

## ARTIGOS

### AN ANALYSIS OF THE ENTREPRENEURIAL PROFILE OF SELF-EMPLOYED TRUCKERS FROM THE GUARULHOS (SP, BRAZIL) REGION

#### ABSTRACT

The objective of this scientific article is to establish the profile of self-employed drivers from the Guarulhos region in SP, Brazil, through a descriptive research on their entrepreneurial profile, their likeliness to formalize their business and increase their economic activity, their issues, and their skill development needs. The results show the reality of self-employed drivers, their issues, their willingness to formalize their business, and their development needs. The findings support the development of the professional category and involve the deepening and continuation of our findings.

**Keywords:** Entrepreneurial Profile. Self-Employed Drivers. Road Transport.

#### 1 INTRODUCTION

Freight road transport is the means of transportation that carries most freights and goods in Brazil. More specifically, it accounts for 52% of freight transportation (TKU - Tons per Useful Kilometer), according to the National Plan for Logistics and Transportation - PNLT (BRASIL, 2011). This activity is conducted by many types of carriers, such as a company's own fleet, transport companies, and self-employed drivers in general.

This study provides information for one to understand not only the operation of freight road transport in Brazil, but also the profile of carriers, more specifically the entrepreneurial profile of self-employed drivers from the region of Guarulhos/SP, their wish for growth and formalizing their business, their issues, and their skill development needs. It has been assumed that no one has done any study on this matter in Guarulhos before.

The primary goal of the study is to establish the entrepreneurial profile of truckers and, secondarily, to understand their issues, their wish for growth and in which areas, and their limitations. In order to achieve the main goal, it was applied a descriptive research with extensive observation. The results allowed us to understand current facts regarding the entrepreneurial profile of self-employed drivers from the city of Guarulhos, in the state of São Paulo.

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## 2 RESEARCH METHODOLOGY

In order to achieve the purpose of this study, we used descriptive research through direct, extensive observation. Based on surveys applied to the sample participants, a data analysis is performed in order to check the interviewees' attitudes, behaviors, intentions, and perceptions by means of a method of natural and personal observation, in an environment that is common and familiar in the interviewees' daily lives. The interviews were carried out at the Fernão Dias' Freight Facility, located in the city of Guarulhos, state of São Paulo, with one hundred fifty self-employed drivers transiting throughout January 2015 (MALHOTRA, 2006; MARCONI; LAKATOS, 2007).

According to Gil (2008), a descriptive research seeks to describe the characteristics of a population or even to establish the relationship between variables when data are collected on a standardized fashion, through a survey and systematic observation. We used SEBRAE's [*Brazilian Micro and Small Enterprises' Support Service*] entrepreneurial profile standard survey to evaluate the entrepreneurial profile of self-employed drivers. The survey consists of ninety-one questions, eighty-five of which are simple Likert-scale grading questions, in addition to other six open-ended questions, based on which we can evaluate thoroughly the profile of each driver interviewed, as well as to look more carefully into their "base profile" and doubts regarding things such as taxes, costs, safety in transportation, and expertise to carry more specific and dangerous products. Since the last questions are open-ended, they demand more attention from the interviewee, causing them to conduct a self-analysis and enhance their awareness of the situation.

Therefore, the research was carried out based upon the survey collection method, where quantitative data and experiments are assessed. The survey considers some of the most important profiles of interviewees. In total, one hundred fifty drivers of different ages, education levels, and of both sexes collaborated with the research.

## 3 THEORETICAL REFERENCE

To carry out this study, one should understand the current freight road transport scenario in Brazil, since it is the main freight and passenger means of transportation in the country, as shown in the BIT [*Transport Information and Map Databank*] provided by the Ministry of Transportation, Brasil (2015a). Also, according to the BIT, freight road transport in Brazil is the modal of greatest representation, fit for short and medium distances, with low implementation and high maintenance costs, high pollution index, and strong environmental impact. It is the only means capable of making deliveries on a door-to-door basis, with high resilience and a network of significant extension. Due to freight limitations and increased costs when the distance increases, this modal is unfeasible. However, for most of the services provided in Brazil, there is no other option.

Some of the characteristics of the Brazilian road network are unfavorable for those who work in the road transport sector, when one analyses the data, according to DNIT (BRASIL, 2014). It can be seen below in an overview of the current scenario of roads in Brazil: 1.7 million kilometers of roads; Paved Roads: 12.9% (221,820 km); Unpaved Roads: 79.5% (1,363.740 km); Planned Roads: 7.5% (128,904 km); State Roads: 14.8% (255,040 km); City Roads: 78.11% (1,339.26 km); Federal Roads: 7% (119,936 km); Paved Roads Under Construction: 13,830 kilometers – (BRASIL, 2014).

The data above depicts the current situation of the Brazilian road network, while table 01 shows the representation of self-employed drivers in their market. According to article 2 of Law 11,442, dated January 5, 2007, self-employed freight carrier (TAC), also known as self-employed driver, is:

A natural person whose professional activity is freight road transport. They use their own vehicle to provide services to a specific client upon compensation or independently, i.e., not

being bound to any client, where services are provided on an independent, non-exclusive basis upon a freight allowance for each travel (BRASIL, 2007, online, our translation).

As listed in table 1, nearly 83.27% of carriers currently operating are self-employed. These drivers own their own business and manage not only operating issues, but also administrative and financial issues. However, they lack the power to negotiate freight rates, which is the main disadvantage for the category.

It is worth emphasizing that these self-employed drivers are undermined by the strong competition they face (ROSA, 2006) and that, in addition to achieving low profit margins, they work under conditions that are increasingly complex. When their activities lack the appropriate management, they may be subject to serious losses, as one can see from the average high age of the fleet, which indicates a financial issue that prevents them to have low-aged vehicles.

One characteristic of self-employed professionals is that they are deemed as a forma-

**Table 1 - National Registration of Freight Road Transport**

Carrier Type	Qty.	Vehicles	Vehicle/Carrier
Self-Employed	867,182	1,025,134	1.2
Company	173,826	1,223,732	7.0
Cooperative	414	17,575	42.5
Total	1,041,422	2,266,441	2.2

Source: (BRASIL, 2015b).

To better understand the matrix of freight road transport and the activity of self-employed drivers, one should understand what types of vehicles are used to provide services. The table below shows the average age of vehicles and vehicle types used by self-employed drivers:

lized company. This legal formalization places an informal business under rules and standards in force in the country, thus making it, as its own name suggests, a formal business company. To become a formalized company, the first step is to have a CNPJ [*Corporate Taxpayer's ID*].

**Table 2 - Average age of vehicles and vehicle types used by self-employed drivers**

Vehicle	Quantity	Vehicle Age
Light Truck (3.5 t - 7.99 t)	149,918	20.6
Simple Truck (8 t - 29 t)	476,838	24.0
Tractor Truck	151,622	18.3
Special Tractor Truck	1,035	16.0
Pick-Up Truck/Van (1.5 t - 3.49 t)	70,994	10.5
Trailer	12,455	20.2
Semi-Trailer	129,253	15.4
Fifth Wheel Semi-Trailer/Double Truck	469	10.1
Special Semi-Trailer	277	14.8
Light Utility Vehicle (0.5 t - 1.49 t)	30,223	13.5
Support Operating Vehicle	2,050	26.8
<b>Total:</b>	<b>1,025,134</b>	<b>17.3</b>

Source: (BRASIL, 2015b).

In a research conducted in the state of Washington, USA, it was found that self-employed drivers tend to have smaller profits compared to organized companies (NGUYEN et al., 2011), as well as less opportunities and financial resources (MIN, 2013).

Finkelstein (2006) points out that the 2002 Brazilian Civil Code provides for the legal personality of corporations in its article 45 as follows: “[...] the legal existence of private corporations starts with the filing of the articles of association with the respective registry office, upon, where required, authorization or approval of the Executive Branch, including any amendments thereto.” (BRASIL, 2002, online).

CNPJ is an identification number for companies and organizations. According to the Brazilian Internal Revenue Service’s website (BRASIL, 2015a), the CNPJ “comprises registration information on entities of interest to the government’s tax offices, the states, the Federal District, and the cities. The CNPJ’s management is under the Brazilian Internal Revenue Service’s responsibility.”

Before assessing the entrepreneurial profile of an individual or a business category, one should understand what an entrepreneur is and what his characteristics are. According to Chianato (2005), the word “entrepreneur” originated from the French word *entrepreneur*, meaning one who takes risks and starts something new. It is the person who looks for opportunities and has to do so very quickly, taking fortunate opportunities before other adventurers do. Over the years, the definition of entrepreneurship got more complex, since it evolved as a result of global economic changes and increased competitiveness in virtually all market sectors, which brought new opportunities, creativity, and inventions. Therefore, it is clear that being an entrepreneur is imperative to hold tactical and strategic positions in organizations.

To Schumpeter (2011), the entrepreneur’s role is to renew or redefine the standard of production by exploring an invention or, generally, a new technology method in order to produce a new or an old good, open a new

source of material supply or a new way to sell products, and build up a new sector. To be an entrepreneur, one should be an innovator at heart, while to be an innovator, not always one needs to be an entrepreneur at heart.

An entrepreneur is one who brings ideas and innovations to life, seeking not only profit as a result of their work, but also their own satisfaction when goals are achieved.

To start their own business, an entrepreneur needs a few skills to settle in such a competitive scenario. Fillion (1999) presents some skills that make an entrepreneur different and help them making decisions when looking to achieve their goals and for their business to be successful. Some of these basic skills are as follows: Innovation; Persuasion; Leadership; Responsibility; Ability to learn; Optimism; Focus; Sensitivity to new opportunities; Interpersonal skills; and Publicity and acting as a leader.

## 4 RESULTS

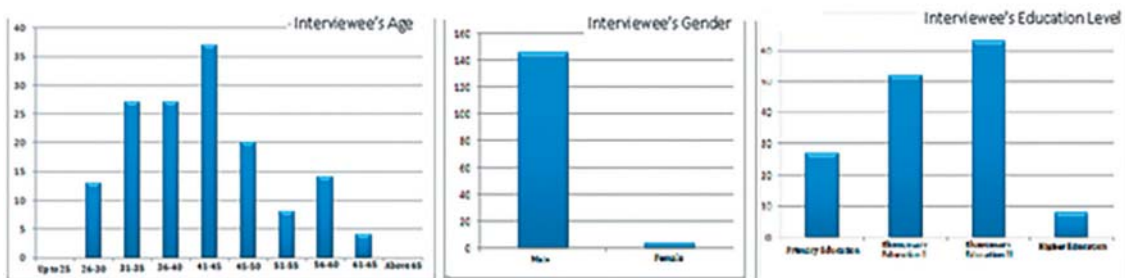
### 4.1 ENTREPRENEURIAL PROFILE OF SELF-EMPLOYED TRUCKERS FROM GUARULHOS

We used the SEBRAE’s Standard Entrepreneur Profile Survey to identify sixteen characteristics of an entrepreneur, namely Initiative, Looking for Opportunities, Persistence, Looking for Information, Quality Commitment, Compliance with Agreements, Efficiency-Oriented, Goal-Oriented, Systemic Planning, Moderate Risks, Assertiveness, Problem Solving, Influence Strategy, Monitoring and Moderate Risks. From these characteristics, only “Compliance with Agreements” and “Financial Management” were identified for most of the interviewees with a medium-high profile, which shows the need to deliver goods within the deadlines established and certain financial control of their activity, although a deep insight into the research showed a need to improve knowledge on financial planning and freight calculation. A similar result was achieved in a research by Moraes et al. (2012).

#### 4.2 SEX, EDUCATION LEVEL, AND AGE-RELATED DIFFERENCES

Despite the difference in the proportion of genders (total of 97.33% men and 2.67% women), women have been gradually starting to have a more active engagement in this market, with significant education levels, since 50% of them attended the higher education, and this percentage is a lot higher compared to men, which is only 4.11%. Clearly, this is an unfair comparison in terms of proportionality; however, women are more likely to have better qualification and education levels than men. These statements can be made due to the age bracket and number of women with higher education among the female participants of the research.

The drivers were interviewed on a random basis, so long as they fit into the expected profile, establishing a possible standard of particulars for those into the category and operating in the area we were focused on in relation to their age, education level, and gender. These data are shown in the graphs below. With regard to data on the interviewees, they will be shown in graphs for one to have a better idea of our statements.



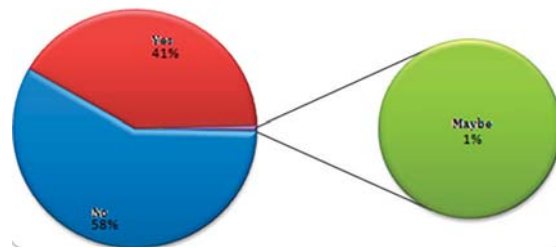
Graph 1- Interviewee's Age - Interviewee's Gender - Interviewee's Education Level  
Source: authors (2015).

This graph is intended to create a profile of drivers. Based on a direct analysis, we could observe an age peak of 31-45 years. On the other hand, there is a significant number of professionals from the sector aged 26-30 years. Interviewee's Education Level - points out a greater participation of individuals who only attended the primary education and elementary education I (79 people), as well as a great par-

ticipation (71 people) of individuals who attended the elementary education II, which shows poor investment and/or conditions to attend the higher education. Based on the graph, the higher education was the bracket with fewer individuals (8 people).

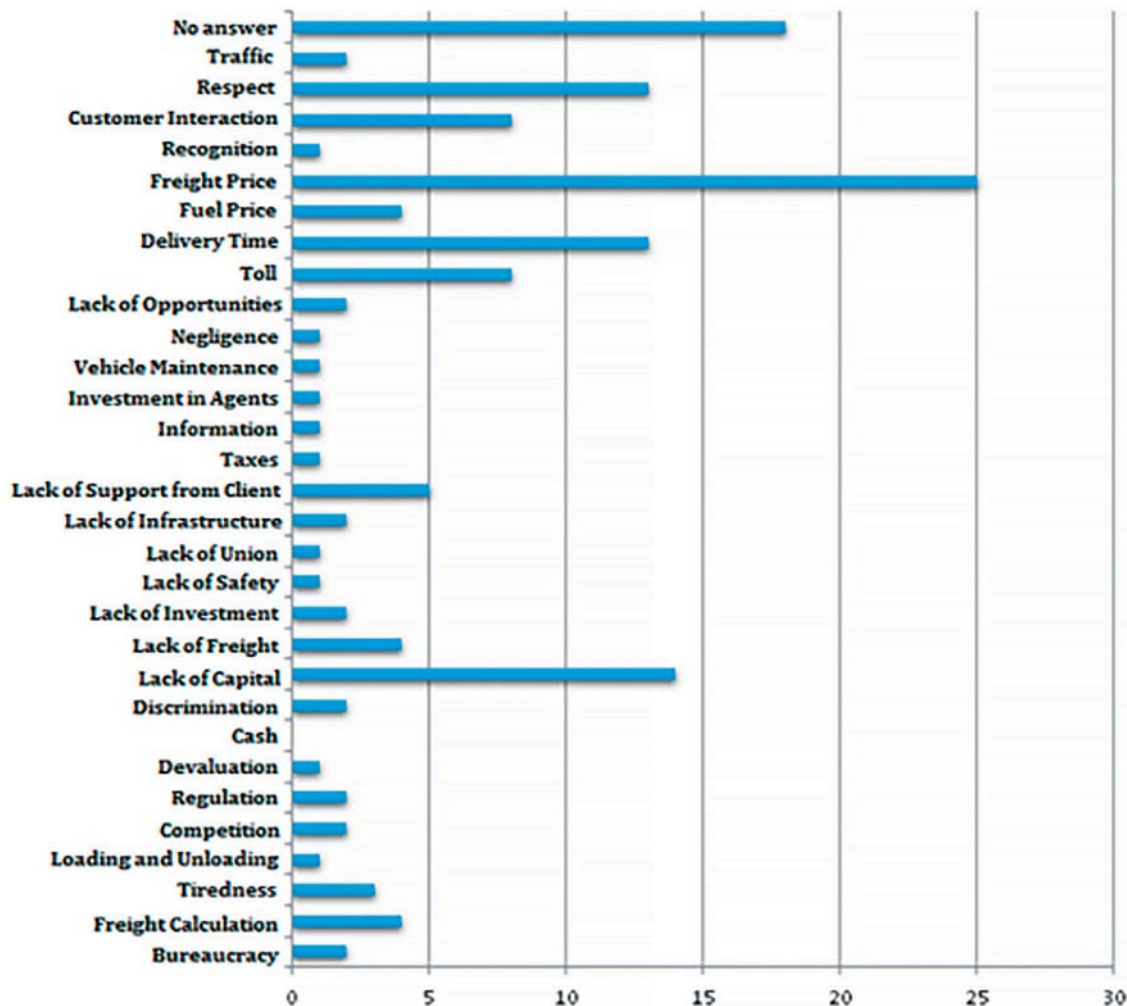
#### 4.3 BUSINESS FORMALIZATION, ISSUES, AND DIFFICULTIES

When the question was about the legal formalization process, i.e., if they had a CNPJ, the following data were obtained: 79% of the interviewees have no CNPJ, while 21% have it. Now when the question was if they intend to increase their fleet of trucks, thus improving their business capacity and making it a formalized business, 58% of the interviewees stated they do not wish to formalize their business or own a fleet of vehicles.



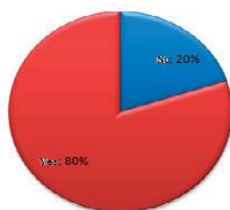
Graph 2 - Percentage of Self-Employed Drivers Willing to Become a Transport Company  
Source: authors (2015).

The difficulties faced by the professionals in their daily lives were listed in graph 3, in descending order of importance. We found that freight price, lack of capital, delivery times, professional recognition, interaction with customers, and payment of tolls are the greatest issues faced by the category according to graph 3 below.



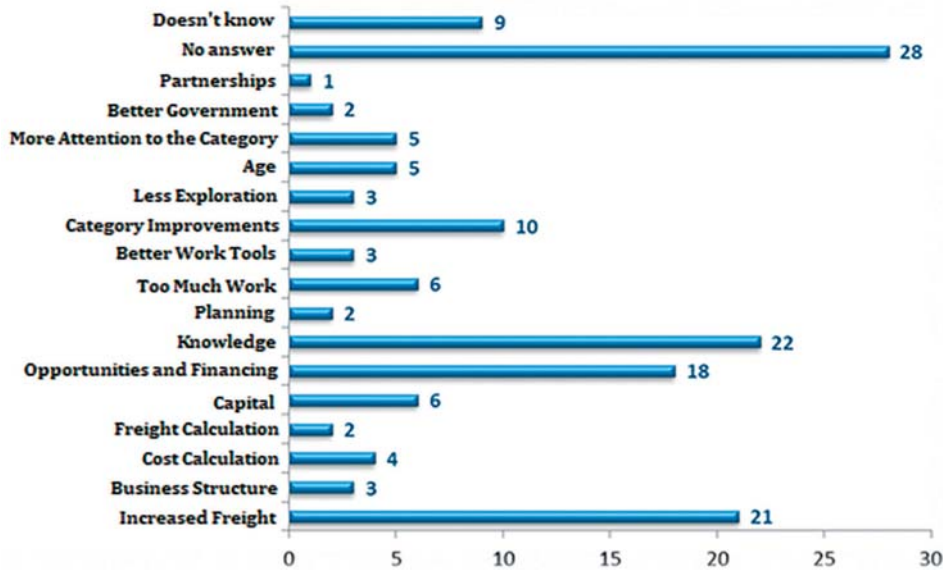
Graph 3 - What problems do you face as a self-employed trucker?  
Source: authors (2015).

With respect to business practices adopted by the interviewed self-employed professionals, they were questioned if they believe a prep course or training would help them improve their business practices.



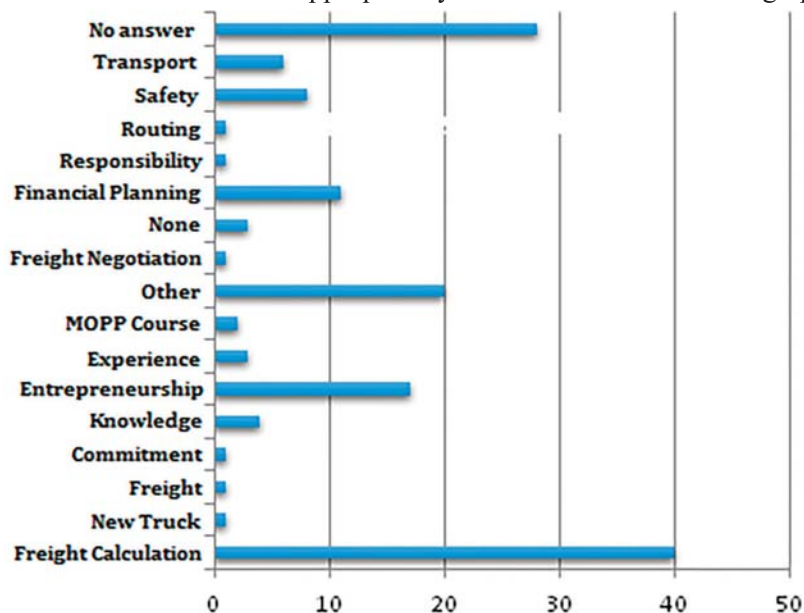
Graph 4 - Percentage of Interviewees Who Believe a Course or Training Would Help Them to Improve Their Business Practices  
Source: authors (2015).

Graph 5 clearly shows that the lack of knowledge on procedures and ways for the drivers to formalize and manage their business is a factor that prevents them from growing. Accordingly, they were questioned about what they need to do in order to make their business grow. From the interviewees who answered, most mentioned the following items: increased freight, improved knowledge, more opportunities and financing, and category improvements. This information matches the sector issues previously presented, thus evidencing that the lack of knowledge on procedures and ways for the drivers to formalize and manage their business is a factor that prevents them from growing.



Graph 5 - Question: What does a self-employed trucker need to grow?  
Source: authors (2015).

Finally, they were questioned about what subjects or topics are important for self-employed truckers to be able to run their business appropriately. The result can be seen in graph 6 below.



Graph 6 - What subjects or topics are important for a self-employed trucker to run his business smoothly?  
Source: authors (2015).

This item illustrated how important it is for the category to know how to calculate the freight, develop their entrepreneurial skills, prepare a good financial planning, work with safety, among others.

## 5 RESULT ANALYSIS

By assessing the results of all sixteen entrepreneurial characteristics of self-employed truckers, where most of the samples have an average profile in fourteen characteristics and high average in other two, compared to the open-ended questions, one can notice that the category, in its daily routine, is concerned with complying with contracts and delivering goods within the deadline and under the conditions expected by shippers.

It was found that self-employed truckers are strongly concerned about the financial management of their activity, as well as with the pricing of their services. However, they lack the appropriate qualification and skills to deal with this concern.

Due to their source, routine practices, and needs, these management issues cause a slight increase or even deterioration in the economic activity.

Surprisingly, the research shows that there are much less women than men, but when gender data are crossed with professional qualification data, women's qualification is higher than men's.

In spite of the high rate observed regarding the wish for growth in the activity (41%) by virtue of the qualification, not too many truckers have the management skills required to achieve their goals. In graph 5, where they are questioned about what they need to grow, the second most selected answer was "Knowledge" (qualification), and the first one was "No answer", which might show a lack of technical knowledge even to identify their deficiencies.

Issues related to cash flow, service pricing, and sales relationship that could be identified reflect in vehicle maintenance and in the self-employed trucker's ability to restore the vehicle, since vehicle depreciation costs are not

taken into account for pricing purposes, thus making the average age of the national fleet higher than the expected.

## 6 FINAL CONSIDERATIONS

This research allowed us to understand current facts regarding the entrepreneurial profile of self-employed drivers from the city of Guarulhos, in the state of São Paulo. There are several economic, social, and political issues that impact the results of this article. However, the question to be answered is what should be done to change the reality of these professionals who seek improvements in their work conditions, in their earnings, and in their quality of life. From the open-ended questions, one can see the drivers are strongly dissatisfied due to a lack of recognition and financial return as a result of unfavorable contracts, taxes, and profession-related risks. One way to change this situation is to educate these self-employed professionals on their main needs and encourage them to seek specialization and qualification in general.

Throughout the research, there were issues related to communicating with interviewees and making them understand the actual importance of the study; however, these issues could be resolved by adjusting our language to theirs.

Therefore, one can state that creating courses and encouraging entrepreneurship are strongly significant actions for this sector, which is crucial for the maintenance and distribution of goods in the country, as well as that great part of the disinterest in working in the field results of a lack of recognition of the category and of a series of financial issues caused only and exclusively by management problems related to the use of resources.

## 7 PRACTICAL RECOMMENDATIONS

To implement qualification, courses for self-employed carriers would help to support their permanence and feasibility as professionals in the road transport market, as well as to



improve their skills to manage entrepreneurial activities, thus ensuring future expertise, job creation, and increased earnings.

As a suggestion, these qualification courses could be strategically provided in truck stop locations used by self-employed drivers, such as service stations and freight facilities, or even airports, ports, and border points during loading and unloading intervals.

### ANÁLISE DO PERFIL EMPREENDEDOR DOS CAMINHONEIROS AUTÔNOMOS DA REGIÃO DE GUARULHOS, SP, BRASIL

#### RESUMO

Este artigo científico traça o perfil dos motoristas autônomos da região de Guarulhos, por meio de pesquisa descritiva, quanto a seu perfil empreendedor, sua propensão à formalização e crescimento de sua atividade econômica, seus problemas e suas necessidades de desenvolvimento de competências. O resultado apresentado pelo questionário tipo *Survey* mostra a realidade do carreteiro autônomo, seus problemas, sua intenção de formalizar seu negócio e suas necessidades de desenvolvimento, seu resultado é útil ao desenvolvimento profissional da categoria e implica o aprofundamento e a continuidade das descobertas efetuadas.

**Palavras-chave:** Perfil Empreendedor. Motorista Autônomo. Transporte Rodoviário.

### ANÁLISIS DEL PERFIL EMPREENDEDOR DE LOS CAMIONEROS AUTÓNOMOS DE LA REGIÓN DE GUARULHOS, SP, BRASIL

#### RESUMEN

El artículo traza el perfil de los conductores autónomos de la región de Guarulhos, a través de una investigación descriptiva, en relación al

perfil emprendedor, su propensión a la formalización y crecimiento de su actividad económica, sus problemas y sus necesidades de desarrollo de habilidades. El resultado presentado por el cuestionario tipo *Survey* muestra la realidad del camionero autónomo, sus problemas, su intención de formalizar su negocio y sus necesidades de desarrollo, su resultado es útil al desarrollo profesional de la categoría e implica el ahondamiento y la continuidad de las descubiertas efectuadas.

**Palabras-clave:** Perfil Emprendedor. Conductor Autónomo. Transporte Carretero.

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