# Strategic diagnosis as the basis for a social responsibility program in motor transport companies

## Diagnóstico estratégico como base para un programa de responsabilidad social en empresas de autotransporte

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#### **Abstract**

**Introduction:** This research describes the context of the steel industry at an international, regional, and national level, as well as the challenges of trucking as a key agent in the supply chain. The objective is to know aspects related to the conditions in which drivers operate, to subsequently, carry out a strategic diagnosis that serves as a basis for proposing a social responsibility program in the shipping companies that participate in the steel industry; in such a way that it improves the labor and health conditions of the drivers of cargo transportation.

**Method:** a survey was conducted on fifty drivers of heavy vehicles, to obtain sociodemographic data, educational level, time working in the company and work experience.

**Results:** Data related to job satisfaction, remuneration, work process, management, and technical division of labor were collected; and a strategic diagnosis was prepared to identify the areas of opportunity that will serve as the basis for future work in the proposal of a social responsibility program.

Conclusions: Finally, within the strategic diagnosis, three solution alternatives were found -1) those of human capital, 2) those of operations, and 3) those of the market- that will serve as the basis for the social responsibility program, which will help to improve the labor and health conditions of freight truck drivers Finally, within the strategic diagnosis, three solution alternatives were found -1) those of human capital, 2) those of operations, and 3) those of the market- that will serve as the basis for the social responsibility program, which will help to improve the labor and health conditions of freight truck drivers.

**Keywords:** Sustainable logistics; competitiveness; sustainable development; social responsibility; labor conditions

## Resumen

**Introducción:** Esta investigación describe el contexto de la industria siderúrgica a nivel internacional, regional y nacional, así como los desafíos del transporte por carretera como agente clave en la cadena de suministro. El objetivo es conocer aspectos relacionados con las condiciones en las que se desenvuelven los conductores, para posteriormente, realizar un diagnóstico estratégico que sirva de base para proponer un programa de responsabilidad social en las empresas navieras que participan

en la industria siderúrgica; de tal manera que mejore las condiciones laborales y de salud de los conductores del transporte de carga.

**Método:** Se realizó una encuesta a 50 conductores de vehículos pesados, para obtener datos sociodemográficos, nivel educativo, tiempo de labor en la empresa y experiencia laboral.

**Resultados:** del diagnóstico estratégico se encontraron tres alternativas de solución -1) las de capital humano, 2) las de operaciones y 3) las de mercado- que servirán de base para el programa de responsabilidad social, que ayudará a Mejorar las condiciones laborales y de salud de los conductores de camiones de carga.

Palabras clave: Logística sostenible; competitividad; desarrollo sostenible; responsabilidad social; condiciones laborales

## Introduction

The steel industry has positioned itself in various sectors since it provides one of the main raw materials for growth worldwide. In turn, it is located as one of the industries that pollute the most, not only due to its manufacturing processes, but also due to the large number of agents involved in the supply chain that do not work sustainably, generate various externalities and, therefore, with effects, not only in the ecological dimension but also economic and social. Some of these effects can be seen materialized in companies with gender inequality and in the working conditions of employees.

One of the main agents involved in the steel supply chain is trucking companies; Therefore, both their infrastructure and the costs they generate determine a competitive advantage. Road freight transport provides essential elements for the production and distribution of goods in a country. The sector plays a fundamental role in the integration of markets, and determines the transaction costs for economic agents, in a highly cyclical activity (World Trade Organization, 2021).

In Mexico, according to the Economic Agenda for Cargo Transportation (2022), this mode of transportation moved 512.7 million tons of cargo in 2020, which represented 56.9% of the national total. In the same year, 366,461 three-axle tractor-trailers were registered, this being the first movement option in motor units. Despite this growth,

the conditions in which drivers operate have not undergone a change.

Drivers have been exposed to various risks and labor demands that determine their working conditions and that make their labor process unique. Thus, for example, drivers spend considerable time in the vehicle's cabin while driving, so why the facilities and rest points, which are generally restaurants or pensions (known as hookahs) that serve as refuge and are essential to rest and avoid driver fatigue. Despite the importance of these facilities, during the COVID-19 pandemic, rest areas and pensions were closed, as well as non-essential businesses including restaurants and repair shops-, which had an impact negative in the working conditions of drivers, since it left them without access to basic services (International Labor Organization, 2020). Likewise, only 10% of the nearly five hundred places where drivers can rest to comply with the hours of break and driving, have the minimum-security dispositions (CONUEE, 2022). On its behalf, regarding gender issues, the Economic Census indicates that the proportion of women registered in activities related to transportation is lower than the economy as a whole; and for motor transport, the percentage of employed women is 11.4% (INEGI, 2021). In this sense, this research is proposed under the assumption that the implementation of a social responsibility program for cargo trucking companies in the steel industry will give them a competitive advantage

in their sustainable logistics, for which they will attract better business opportunities while improving the working and health conditions of drivers of cargo transportation.

## **Method**

Given that freight forwarding companies in the steel industry lack a social responsibility program to achieve a sustainable logistics operation that offers them a competitive advantage in the market, an investigation is proposed in which a social responsibility program is designed, as a source of competitive advantage for this type of companies, to obtain competitive advantages, while improving the working conditions of their drivers.

In this sense, a strategic diagnosis was first conducted, in which, the areas of opportunity are identified to reveal junctures of improvement based on various collection methods. Here both qualitative and quantitative techniques were used to obtain the information, such as questionnaires and interviews with key informants. In addition, that the competition standard EC0247 "Provision of organizational management consulting services" established by the National Council for Standardization and Certification of Labor Competencies - (CONOCER) was used.

The research conducted in 2021 was applied to a cargo trucking micro-enterprise located in Altamira, which has its main destinations in the north and the Huasteca area of the country. The company in the case study has the characteristics of being legally constituted, has its own vehicle fleet, and is connected to globalized chains since it conducts steel import operations.

The actions that the company carries out and that it must carry out in order to implement a social responsibility program were inquired; nonetheless, a questionnaire was applied to the drivers of heavy vehicles in which sociodemographic data, educational level, time working in the company, and work experience were asked. In addition to data related to their satisfaction at work, their remuneration, the work process, and the direction and technical division of work. In addition to asking about diagnosed chronic diseases and their opinion on actions or motivations to remain in the company.

#### Results

Fifty truck drivers were interviewed, and most of the drivers (46%) are between 30 and 34 years old, so it is a young workforce. Seventy-two percent finished high school and 2% have professional studies. The years of driving experience indicate that 46% of the drivers have more than ten years of experience, a high figure considering that it is a group of young employees. Regarding the benefits received, 78% indicate being satisfied or very satisfied in this field; almost all of them, 98%, indicate that their level of satisfaction in the company is satisfactory or very satisfactory and, in the same way, 98%, indicating that they receive a fair salary in relation to their working hours and that their opinion is heard in the company (80%).

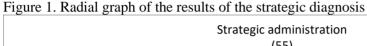
On its behalf, in the results of the strategic diagnosis, the scores of the six functional areas marked by the reference model (EC0247) can be observed, which are Strategic Administration, Market, Operations, Legal Aspects, Financial Aspects, and Human Capital. It was found that the areas with the greatest opportunities for improvement are strategic management and operations; Priority issues to address in these areas are related to innovation management, as well as the incorporation of Information

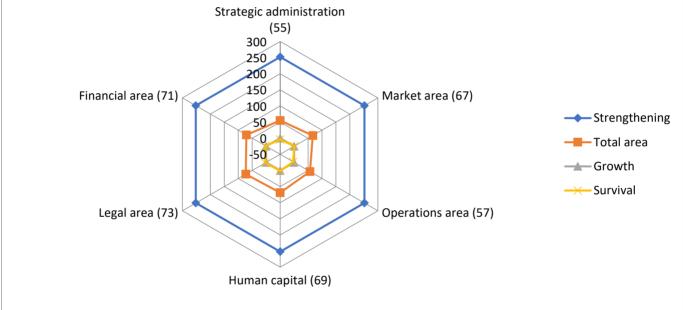
and Communication Technologies (ICTs), and the value chain together with quality control tools. On the other hand, in the areas of legal and financial aspects, the priority issues are in aspects related to their labor relations and their accounting system respectively, which can be seen in Figure 1.

## **Discussion and Conclusions**

With the current trends towards a sustainable transition on

For transportation in Mexico, and focused on the environment, the Clean Transportation Program was created, a "Voluntary program that seeks to make cargo and passenger transportation that circulates through the country more environmentally friendly" (SEMARNAT, 2022); and aims to reduce environmental impact by reducing fuel consumption, making operating costs efficient, while reducing its ecological footprint. Among the measures to be taken, driver training is considered,





behalf of the economic sectors, the United Nations Organization (UN) and its agencies, which are the allies for the fulfillment of the objectives of the companies, and which are dedicated to the fulfillment of the Sustainable Development Goals (SDG) and the 2030 agenda, such as the Global Treaty, the largest network of alliances with companies for their role in social responsibility. In Mexico, no recognized body or institution obliges companies to be socially responsible. All those who seek certification adapt and self-assess their progress and processes to acquire this distinctive.

"they can help trucking companies to save fuel and reduce Greenhouse Gas (GHG) emissions, increasing the skills, knowledge and performance of the drivers. According to the Ministry of Environment and Natural Resources (SEMARNAT), a driver training program that improves fuel consumption by 5% could save more than \$60,240 in fuel costs and eliminate eight tons of Carbon Dioxide (CO<sub>2</sub>) per truck per year.

The driver training program incorporates economic and environmental benefits, it is to say, this measure only addresses the ecological dimension and does not imply actions in the social dimension. Under this consideration,

a social responsibility program for cargo trucking companies in the steel industry will give them a competitive advantage in their logistics activities in a sustainable manner; It will allow them to attract better business opportunities that will be permanently adapted to sustainable trends and will improve the working and health conditions of their drivers.

Specifically, the surveyed drivers, are in better working conditions compared to comparable results in other investigations (Bernal, 2018). However, companies must implement social responsibility programs. For this, in cargo trucking companies, a strategic diagnosis must be carried out to identify the profile of the organization, the external and internal factors that directly affect the implementation of the program, and the opportunities for improvement that it has to be a socially responsible company that can participate for certifications or badges that give it an advantage over its competition, but mainly, for improving the working conditions of its operating personnel. Among the solution alternatives designed from the strategic diagnosis, the following were found, which we can group into three points: 1) those of human capital, 2) those of operations, and 3) those of the market.

The first is aimed at improving relations with their workers so that they can develop a career within the company. General policies such as the basic structure, philosophy, and rules of the organization are included; in addition to contractual aspects, employment status including hiring, firing, promotions, benefits, and life insurance, among others- and daily procedures, such as paydays, clothing, security, and work hours. These aspects include preparing a human capital training and development plan, which involves efforts to achieve assertive communication, skill development, and employee participation in decision-making.

The second solution alternatives, the operational ones, include not only strengthening the company's processes and activities, from sales to recruitment processes; but to

generating indicators of productivity and evaluation of the organization that allow continuous improvement processes in the company, monitor the quality of services, and identify areas of opportunity. Finally, the market alternatives will serve to lay the foundations for strengthening the commercial activities of the company and, with this, train the sales force, plan the sales more efficiently, and develop marketing strategies.

Thus, under these assumptions, knowing the input of the drivers, the areas of opportunity of the company, and future work, the proposal for a social responsibility program can be performed.

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Los autores de este artículo expresan que no tuvieron ningún conflicto de intereses durante la preparación de este documento ni para su publicación.

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