more important is knowing how to react quickly to these changes. Identify the threats and opportunities to establish the guidelines that will allow the company to take advantage of any situation.

It is here where marketing and strategic management provide us with concepts and tools to guide management through the unstable and adverse paths of competition for market share.

Benchmarking consists of measuring and analyzing the performance of activities and operations, not only in absolute terms, but in relation to competitors. Therefore, the company's processes must be contrasted with the processes of the best within its sector. But it is still possible to go further, comparing not only with direct competitors, but also with indirect or circumstantial competitors, and with other companies that may not be competitors, but present common processes. (Soret los Santos, 1999)

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# Importance of competitiveness in the COVID-19 pandemic

Currently, organizations are very concerned about obtaining a competitive advantage by improving process standards, in order to have a capacity to respond to the changing environment.

Based on Ferraz, Kupfer and Haguenauer (1996), competitiveness can be defined as the ability of a company to create and implement competitive strategies and maintain or increase its product share in the market in a sustainable manner. These capabilities are related to various factors, controlled or not by the companies, ranging from the technical training of personnel and managerial-administrative processes to public policies, the supply of infrastructure and the peculiarities of demand and supply.

The importance of competitiveness can be seen in its positive relationship with long-term economic growth. A country can be considered competitive when it manages to manage its resources and skills.

Referring to a standard definition of the European Union (2001), competitiveness, at a regional and national level, is the capacity of a given country or region to generate higher rates of growth and employment in a sustainable manner.

# Advantages of competitiveness in the face of the COVID-19 pandemic

The emergence of COVID-19 made all companies realize that they needed to adapt to the new environmental conditions.

Organizations had to adapt in order not to lose customers and profits, some actions are the following: increase the speed of their decision making, through better productivity, the use of technology and accelerating the scope and scale of their innovation.

Organizations had to get together in order not to lose customers and profits, some actions are the following: increase the speed of their decision making, through better productivity, the use of technology and accelerating the scope and scale of their innovation.

- 1. Quick and concise decision making: The pandemic showed us that it is possible to make decisions faster without breaking the business.
- 2. The proper use of technology: There is a great variety of applications as a tool to approach despite the distance.
- 3. New strategies: find solutions together in having quick answers.
- 4. Respond quickly to emerging challenges and opportunities: Create
- 5. team network dynamics.
- 6. Work on a clear goal of focus.
- 7. The combination of face-to-face work with virtual work increases the productivity of the organization.
- 8. Benefits at the organizational level, due to cost reduction.

COVID-19 has become a permanent challenge in the many paradigms used by medium-sized companies to strengthen business competitiveness.

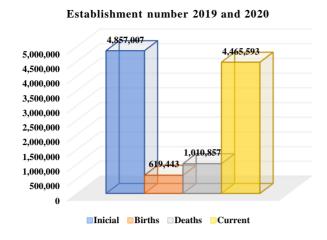
# Competitiveness index results in the context of the COVID-2019 pandemic.

México has in the INEGI a responsible, reliable and solid institution for the generation of information on demographic, social, economic and environmental phenomena and their relationship with the national territory.

The EDN 2020 has the purpose of identifying the changes that the set of micro, small and medium economic units of the country that develop economic activities in the manufacturing, commercial and non-financial private services sectors have had, 17 months after the conclusion of the Economic Censuses 2019, to know its demographic situation, distinguishing the establishments that have started activities in the period from May 2019 to September 2020, those that closed definitively in that same period and those that continue to operate, in the context of the pandemic by COVID-19, shown in Figure 1.

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**Graphic 1** Visited businesses, percentage variation - 8.06% *Source: EDN* (2020)

The confinement measures forced the businesses to pause their activities and even to close permanently, but it also became an opportunity for growth in the competitiveness of reconversion of many economic activities to adapt to new needs and trends

Actions or measures taken by the establishments in the face of the health contingency due to COVID-19.

- Problems faced by establishments (closure, changes in staff)
- Sources and use of financing
- Measures and actions implemented to face the economic impact of the pandemic

### **IDB** competitiveness map

The IDB Competitiveness Map instrument is a questionnaire consisting of 145 questions divided into eight factors. The reliability of the measurement instrument was calculated with Cronbach's Alpha, resulting in a 91% reliability. A summary of it is presented in Table 1.

G						
Competitiveness Map.						
Area	Sub-areas					
Strategic Areas	Strategic planning processes.					
	Strategy implementation.					
<b>Production</b> and	Planning, capacity, maintenance,					
operations	research and development.					
Quality assurance	Quality philosophy. Quality					
	standards. Established technical					
	standards. Comparison of the					
	product or service with the needs					
	of the client. Identification and					
	correction of defects.					
Commercialization	Marketing, sales, service and					
	distribution.					
Accounting and	Cost and accounting					
Finance	_					
Human capital	General aspects of personnel,					
_	organizational culture, industrial					
	health and safety.					
Environmental	Company environmental policy,					
management	strategy and awareness.					
Information system	System planning, inputs,					
	processes and outputs.					

**Table 1** Map of competitiveness

Source: Own contribution 2021, Based on Martínez and Álvarez (2006)

### Methodology

The main objective of this research is to analyze the current situation of the COVID-19 context, in relation to the competitiveness of authorized white line service centers.

The need for entrepreneurs to see beyond, to seek new competitive strategies within the reach of new technologies, to be clear about the cause and effect of the impact generated by the COVID-19 crisis on business activity, has generated the analysis of parameters based on in a measurement instrument that consists of 10 elements that reflect the importance of competitiveness in the COVID-19 environment.

### **Analysis of results**

Based on the information obtained by the instrument that was applied in the medium-sized white line service centers, the results shown in Table 2 were obtained, referring to the context variables as they affect competitiveness as a result of the COVID-19 environment. 19.

CONTEXT VARIABLES	Never	R Rarely	Response freq Regular- mind	Always	
Politics	9	1	1	0	0
Economic	0	4	2	2	2
Environmental	1	2	5	1	1
technological	0	0	1	6	3
Cultural	7	1	2	0	0
Society	0	2	2	3	3

Table 2 Frequency of the variables of the context of the white line center

Source: own contribution 2021

TIEP (Integral Productivity Evaluation Technique)								
Element	Economic Variable	Political Variable	Environmental Variable	Cultural Variable	Technological Variable	Social variable		
Liement	p E	P E	P E	P E	P E	PE	P/S	P/C
1. Conceptual approach of the company	6.07   9	0.1   7	0.1 9	0.11 10	0.1 10	0.11 10	9.17	0.91
2. Process knowledge	0.08 8	0.07 6	6.1 9	0.08 8	0.1 10	0.1 9	8.33	0.75
3. Social scope of the organization	6.12 8	0.09 7	0.09 7	0.11 8	0.1 7	0.1 9	7.67	0.78
4. Administración de la planeación	0.11 9	9309 7	0:05 7	,6.1 8	5.09 10	0.09 8	8.17	0.78
5. Management involvement	6.11 9	6.1 7	9/1 9	0.1 9	0.08 9	0.1 9	8.67	0.87
6. Creativity and organizational innovation	0.11 7	0.11 7	9.11 8	0/12 9	0213 10	0.13 9	8.33	1.00
7. Knowledge of the client(z)	5.12 8	0.12 9	6.11 7	0.11 10	01 9	0.11 9	8.67	0.97
8. Technological development	6.11 8	0.1 9	6.1 10	6.1 9	,0(13) 10	0.09 9	9.17	0.97
9. Macroeconomic knowledge	0.07 9	6011 8	0.09 10	0.08 10	0.08 10	9 8000	9.33	0.79
10. Comprehensive development of human resources	0.1 8	0.11 7	0.1 8	0.09 8	,0,09 9	9369 8	8.00	0.77
	1 8.3	1 74	1 84	1 8.9	1 9.4	1 89		

Table 3 Aspects of the measuring instrument Source: Own contribution 2021

Table 3 shows the evaluated elements of the responses collected.

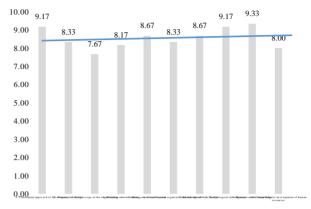
The instrument was applied to 5 authorized white line service centers, which consisted of a questionnaire of 2 to 3 questions per element to 5 areas classified as priority.

Within the results obtained from the instrument applied to the collaborators, the results shown in graphic 2 were obtained.

context of COVID-19.

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Simple Average Chart - Marketing Department



**Graphic 2** Measurement elements Source: Own contribution 2021

The results generated from the study of competitiveness in white line service centers, it is observed that all dimensions have low levels of competitiveness; however, this increases in the dimension of macroeconomic knowledge, technological development and conceptual approach, which suggests that companies do not have established comprehensive systems for determination or the social sphere.

COVID-19 Despite the context. competitiveness is sufficient to make decisions in the short, medium and long term of the other elements mentioned in (graph 2), knowledge of processes, planning administration, management participation, creativity and innovation. knowledge of customers, among others.

Within this dimension, the questions competitiveness indicate related to companies have a significant margin in their application of white line service centers.

### **Conclusions**

The purpose of this article was the documentary analysis of the strategies of the medium-sized companies of the white line service centers that the organizations have implemented in the face of the COVID-19 pandemic, based on the increase in competitiveness.

The method used was the quantitative of descriptive scope approach through observation and application of the instrument that allowed studying the concepts in which the research was framed, such as: competitive strategies of white line service centers in the

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The elements were detailed directly and indirectly, but directing the study information, in such a way that it was clearer when addressing each of the measurement elements.

In the analysis of the results, it is disclosed in specific areas of the organizations that have been impacted by the pandemic in specific sectors and what were the most implemented strategies to increase competitiveness and face the negative impact in terms of productivity and economy.

As for the white line service centers, they must carry out constant updates of strategies to face COVID-19 and focus them on business competitiveness.

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