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SAVANNAH, GEÓRGIA, E.U.A
2003
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SUMMARY

The objective of the work is to demonstrate the importance, the role and the use of the road transporter of loads as a factor of competitiveness for logistics operations in the Brazilian market. For so much the work tries to explain the road transport and its performance as a factor of competitiveness in the chain of logistics. There will be considerations made on the decisive process for choosing a logistics operator and on the administration of road transportation of loads. Starting from there, a research was elaborated to verify which elements characterize a logistics operator and which characterize an operator of road transportation of loads, trying to identify the existing gap between one another and which way it’s possible for a transporter to become a Logistics Operator, once assuming functions of logistics operations, the road transporter of loads can turn into an important factor of competitiveness for the organizations. The following research procedures are being used: exploratory researches, descriptive researches and evaluation researches. The methodology is divides in two stages: one of a qualitative nature and the other of a quantitative nature. The preliminary results indicate that the transportation companies, taken by the market trend in which the demand is increasing for logistics operators, need to accomplish great investments in infrastructure (storage, equipment, packing), systems, policy of supplies, quality and labor to supply the existing gap between the characterized attributes of the two operations. The work is a good referential for road transportation companies of load in Brazil to get a competitive positioning in the intransigent market of loads in the country.

Key words
Road Transporter of Loads, Logistics Operator, Competitiveness.
1. INTRODUCTION

A new technological paradigm started to delineate in the last decade. The definition of the new era is sketched in the era of the speed of information, in how fast things happen in the world of the new technologies, the Era of Intelligence in Net, the electronic business. According to BALLOU (2001), logistics is characterized as a new field of integrated administration, comparatively with the traditional finances, marketing and production. The companies have been engaging continually in the movement and storage activities. The novelty results in the concept of coordinated management of the related activities, instead of having practiced separately and in the concept of that logistics joins value to the product and the services.

The question is if the companies, taken as subcontracted logistics services are prepared, appropriately to make all this movement of goods that extrapolates the storage and the transport, involving the whole managerial structure. The trade involves the exchange of goods and services for money, which is sometimes done without the intervention of money, that is to say, through exchange. Along the whole productive chain, the consumer is the final objective. With the expansion of the electronic trade this structure is changing itself, says NOVAES (2001).

The great challenges faced by the companies in a general way, are in the growing pressure to reduce costs and to obtain larger effectiveness in their operations. To turn the more efficient chain of supplies, eliminating its direct action to the functions that join value even so they are not the focus of the specialty of the companies.

The logistics has been presenting itself as a new area of studies with significant impact in the society. The logistic process affects almost all spheres of the human activities. Independently of the role of the educator’, consumer’, executive’ or employee, it is important to understand the role of the logistics says LAMBERT (1998).

Facing the Brazilian territorial dimension, and the high use of road transport in Brazil, it fits to stand out the importance and need of rendering these services as a gain in the chain of logistics operations.
The companies that enjoy a durable success have essential values and a purpose that it stays unaffected, while its strategies and managerial practices adapt themselves unceasingly to the world in mutation, COLLINS and PORRAS (2000).

The starting point of this research was the verification that a lot of transportation companies have been auto denominated of logistics operators, when actually they are not appropriately guided to the real performance of logistic in its strategies of business.

This research has its vindictive in the fact of being the logistics a primordial link for the materialization of the commercial relationships.

The transformations unchained by the current competitive processes among the companies, unchained the appearance of mechanisms that adapt themselves to the evolution imposed by the market.

Facing the notorious growth of the logistics section and the intensity of use that the road transport has in relation to the other types of transportation in Brazil, according to GEIPOT around 62%, the investment of the companies in this section stand out.

With the intense use of technology of information in lines of production of the industries (MRP, ECR, EDI), the reduction of stocks and the efficiency of the technology are decisive factors for competitiveness. The companies start to get more and information for the market, with the objective of providing customers needs trying to reach competitive performance and higher profit.

The supply chain of goods consumption has been trying substantial changes in the last years. The new sceneries with competitive atmosphere were delineated starting from the opening of the domestic market to the imports of quality products. Starting from these changes, the companies are maintaining an extensive watch of the relationships between the industry and the market. In this scenery, logistics has been the focus as central competence, being framed in an effective way in the strategy of marketing of the companies.

The companies accomplish the activities of transports, stocks, distribution and communications as an essential part of their business, with the objective of assisting their customers well, a concern which had not always existed. The reflex on the gains is transforming the administration of the logistics activities in key factors of success.
The interest for the present study resides in the identification of a builder of attributes of an organization of logistics operation, as a way of identifying the gap between a logistic operator and a transportation company. That identification of attributes is still not very explored by the theoretical concepts of logistics. Then, it is necessary an exploration of concepts, origins and characteristics, in a way to place them theoretically.

The development of this work was made through bibliographical and exploratory research developed in transportation companies. We try to identify a new atmosphere in the relationships, between the attributes related for the activity of a logistic operator and a carrier, the important aspects that characterize the way as the carriers can use these indicators for them to be strategically positioned, incorporating this new activity.

Thus, the focus of this research is to identify and to characterize:

- Which is the existent gap between the attributes of a transport organization and a company of logistic operation?

Objectives of the Research

a) To characterize the activity of a Logistics Operator;

b) To characterize the activity of a Road Cargo Transporter;

c) To identify the gap between one another.

Used Methodology

The study is exploratory, because it has a purpose to develop, to illuminate and to modify concepts and ideas, for the formulation of concepts that can converge to posterior investigations. In agreement with CHURCHILL (1998), the exploration is the base of a good study for any problems on which is known little. The application of these methods is due to the fact that the present study doesn’t have much information to start questioning and allow a larger flexibility in the insights generation.

It is descriptive in the moment that the researchers will try to describe the reality as it is, without worrying in modifying it. However it has evaluating character, once that it will try to identify the existing or not of similarities between the attributes of an organization of a logistics operator and transportation company GIL (1987).

The present study tries to combine aspects of the objective and subjective dimension. Firstly it describes the precise reality of the organization for, soon after, to
develop an appreciation of the problem, with the purpose of showing the relevance of the combination of the methods used in this work KUHN (1992).

The development of this study has the perspective of synchronization, which according to BRUYNE et al (1977) it is characterized by the development of a study in a certain period of time, without considering its evolution.

In this context, the method that characterizes and helps the understanding of the theme is the case study, that according to BRYNE et (1977) it is founded in the intensive analysis of an only organization, it gathers such numerous and so detailed as possible information, with views to apprehend the whole situation. For this reason, it is necessary to use techniques of collection of such data as: documents, interviews and observation.

2. THE PAPER OF THE LOGISTICS IN THE COMPANY

According to BOWERSOX (1986), under the point of view of logistics system, three facts are of primary importance when establishing the capacity of transport services, as they proceed:

a) Cost: the cost of the transport is related to the payment, for the movement of the product between two points, plus the own expenses related to stocks in traffic. The logistics system should be drawn to minimize the transportation costs in relation to the total cost of the system. Though, this doesn’t mean that the most inexpressive transportation method is always desired.

b) Speed: speed in transport service is the necessary time to complete a movement between two locations. Speed and cost are related in two ways. First, transport specialists are capable to provide fast services with high fees. Second, the fast service shortens the interval of time in which materials and products are retained in the traffic.

c) Consistency: the consistency of the transport service refers to the variation in time among a number of movements in the same places. Consistency of the service is the most important characteristic of transportation. If a movement is accomplished once in two days and next time it is accomplished in six days, serious gaps can be
developed in the flow of goods, as unbalance of stock control. It lacks consistency in the transport capacity, considering the safety in the levels of stocks that will have to be provided for protection against flaws in the service. The consistency in the transport influences the understanding between salesperson and buyer with a relationship that risks the maintenance of stocks.

For BOWERSOX (1996), the elements of a logistics system that don’t act in an individual way and are justified for the contribution that they give to the total performance of the system. A functional relationship called “trade-off that exists among the components, can stimulate or hide the set up performance.

Above all, logistics administration is related to the planning, to the coordination and operations. Starting from strategic plans, they are defined politics and operating systems that should be coordinated in a way to obtain performance of the objectives, adding value to the services with low possible expenditures in the total cost.

Then, according to LAMBERT (1998) “the effective administration of the logistics complements the effort of marketing in a company, providing an effective direction of the product to the customer and placing the product in the right place and in the right moment”.

Therefore, as part of the marketing effort, the logistics carries out the key role in customers satisfaction in a company and in the profit of the company as a whole, could take to an additional advantage in the market.

When analyzing the role of logistics in a company, BALLOU (1993) affirms that the logistics conception of putting together the activities related to the flow of products and services to administer them in a collective way is a natural evolution of the administrative thought. The transport activities, stocks and communications started even before the existence of an active trade between neighboring regions. Today, the companies should accomplish those same activities as an essential part of their business, in order to provide their customers with the goods and services that they want.

This way, the managerial logistics has the objective to provide the customer with the required service levels. The goal level of logistics service is to provide goods or correct services, in the right place, in the exact time and in the condition required at the smallest
possible cost. According to LAMBERT (1998), this is possible through the adequate administration of the key activities of logistics, that is to say: service to the customer (the customer’s satisfaction is important for the company); processing of orders (the central nervous system of the company); distribution communications (the effective communication is vital); inventory control (the financial impact of the stocks); demand forecast (of highest importance); traffic and transport (the transport is an important component of the logistics); stoking/storage (the products should be stored); factory and stocks/storage location (where should the facilities be); movement of materials (its objectives); supplies; support of replacement parts and service (after-sales service); packing; reuse and refuse removal; administration of refunds (reverse logistics).

Finally, it is worth to point out that, in practice, a lot of organizations have been developing new organization charts to best treat the supply activities and distribution, frequently giving status of high administration for the function, next to marketing and production.

3. STRATEGIC FUNCTION OF LOGISTICS IN A COMPANY

The tendency heading to an integrated world economy and to the global competitive arena is forcing the companies to project products for a global market and to rationalize their productive processes in a way to maximize the corporate resources. The companies should coordinate their functional activities inside of a coherent strategy that considers the global nature their business.

As NOVAES (2001) says, with the economic opening through globalization, for the Brazilian companies there was a need of searching for new references for their performance besides logistics. In Brazil there are still companies in the First phase, that is, controlling their flows through the stock and several sections acting separately. Others that operate in the Second phase, trying to go on to the Third. These companies are looking for a better articulation with their suppliers and integrated planning of their operations. Some
interlinked ones saw EDI, to offer a larger flexibility in the delivery of components. In the Fourth phase it is noticed movements of ECR, still incipient, for a larger integration of the chain of supplies. It should be considered that even in the USA, where all evolution had started, there are a lot of companies still operating in the Second phase and just a few have got to develop fully to the Fourth phase.

However, according to DORNIER (2000), when the corporate strategy arrives, most of logistics functions stay relegated to the traditional papers reactive/tactics. The high administration (taking a surpassed managerial attitude) projects the strategy without their considerations and relegates them a role of cost minimization, owed mainly to the following reasons:

- The dominant function of certain areas in the formulation of corporate strategy;
- A vision of a short period of operations/logistics contributions;
- A belief that logistics is a technical specialty and not a strategic function of the business.

Today, in the current atmosphere of business, the improvement in the administration of the logistics becomes so important for the corporate strategy as the improvement in the manufacture and in the marketing.

In this context, according to DORNIER et al (2000), the logistics strategy can have the following definition: it is coherent, unified and integrated pattern of decisions; that determines and reveals the purpose of operations and logistics activities of the organization in terms of long term objectives of a company, action programs and priorities of resources allocation; it tries to support or reach a sustained advantage of long term by means of the answer adapted to the opportunities and menaces in the atmosphere of a company.

CHRISTOPHER (1999) approaches the following fact: “only recently, the companies recognized the vital impact that the logistics management can have obtaining competitive advantage”. Therefore, he defines logistics, as being the process of managing strategically, that is to say, to manage through competitive strategies that include logistics.
For CHRISTOPHER (1997), “logistics management can provide a source of competitive advantage, that is to say, a position of durable superiority over the competition, in terms of customer’s preference, that can be reached through logistics”.

The search of a maintainable and defendable competitive advantage has become the concern of every attentive manager to the realities of the market. You cannot presuppose that good products always sell, nor it’s acceptable to imagine the success today will continue in the future. The companies that take logistics as a marketing weapon, says LAMBERT (1998), probably will turn logistics into an integrating part of their business strategy.

In this sense, it is worth to observe the emphasis given to the search of strategies that would provide a superior value to customer’s eyes, in the last years. Great part of the merit of this search is due to Michael Porter, professor of Harvard Business School that through his researches alerted the managers and strategists for the central importance of the competitive forces to reach success in the market.

According to CHRISTOFER (1997), Porter brought a private concept to approach this subject, which is the chain of value:
“The competitive advantage cannot be understood being looked at completely for a company as a whole. It derives of a lot from discreet activities that a company carries out, projecting, producing, commercializing, delivering and supporting their product. Each one of those activities can contribute to the position of a relative cost for a company and to create the base for the differentiation…. The chain of value unfolds the firm in its strategically important activities, to understand the behavior of the costs and the existing or potential differentiation. A firm gets a competitive advantage executing these strategically important activities in a cheaper or better way than its competitors”. These activities of the chain of value can be classified in two types:

Primary (entrance logistics, operations, exit logistics, marketing and sales and technical assistance) and support activities (infrastructure, human resources management, technology development and acquisition). Thus, the competitive advantage of a company appears in the way as the companies carry out such discreet activities inside the chain of value.

Therefore, to get a competitive advantage over the competition, the company should provide value for its customers, carrying out the activities in a more efficient way than its competitors or carrying out so that it creates a larger value noticed by the consumer.

4. ROAD TRANSPORT OF LOADS

It is run over to ALVARENGA and NOVAES (2000), when it’s emphasized, that the road way is the most expressive in road transportation of loads in Brazil, reaching practically the whole national territory. Statistical data of the study accomplished by Geipot in 1999, indicated a total extension of paved highways of approximately 165 thousand kilometers. The general total of paved and non-paved highways in that year was of 1.724.924 kilometers.

However, according to FELTRIN (2000), the atmosphere of this millennium turning was favorable to the truck competition, being stimulated by two sides: increase of operational costs and the appearance of modal competitors. In this sense, some facts are inhibiting the hegemony of trucks, such as:
Freight influencing the final price of the product, stimulating alternatives of modal;
- The positions of tolls;
- Increase of oil *diesel*;
- Increase of robberies of loads;
- The precarious state of conversation of most Brazilian highways.

According to ALVARENGA e NOVAES (2000), “the national road net comes quite deteriorated, with extensive spaces that need massive resources for its recovery. The situation of the highways harms a lot the road transport, increasing the time and price of operational costs.

Therefore, according to FELTRIN (2000), the scenario of transport in Brazil is modifying, although slowly. The arrival of great multinational logistics operator in the country mainly is a test that the road transport tends to be more efficient. A truck in Brazil still rides very little, wastes time in load and unload operations and sometimes operates with load use.

To conclude, it is worth to stand out, that a little time ago, the transport was a hidden department in the organization chart of the expedition. Now it is rejuvenated by the new moment that places it as one of the sensitive parts of logistics, entering the list of strategic subjects. If the cost of transportation before was an easy input to be reviewed to the price of the product today it can be the differential between the profit and loss of a company.

5. CHARACTERISTICS OF THE TRANSPORT SECTION

For GÜNTHER (1988), the managerial activity in road transportation of goods is the result of the verification of a service need, so much in the geographical aspect as in its operational particularity. The need should be examined in all its profile, from its structure based in the demand and supply of goods, until the temporary aspect of its existence.
6. FUTURE SCENERY OF TRANSPORT

According to FELTRIN (2000), the future of road transportation of roads after the privatization of railroads, the modernization of ports and the propagation of highways with tolls - points that can alter the domain of the truck as a leader in the source of transport – there are two answers:

- First, the truck has long life assured in the source of transport, when it denotes that the characteristic of the business is changing with the abolition almost summary of the stocks. Therefore, some stores should be provisioned more than once a day.
- Second, according to Walter Zinn, mentioned by FELTRIN (2000), “the road area of loads should continue leading the chart of Brazilian transport, in spite of the rail and waterway rejuvenation, starting from the privatization that motivated the competitiveness.

Giovanni Fiorentino, consultant of Bain & Company, mentioned by FELTRIN (2000), also points out that although the prevalence of road transport should not be violated. And he justifies: “it is natural that the privatize rail roads has the potential to grow. But, even if they double the general participation in load volume, where the trucks prevails nevertheless it won’t be very probable that it will stand as a leader, unassuming that road transport tends to occupy spaces because of its flexibility.”

According to FELTRIN (2000), selected 11 of the main Brazilian loads for volume, The road modal appeared way ahead, with 64% of the total transported. The railroad in second, with 32,7% fitting inexpressive participations to the coastal traffic, 2,5%, and to the waterway modal, 0,9%.

Still according to the author, in the document Sectorial Analysis – Gazeta Mercantil 2000, in a scenery simulated by the Empresa Brasileira de Planejamento de Transportes (Geipot) for 2015, it will demonstrate changes. The volumes projected for a group of eleven products, the transport source optimized in 2015 shows the railroad ahead, with 55,7% of the volume proceed by the highway, with 23,6%, the waterway, with 10,8%, and the coastwise shipping, with 9,9%.
7. SECTOR STRUCTURE

According to Cadastro Nacional de Pessoas Jurídicas (CNPJ), mentioned by FELTRIN (2000), there was in the middle of October of 2000, a total of 77,231 register companies. The great majority, 75,250 companies, or 97.32%, are classified in the situation of regular or non-regular active transporters. The regulars ones added 22,836 companies. The non-regular ones were 52,414.

Actually, the sector of road transport of load is quite spread out. Just counting the active companies, so much regular as irregular, in a total of 75,250 transporters, there are 13,7 companies for each Brazilian city. Or a transportation company for each 2,000 Brazilians. An observation made to justify the high number of existing of transportation companies in CNPJ is the opening of small companies, many of them individual companies, to satisfy legal demands made by the contracting party.

Even so, according to Fundação e Instituto de Pesquisa Econômicas (Fipe) of Universidade de São Paulo, that had as source the Relação Anual de Informações Sociais (Rais 1992), mentioned by FELTRIN (2000), up to now, without considering the data of CNPJ, a frequently used number by the community of transport showed a population of 12,000 road transportation of load companies of different sizes.

8. PERFORMANCE OF THE SECTOR

The transport system in Brazil, that was several years without receiving significant investments, is going thru some changes in terms of the use of possibilities of utilization of more than one modal movement of loads for the whole supply chain.

The kinds of products mainly transported for more than a modal are commodities, as iron, grains and cement, all characterized as products of low aggregated value, being the cost of transport considered a part of the value of these products. But, for products of larger aggregated value, the transport flow for more than one modal is quite inexpressive in
Brazil, once that its infrastructure of transport system compared to others countries still needs improvements.

Another aspect to be observed relating to the performance of the sector, according to NAZÁRIO (2000), comparing the competition between highway and rail road, it is verified that for certain distance and transported volume, the use of more than one modal is the most efficient way of executing the movement, however in Brazil as it was said previously, such competition possesses distortions due to the main fact of infrastructure and regulation.

Another aspect to be observed regarding the performance of the sector, according to FELTRIN (2000), it relates to PIB. In average, the transport services maintained between 1995 and 1999 the participation of 3,28% on the Produto Interno Bruto (PIB). Considering that in the period the road modality had the average participation of 62,6% over the load transporter per kilometer, the truck could have generated 2% of PIB in the period, something like R$15 billion a year.

To conclude, the last aspect to be approached is regarding the transport source of loads. As so, according FELTRIN (2000), the capture of data to set up the transport source of loads considers effectively physical volumes and volumes obtained by formulas. But, it is a big the difficulty to gather physical data from the road system. Therefore to calculate the participation of road transportation of loads in the, GEIPOT uses their own calculation method.

Thus, through data compiled physically or extracted from formulas, we know that, in 1999, the road transport was responsible for, in the transport source, 61,8% of the movement, the train for 19,5%, the waterway system 13,8%, the waterway for 4,6%, and the air transportation for 0,3% of the loads. See chart 1.
9. FREIGHTS

The cost of manufactured products is larger than the primary products. In the first case, the cost of transport varies according to the type of product involved in the commercial transaction and, for grains transportation, what influences the cost of transport is the volume to be transported (LANGHAMMER *apud* LOTTEMBERG and GUVERICH, 1994)

BALLOU (2001) says that, the costs of transport vary from two to three thirds of the total logistics costs that can improve according to the efficient use of equipment and people. The extension of time that the products are in traffic influences the number of embarks that can be done with a vehicle the whole period of time, and the total costs of transport for all embark. To reduce the costs of transport and also to improve customer service, finding the best itineraries is a constant decision problem, but a good route influences directly in the final costs of transport.

According to FELTRIN (2000), there is a big difficulty in the sector of road transportation to review readjusts with the loaders. To face some readjust of compulsory...
prices, such as: diesel and products derived of petroleum, and the escalating number of tolls, the road sector of loads has been challenged to reduce costs, through the increase of productivity and instruments of operational and logistics refinement.

In the practice, between September of 1994 and October of 2000, the freight of a truck driver, when confronted with the period of inflation suffered an average loss of 31.8% in nine important routes, as you can see on chart number 2.

The freight fee paid to a truck driver is an important and transparent indicator. It is important because the truck driver is the main transporter and works as a market thermometer. It is transparent because, the spot price is quoted openly like an auction.

10. THE ROAD TRANSPORT IN THE CHAIN OF LOGISTICS

Considering that the priority focus of this accomplishment is harnessed to the road transport in the logistics chain, it is opportune to confirm it as a very important inside part of the logistics system. The importance of the road transport is the logistics chain, and its action as a differentiating factor, suggests that we explore and analyze in a more detailed way this way of transportation.

LAMBERT (1998), referring to the road transport as the more used modal, it also detaches that this competes with the aerial in small loads and with the rail in great loads. Considering a distance involved in approximately 300 km, or less, in service point-to-point, any load size, it is possible the competition between the aerial and the road, knowing that the road transporters can obtain larger efficiency in the terminal operations, collection and deliveries. The competition is also direct with the rail transport that takes place in the occupancy of the load of a truck (TL or complete load) in spaces of up to 300 km. When the shipment exceeds 50 tons, the rail transport prevails.

The road transporters are more flexible and versatile, because they transport loads of varied sizes and weights to any distance, offering the customer a fast and reliable service with little loss or damage in traffic. Many road transporters, mainly those involved in
programs Just-in-Time operate with a time schedule. That results in very short traffic times and reliability.

In practice, the indexes of lose and damages in road transport are substantially smaller than the most of rail and slightly larger than airfreights. No other transport modality provides the market coverage offered by road transport.

LAMBERT (1998), classifies the sector in two categories: transporters of general loads that generate most of the revenues and specialized road transporters that generate the remaining revenues, being included the transporters of heavy machines, petroleum (liquid state), refrigerated products, agricultural products, motorized products, construction products, utensils and other specialized items.

The author complements: “While it continues supplying fast and efficient service with fees offered among the rail and air, the sector of road transport will continue to prosper in relation to other means of transportation.” LAMBERT (1998).

The Minister of Transports from Fernando Henrique Cardoso’s government, the lawyer Eliseu Padilha, in interview granted to Exame Magazine – Special Publicity News – (22/09/1999) – when was questioned with relationship to Brazil as a road country, stuck in the 50’s and with the arrival of the automobile industry, that made the country take large steps to become a road country. Comparing Brazil to other countries with the same territorial dimension the Minister said that in Brazil, more than 60% of transport are made by road, while in similar territories the percentage is of 30% for each modal.

In the same special publicity news (22/09/1999), Carlos Alberto MIRA, director of National Association of Load Transport – NTC, in interview granted under the title: “The market will grow in all modals”, describes about road transport sector, conceiving this modal as a sector that is going through several transformations, among them conceptual changes. Alert for the growth in the country, of the combination transport – Logistics, where the transporters are closing operational deals with logistics companies or creating their own companies in this segment. He still ennobles, as a remarkable factor in the sector, the use of technologies such as advanced software of managerial administration, systems of data communication through satellite, among others.
In relation to the difficulties that the sector is facing, Mira (1999) stands out the freights bellow of what would be necessary provoked by the free binomial competition recessive economy; the increase of costs, mentioned as an example, the toll that has been readjusted much higher than inflation in percentile.

Establishing a relation among the modals: rail, waterway and road, the interviewed person argues that the first ones are for specific loads and long distances, while the truck possesses the agility to deliver door-to-door, absent aspects in the others. Those aspects make the road transport not to lose significant space in the future.

Its participation in the Brazilian distribution should become much more productive, having in mind, the notable ability of a truck to transport dry loads. Not only agricultural products. Considers MIRA (1999), that with the growth of the country, the trucks will the ways that means, the connection between the producing center and the railroad or the waterway to the ports. The market will grow for all modals.

In relation to the transportation companies that create logistics companies and their advantage over other logistics companies, stands out the person interviewed that the transporters have 90% of what’s necessary to become a logistics operator, because they do not only transport, but they move and store, they know the regional characteristics very well of the country-continent, the interstate barriers and the legislative peculiarities. This way, the industry is reducing their storage more and more and they are subcontracting several activities.

In relation to the profile of a road transporter for the next millennium, Carlos Mira, is optimistic when foreseeing that the truck will make the transportation in small and medium distances of practically all products, while the other modals will be in charge of transporting grains, minerals and some raw material. The tendency is for the road transportation companies to be more and more specialized.

Today, when you intend to get a position in the industrial context regarding the role of logistics and transport, you must count with logistics strategies very well structured that generated production agility, distribution and cost reduction, as aspects that put a company ahead of its competition. In this point it is opportune return to BALLOU (1995), when he stands out that the field of logistics, until nowadays, has its importance not very
recognized by the service organization, due the fact of the absence of vision to limit activity to supplies, once that activity of physical distribution of goods is absent in organizations such as banks, hospitals, schools.

The transportation companies are service organizations that work with the movement of goods by nature, to attend the necessities of physical distribution of the logistics system of their customers. This way, we have to take care not to confuse the operational function of a transportation company – collection, movement and delivery of loads – with the logistics function of an organization that has the focus on customer’s satisfaction, belonging to them the building and delineating work.

The costs of transport possess certain basic elements. MOURA (1998) considers these elements as terminals and vehicles. Each one of them results in a certain cost for the transporter and, depending of the modal and the transporter, it can be capital cost (fixed) or operational (variable). The fixed costs don’t vary according to the volume of transported goods, while the operational costs are variable.

According to HANDABAKA, mentioned by DANESI (1998), the road transport shows the lowest fixed costs among all transportation modals for the following reasons:

- The road transporters are not the road owners where they move;
- A truck is constituted in a small economic unit
- The operations in terminals don’t demand expensive equipment

In compensation, the variable costs tend to be high, because the users finance the construction of highways and its maintenance (taxes, tolls and rates). The advantages of the road transport are characterized by the versatility, accessibility and availability, while the main disadvantage is the capacity of transport for vehicle.

In relation to the costs of transport for truck, the author distributes them among terminal expenses and route.
Expenses per terminal – collection, to delivery, to handling in platforms, storage, billing and collecting of bills, represent between 15% to 25% from the total cost, alternating in agreement to the segment. These expenses, calculated over the value by metric ton, change easily when the size of the shipment is below 1.000 to 1.500 kg. For larger shipments of 3.000 kg, the cost goes down progressively.

Expenses per route – they represent 50 to 60% of the total cost,

Total costs – they decrease proportionally direct to the size of shipment and the distance, having in mind that the cost per terminal and others fixed costs, are distributed in more tons per kilometer (Tn/Km).

The Magazine “Movimentação e Armazenagem”, edition of March 2000, mentions some distribution and transport characteristics, with the clear vision of how they can be evaluated under the context of systemic vision of the logistics chain. They stand out that the globalization and the focus on cost reduction intensified the exchanging need among units of the same company, suppliers and customers implying a great increase of materials flow. In this point, the article makes reference to the prominence that the distribution logistics and transport occupies now. It complements, emphasizing that the physical distribution is a group of operations associated to the transfer of materials and products, from the production to the designated place, usually for the customer, including the flow of information.

Another important factor is the suitable planning of channels distribution that interferes in the time of products delivery, in the costs of handling and storage and lost sales.

Some distribution modalities are being used by the automobile industries and also interfere in the distribution processes:

- Provisioning for third parties straight from the assembly line – line feeding;
- Selective collection milk-run;


- **Direct overflow – cross-docking:**
- Suppliers of components deliver in the manufacturers, larger sets that deliver the complete system – “little systems”.
- Manufacturers of big sets or systems deliver and set up the product in the client – “moduleiros”.
- Use of standardized – beans – that are delivered directly off the assembly line;
- Others

Brazil due to the need of growing quickly, structured its model based on the road transport, where the other modals stayed in second plan.

LAMBERT (1998) when refereeing to strategies decision in transports, affirms that an enclosed comprehension of the transport system is a pre-requisite for a good logistics decision. Considering the transport as an essential part of any logistics system, observes the author, this should be very well administered so that the company can satisfy its customers and obtain an acceptable index of return on its investments. In that sense, the effective and efficient strategies of decision are of so much fundamental importance for the transporters that supply services as for the loaders that use them.

In the supplement LOG, of the Magazine “Movimentação e Armazenagem” (jan/feb), the professor Manoel Reis, - makes the following statement: “There is intermodability only when there is efficiency”. One of the intrinsic aspects of the multi modally is the logistics and vice-versa. It continues declaring that the globalization has been providing the appearance of an atmosphere of intransigent competition that enhances the qualities of logistics. The logistics process of a company answers for the whole flow of materials. “Today it is not admitted that a “good” product sells by itself and that the success of today is guaranteed for tomorrow. Besides the quality that before was a competitive differential, today it is a presupposition”. (Manoel Reis, 2000).

Reis comments, although the tendencies of transport are also in participation of this intransigent competition. So, every day, companies look for a larger efficiency in its services, which a lot of times depend on the perfect operation of the logistics chain as a
whole, but mainly, the efficiency of the distribution, which makes the product, to be in the right place on time. The author confirms that is exactly there where a great obstacle appears: the “Brazil Cost”. One of the main factors for the increase of those costs is the Brazilian source of transport that has the road transport as the first on the list. The author agrees with this placement, adding that no other modal has such flexibility, having in mind that only it accomplishes the door-to-door service. However, depending on the shipment, the distance, its costs etc. can turn it unviable. Thus he says:

“When we talk about loads of low aggregated value, the modals more suitable are the rail, fluvial and the coastwise shipping. However the road transport should continue growing, but totally changing its focus. Seeing the efficiency of this modal, the collection of tolls and of the larger weight control in the highways, the transport of grains of long distance, for example will be accomplished through other modals, and the road transport will start to operate just in the points, increasing the profitability.”(Manoel Reis, 2000).

In this context, based in table 1, Reis considers the perspectives for transport modals the following way:

- Road Transport – moderate growth and displacement;
- Rail Transport – accelerated growth of transported volume;

<table>
<thead>
<tr>
<th>Modal</th>
<th>Brazil</th>
<th>USA</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road</td>
<td>70%</td>
<td>25%</td>
<td>18%</td>
</tr>
<tr>
<td>Rail</td>
<td>29%</td>
<td>50%</td>
<td>53%</td>
</tr>
<tr>
<td>Waterway</td>
<td>1%</td>
<td>25%</td>
<td>29%</td>
</tr>
</tbody>
</table>

➢ Waterway transport – slow growth;
➢ Coastwise Shipping Transport - growth with average speed.

Comparatively, the North American distribution has other transport source, where the distance is a preponderant factor, according to FELTRIN (2000), 88% of the transport accomplished for distances up to 500 miles 94% is made through road however for the 12% of the transport of larger distances than 5000 miles, 6% are just road.

<table>
<thead>
<tr>
<th>Modal</th>
<th>&lt;500</th>
<th>&gt;500</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road</td>
<td>88%</td>
<td>12%</td>
<td>424</td>
</tr>
<tr>
<td>Rail</td>
<td>64%</td>
<td>34%</td>
<td>n.d.</td>
</tr>
<tr>
<td>Air</td>
<td>37%</td>
<td>63%</td>
<td>n.d.</td>
</tr>
<tr>
<td>Waterway</td>
<td>61%</td>
<td>39%</td>
<td>n.d.</td>
</tr>
</tbody>
</table>

**FONTE:** U.S. Census Bureau’s, 1993 e Sectorial Scenery

**11. TENDENCIES**

According to DORNIER et al (2000), “when offering an increased flexibility of short period, the logistics service companies are seen as essential partners. A series of companies, after using third parties, decides against their future use and for the reintegration of the functions to their companies.”

In the article published in the section *Perfil*, of Revista Tecnológica, edition Nov. TABAJARA(1998), was made the following statement: “a great tendency that has been consolidating is the entrance of large operators and the partnership – or even acquisition – of Brazilian operators for foreigners.

Actually, this has already happened in other parts of the world and it should enlarge in Brazil. According to TABAJARA (1998), one of the interviewees mentioned in the article above, director of DDF:
“This processes irreversible. Today the companies operate globally and they need local solutions. And the best way to enter in a market is through partnerships with local operators that know the peculiarities of the market. I believe that the Brazilian operators that have a good structure and skills will certainly be asked to become future partners. Whoever doesn’t have skills is out of this process, because the world-class operators want to present their customers with the same profile. The quality is a pre-requirement.”

But, TABAJARA (1998), stands out that the Brazilian market should not fear this process, because there is a place for all of those with good service.

It is worth to stand out that the professionals of the sector believe that, in the near future, the concept of subcontracting logistics operations should extend from large to medium and small companies, and these will look for even smaller companies. They believe that, at first, any company can subcontract their logistics operations, since they find an operator with the profile. And that sooner or later the companies will end up recognizing the advantages of having a specialist ahead of its logistics. And, although the faster this process happens, the bigger are the chances of the company in the market.

A more modern vision of the logistics development, is found in an article published in Revista Tecnologística of November of 1999. It talks about the lecture presented by Professor Donald Bowersox – Making Supply Chain a Reality – where it says that the end of the year 1999, the costs with logistics in the world will have overcome US trillions. In the same opportunity, it pointed out that the philosophy of the logistics administration is not guided by the objective of reducing costs any more, but by the increase of the satisfaction degree and relationship with the customers.

Containing the lecture, according to the article, professor BOWERSOX gave a vision of the changes that should happen in the next ten years (Vision 2009) with the globalization paradigms, an answer to the almost instant demand, financial sophistication and the importance of information.
Chart 4 - Tendencies

<table>
<thead>
<tr>
<th>The 10 New Tendencies according to BOWERSOX (Levels from 1 to 10)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>01</strong> Changes of customer service for relationship with the customer, increasing the aggregated value.</td>
</tr>
<tr>
<td><strong>02</strong> From competition position to customer collaborator</td>
</tr>
<tr>
<td><strong>03</strong> From advanced forecast to attendance of instantaneous demand</td>
</tr>
<tr>
<td><strong>04</strong> From taking decision with base in experience to taking a transactional decision, because there won’t be time to accumulate experience due to great and Constant changes. The logic should create the decisions.</td>
</tr>
<tr>
<td><strong>05</strong> From absolute value to relative value</td>
</tr>
<tr>
<td><strong>06</strong> From integration of functions to integration of processes.</td>
</tr>
<tr>
<td><strong>07</strong> From vertical competences to virtual competences.</td>
</tr>
<tr>
<td><strong>08</strong> From holding information to sharing information</td>
</tr>
<tr>
<td><strong>09</strong> From learning from training to acquired knowledge.</td>
</tr>
<tr>
<td><strong>10</strong> From accounting management to management based on aggregated value to each process.</td>
</tr>
</tbody>
</table>

Source: BOWERSOX, Donald, 1999

12 DEFINITION AND TYPES OF LOGISTICS OPERATORS

According to LAMBERT (1998), the subcontracting of logistics operations can be described as a simple way like renting more storage space or something more complicated as, for example, to transfer all the distribution function to third parties. In any way, subcontracting means to transfer to someone, not subordinated to the head office, the function of distribution, as a whole or partly.

With the growing recognition of logistics, as a source of potential competitive advantage, from the companies, there is a fast growth in the industry of logistics services. The logistics operators, also called third-party logistics (3PL) or still, subcontracted providers of logistics service, according to DORNIER et al (2000), are companies that set up an independent business and offer a wide range of services accomplished internally. The subcontracted freight operations, storage, request preparation, final delivery, activities of pre and post assembling fill in two needs:

- Increases the levels of services, by means of the improvement in flexibility and administration of stocks, taking it to a larger availability.
- In many cases, reduces costs.

In the practice, the services supplied by logistics service companies and subcontracted logistics, relapse in a model that combines physical services (that is,
warehouse and transport) and managerial. As the complexity and the need of customization of different companies increase, the integrated nature of logistics and the number of specific companies that also offer that also increases.

In relation to the types, it can be affirmed that under the operational point of view, there are two basic kinds of logistics operators: operators based on assets and operators based on information and administration. The operators based on assets are characterized for having their own investments in transport, storage and equipment for them to accomplish the logistics operation. The operators based on administration and information don’t have their own operational assets. They sell know-how management, based on information systems and analytic capacity that allows them to identify and implement the best solutions for each customer based on the use of third party assets.

13. CHARACTERISTICS

In fact, according to FLEURY (2000), the characteristics of the logistics operators are more evident when compared with the specialized customer services that are to transportation companies, storages, human resources managers and information, among others. The chart number 5, to proceed, tries to confront the main characteristics of a logistics operator integrated with a specialized customer service.
### Chart 5 – Comparison of Logistics Operator’s characteristics with Traditional Customer Service Logistics

<table>
<thead>
<tr>
<th>TRADITIONAL CUSTOMER SERVICE</th>
<th>INTEGRATED LOGISTICS OPERATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offer Generic Services Commodities</td>
<td>Offer Customized Customer Service Personalized</td>
</tr>
<tr>
<td>Tends concentrating in only one logistics activity transport, or stock, or storage</td>
<td>Offers multiple activities in an integrated way; transport, stock, storage</td>
</tr>
<tr>
<td>The objective of the hiring company service is the specific cost minimization of the hired activity</td>
<td>The objective of the hiring company is to reduce total logistics costs, make the services better and increase the flexibility</td>
</tr>
<tr>
<td>Service contracts tend to be short to medium terms (6 months to 1 year)</td>
<td>Service contracts tend to be long term (5 to 10 years)</td>
</tr>
<tr>
<td>Know-How tends to be limited and specialized (transport, storage etc)</td>
<td>Possesses a wide capacity of analysis and logistics planning, as well as operation.</td>
</tr>
<tr>
<td>Contracts negotiation tends to be fast (weeks) in an operational level.</td>
<td>Contracts negotiation tend to long (months) in a high management level</td>
</tr>
</tbody>
</table>

SOURCE: FLEURY, Paulo Fernando - 2000

In this context according to DONIER et al (2000), it is worth to point out that although the use of logistics operator varies from country to country. The content subcontracted operations and the legal contractual models also differ a lot.

### 14. FOUR BASIC QUESTIONS WHEN DECIDING FOR A LOGISTICS OPERATOR

For LAMBERT (1998), to identify and use the services of a logistics operator is similar to buy a use a precision tool. You have an objective or requirement in mind and only that tool can make the job.

The experience related by several companies in the subcontracting process with logistics operators, points for the advantages of a structure procedure in the analysis of a decision. According to FLEURY (2000) this procedure is based on the search of answers to four basic questions presented below:
What do you wish to gain with the recruiting?

To delegate to an external operator the responsibility for logistics activities involves costs and significant risks that need to be compensated by gains originated from the decision of subcontracting. Therefore, a fundamental step in the decisive process is to define the possible gains to be reached with the third party. There are at least four dimensions of potential gains: cost reduction, quality improvement of services, increase of business profitability and market share growth.

The reduction of costs can happen with the decrease of administrative expenses, stock reduction and decrease of transportation costs, storage and movement. The quality improvement of services can result for example, larger stock availability, shorter movements, and larger punctuality in deliveries.

The profitability increase of a business can be obtained through smaller investments in assets, scaled economies, and larger efficiency due to the larger focus on central competence of the business.

The gains of market share can come from new segments of the market, or expansion of markets already explored, function the larger capillarity and capacity of distribution of a hired logistics operator.

What characteristics should the logistics operator have?

Once they have clearly identified, the third party of the potential gains, the next step is to identify a logistics operator that has a group of necessary characteristics to guarantee the longed results are reached. Given the strategic importance of the decision, the relationship between the contracting party and the external operator tends to go in the direction of a partnership, which demands the minimum of compatibility between and the characteristics of the partner. These compatibility characteristics can be contained in four classes: managerial attitudes, coexistence pattern, managerial philosophy and structure / image.

The managerial attitudes regard the posture of the companies’ relation with the employees’ training, valorization of the teamwork, technical cooperation with third parties. The coexistence patterns involves pre-disposition for common objectives fixation to make available the operational and strategic information, and to split gains and losses. The
managerial philosophy refers to the growth of strategies, politics of investments and product and processes innovation. The structure and image refer relatively to the size of the contraction party, the financial solidity and the managerial and technological sophistication.

To establish the necessary characteristics and to find an operator / partner with these characteristics, represent a fundamental step to increase the success the changes in the use of a logistic operator.

➤ *What managerial instruments should be established?*

Given the complexity of the relationship and the dynamics of the operational, it is really important the creation of managerial instruments of planning and control to monitor the subcontracted operation. These managerial instruments should cover the planning activities and control of operational groups, procedures of communications inter-companies cost and benefit sharing, characteristics of the sharing and investments in operation and people.

➤ *How to evaluate the results – success of a subcontracted operation?*

With base in gain objectives, previously defined, and information obtained by managerial instruments of planning in control, it becomes possible to evaluate the results of a subcontracted operation, and to use this evaluation as retro-feeding mechanism to improve the operation as well as the planning and control mechanisms.

**15. PHASES OF THE RESEARCH**

The phases of this study that will be approached in full detail in the next pages are structured like this:

1st  **Qualitative Stage**

1.1 Exploratory

1.2 Bibliographical revision

1.3 Definition of the variable construction
1.4 Specialists validation

1.5 Elaboration of collection instrument

2nd Quantitative stage

2.1 Definition of the sample

2.2 Data collection

2.3 Researches and Comparative Analysis of Data

2.4 Composition of the report
16. DEFINITION OF VARIABLES

Starting from the bibliographical revision and the conceptual structure of this research, it was possible to define a group of variable that allowed us to analyze the indicator to assist the general and specific of this study objects according to picture 1 to proceed. These variable are analyses in their following way from numbers one to nineteen, they will be described with the interviewees characterization and units and from numbers 20 to 196 will be objective answers YES or NO.
**Characterization of the interviewee**

1. Name
2. Position
3. Level of Educational
4. Time in the company.

**Group 1 (variables 5 to 19)**

**Characterization of the unit**

5. Beginning of the activities
6. Number of direct employees of the unit
7. Number of indirect employees of the unit
8. Number of Equipment of Movement
9. Physical Space – Square Meter
10. Average Volume of Storage Ton/Day
11. Average Volume Transferred Ton/Day
12. Quantity of collection made per day
13. Quantity of delivery made per day
14. Number of vehicles used to realize the **collection** per day
15. Number of vehicles used to realize **transfers** per day
16. Number of vehicles used to realize **deliveries** per day
17. City
18. State
19. Region

**Group 2 (variables 20 to 89)**

**Identification of elements characterization of the logistics operator activity**

Group 2.1

Storage (for own use and third party)
<table>
<thead>
<tr>
<th>YES NO</th>
<th>20. Storage area covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES NO</td>
<td>21. External area of storage</td>
</tr>
<tr>
<td>YES NO</td>
<td>22. Maneuver area and truck parking lot</td>
</tr>
<tr>
<td>YES NO</td>
<td>23. Administrative area adapted to the activity</td>
</tr>
<tr>
<td>YES NO</td>
<td>24. Warehouses for Contracting parties - CD</td>
</tr>
<tr>
<td>YES NO</td>
<td>25. Area for customer’s office</td>
</tr>
<tr>
<td>YES NO</td>
<td>26. Area to store dry loads</td>
</tr>
<tr>
<td>YES NO</td>
<td>27. Area to store refrigerated products</td>
</tr>
<tr>
<td>YES NO</td>
<td>28. Stock capacity and stock demand</td>
</tr>
<tr>
<td>YES NO</td>
<td>29. Quantity of positions/pallets in the warehouse and demand</td>
</tr>
<tr>
<td>YES NO</td>
<td>30. Warehouses and platform to load and unload</td>
</tr>
<tr>
<td>YES NO</td>
<td>31. Platforms and leveling boards</td>
</tr>
<tr>
<td>YES NO</td>
<td>32. Stock control</td>
</tr>
<tr>
<td>YES NO</td>
<td>33. Kits or groups assembly</td>
</tr>
<tr>
<td>YES NO</td>
<td>34. Intermodal management</td>
</tr>
</tbody>
</table>

**Group 2.2**

**Equipment (for own use and third party)**

|YES NO| 35. Rental services of pilling equipment for their clients |
|YES NO| 36. Rental services of other equipment for their clients |
|YES NO| 37. Equipment rented from third party for load movement |
|YES NO| 38. Electric pilling machines |
|YES NO| 39. Combustion pilling machines |
|YES NO| 40. Electric transpallets |
|YES NO| 41. Manual pallets |
|YES NO| 42. Storage structure (portable pallet/driven) |
|YES NO| 43. Equipment for unitization of goods |

**Group 2.3**

**Packing (for own use and third party)**

|YES NO| 44. Plastic packing (KLT) |
|YES NO| 45. Dismountable plastic packing |
|YES NO| 46. Metallic containers |
|YES NO| 47. Cages |
|YES NO| 48. Plastic pallets |
|YES NO| 49. Wood pallets |
|YES NO| 50. Packing rental for their clients |
|YES NO| 51. Physical control of assets through system |
|YES NO| 52. Maintenance of these assets |

**Group 2.4**

**Software, Hardware (for own use and third party)**
53. EDI - with Contracting/Clients
54. System WMS
55. System ERP
56. Computer equipment mainframe
57. Windows NT
58. Client’s invoice issue in the warehouse
59. Feeding system of receiving material from the contracting party through system
60. Sharing information system
61. Effective demand communication to the client
62. Data collectors for material check
63. Radio Frequency collectors for data collection
64. Bar code for stock administration
65. Establishment of stock FIFO through system
66. Specific software for stock administration
67. Special software simulators (provisioning, supply production, movement)
68. Communication interface among the companies
69. Tracking of own vehicles with GPS
70. Tracking of third party vehicles with GPS
71. Tracking of own vehicles by telephone, radio or other kind of communication
72. Tracking of third party vehicles by telephone, radio or other kind of communication
73. Routing of own vehicle
74. Routing of third party vehicle
75. Own administration system (developed for the company)
76. Internet as a tool
77. Internal communication through intranet
78. Shared system with partners
79. Diffusion of their information
80. Diversified means of contact with customers (fax, telephone, email)
81. Diversified means of contact with suppliers (fax, telephone, email)

**Group 2.5**

**Labor (for own use and third party)**

82. Subcontracting of labor for clients
83. Team work
84. Delegation of powers to employees
85. Delegation of responsibilities to employees
86. Qualification of labor
87. Development of courses, trainings and technological training programs to their employees and they are shared with the clients
88. Investments in training and training of employees.
89. Multifunctional work, participation of the areas.
### Group 3 (variables from 90 to 99)
Identification of characterization elements of the transport activity

<table>
<thead>
<tr>
<th>YES NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>90. Posses movement capacity for the responsible material</td>
</tr>
<tr>
<td>91. To work with aggregated fleet for movement of responsible material</td>
</tr>
<tr>
<td>92. Vehicle to transport dry load</td>
</tr>
<tr>
<td>93. Closed vehicles</td>
</tr>
<tr>
<td>94. Sider vehicles</td>
</tr>
<tr>
<td>95. Utilitarian vehicle (3/4 Ton)</td>
</tr>
<tr>
<td>96. Special vehicle for different loads</td>
</tr>
<tr>
<td>97. Distribution in pole cities</td>
</tr>
<tr>
<td>98. Interface with other modals of transport</td>
</tr>
<tr>
<td>99. Material consolidation in their warehouse for future consolidated transfer</td>
</tr>
</tbody>
</table>

### Group 4 (variables form 99 to 108) Supply policy

<table>
<thead>
<tr>
<th>YES NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>100. To represent the company to purchase the use items by the partners</td>
</tr>
</tbody>
</table>

101. **COMPETITION PROMOTION AMONG SUPPLIERS TO REDUCE THESE ITEMS**

102. Make the supplier substitution

103. **POSSESES LOCAL SUPPLY**

104. Make regular orders in short period with programmed delivery

105. Make regular orders with a long term agreement with frequent deliveries

106. Accomplish supply for assembly line in Kanban

107. Accomplish supply for assembly line in JIT – Just in Time

108. Utilizes process of reverse logistics

### Group 5 (variables from 109 to 115) Quality Policy

<table>
<thead>
<tr>
<th>SIM NÃO</th>
</tr>
</thead>
<tbody>
<tr>
<td>109. Certification ISO</td>
</tr>
<tr>
<td>110. Suppliers of qualitative material QS</td>
</tr>
<tr>
<td>111. Responsibilities over the received lots - (insured quality)</td>
</tr>
<tr>
<td>112. Specifications for quality selection of items used by partner</td>
</tr>
<tr>
<td>113. Quality tools for process control</td>
</tr>
<tr>
<td>114. Quality tools diversified for process control</td>
</tr>
<tr>
<td>115. Quality inspections for the partner</td>
</tr>
</tbody>
</table>

### Group 6 (variables from 126 to 160)

<table>
<thead>
<tr>
<th>Perception of importance and necessity of managerial strategies</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>126. Operational excellency that strengthens the scale gain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>127. Innovation in products concepts to increase productivity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>128. Service orientation to enrich relationships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>129. Relationship with the customer to establish strategic relationship, aggregation value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>130. Alliances with customers for risks minimization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>131. Exclusiveness relationship with partners to create a future relationship prospective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>132. Guidelines with the partner to consolidate the relationship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>133. Clients relationship to stablish the process of outsourcing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>134. Role particularities with the contracting supplier to stablish complementary relationship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>135. Innovation in technologies in requiring sharing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>136. Sharing of risks to keep companies relationship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>137. Sharing of gains to keep companies relationship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>138. Services for companies of competition products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>139. Analysis of the financial situation of partners before establishing alliances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>140. Compromising with the contracting party objectives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>141. Compromising with the contracted party objectives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>142. Compromising of the same value aggregated vision to the final client</td>
<td></td>
<td></td>
</tr>
<tr>
<td>143. Compromising of the same client’s supply chain vision</td>
<td></td>
<td></td>
</tr>
<tr>
<td>144. Has the quality for the companies as a indispensable item</td>
<td></td>
<td></td>
</tr>
<tr>
<td>145. Establishment of price based on a cost chart</td>
<td></td>
<td></td>
</tr>
<tr>
<td>146. Distribution synchronization with the demand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>147. Aggregated value of the distribution and demand synchronism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>148. Productivity studies and analysis</td>
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<td>149. Process reliability studies and analysis</td>
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<td>150. Customer service studies and analysis (final consumer)</td>
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<td>151. Participation with elaboration partner of future projects</td>
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<td>152. Elaboration of a specific project for the client</td>
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<td>153. Privileged physical location for commercial relationships establishment</td>
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<td>154. Contracts with minimum of conflicts</td>
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<td>155. Continuous evaluation of strategies</td>
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<td>156. Movement of the market</td>
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<td>157. Movement of the competition</td>
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<td>158. Monitoring of suppliers evolution</td>
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<td>159. Monitoring of clients evolution</td>
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<td>160. Fiscal support to the clients</td>
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Chart 1 – Variables of the research

Source: the researcher
17. CONCLUSION

With the importance growth of logistics in Brazil, the increase of competitiveness and the search for a better customer service, more and more companies’ thing about subcontracting logistics services. But, this decision is not easy and finds, on one side, the lack of the market buyer’s knowledge that doesn’t know many times the existence of this kind of service. On the other hand, it finds the lack of conceptual knowledge of those who sell the services, besides the need of minimum conditions regarding to the infrastructure such as: storage capacity, specific equipment, packing systems, hardware, software, labor, that demand great investments.

It was clear through the analysis of results of the items in the logistics operator activity, that some companies call themselves logistics operators, however it is evident that they should make great investments training and culture for that.

To specific objectives were delineated to clarify the research problem and in answer to those objectives, you can make the following observations:

01) To characterize the activities of a logistics operator:

Starting from the method already describe, were identified 69 (sixty nine) variables, divided in smaller groups: warehouse, equipment, packing, labor system that characterize the activity of the logistics operator.

The results of the research reinforced the initial expectations that the company object of study, shows only some of the necessary characteristics to classify it as a logistics operator.

Some functions are fundamental for the characterization of a logistics operator, as the condition of storage that should be adapted to the necessities of the market, possessing area for a Center of Distribution (CD) to attend the market demand of their clients, because these points approaches the manufacture to the final consumer.

The warehouses today should have platforms or shipment docs to offer a fast operation for so they should have adapted equipment for the movement of merchandise, such as electric pilling machines or electric trans-pallets that can go in the back of a truck to pile up the load. In the same way the need of storage structures as a portable pallets or drive
in to increase the capacity of pallets positions are fundamental to reduce the cost of permanents of the product in the warehouse. To have a fast movement of loads they should be conditioned properly using packing such as plastic boxes from to the material consumption area, pallets disassembling boxes and racks of great importance in the unitization of these goods observed by the market trend that are being supplied as a rental or negotiation condition by the logistics operator.

02) To Characterize the transport activities

With the identification of 09 (nine) characterized elements of transport operator and parallel analysis of the characterization variables of a logistics operator activity, is evidence that the company in reference is actually a transport operator and taken by the new market trend where the demand is growing for logistics operators, started to announce themselves as a logistics operator, when actually they have a long way to go. Although the company demonstrated to be toward the strategic subjects, it is necessary to accomplish great investments in infrastructure, in supply and a quality policy indeed refers itself as a logistics operator.

The activity of a carrier can be easily executed with only the use of a truck that accomplishes the transport the merchandise from one point to the other, but this function has been completed by the market evolution. In Brazil today, the largest portion of transporters of loads fleet are self employed that sometimes work or as an employee of a company. The practice of aggregating vehicles is a way that the transportation companies found to reduce their cost to aggregating the whole group or just the mechanical group (horse) and the remuneration for this practice according to the agreement of the contract that can be for the freight value practice for distance or driven kilometer.

Today the loaders do not hire self-employed, they seek for constituted companies because of insurance reasons and responsibilities delegation that is very clear for the situation. Controls such as, fleet maintenance administration, tracking and routing are inherent for the transportation companies, to the loader it just fits to determine the quantity, time for loading, and course and destination of the goods. This way, if the transportation company chooses to have their own fleet, apart or aggregated, the responsibility is
exclusively theirs, but evidently that accomplishing, the customary norms of risk administration attributed by their insurance company.

This way, when we analyze the chart of activities characterization of transporters, we observe a good result in all items that is also due to the subcontracting of the fleet

03) To define procedures that allows identifying the gap between the attributes of a logistics operation organization and a transportation company through a study case.

The structure of attributes in this research, characterizing the activities of a logistics operator and transporter allows as a model to identify the gap to be filled by the candidate the transportation company to logistics operator.

The demand of the market is avid for different products with appropriate prices that the suppliers need create and make costs viable. In the chain of logistics, it is very clear the relation of customer service with lower costs and better levels of service.

The logistics is a new tendency in the Brazilian market with a lot of companies subcontracting this activity opening a gap for the transportation companies to expand their business. We can say that the transporter is the figure indicated for this transformation due to the characteristics already existent.

The logistics operator is a supplier of specialized logistics services managing and executing all the logistics activities in the several phases of the chain of supplies, aggregating value to the product and It needs competence to simultaneously manage the three basic activities controlling stock, storage and transport administration.

A transporter can take part or assume the whole logistics operation that represent an enormous quantity of attributions that can be simple like the control of stored stock or even more complicated activities like the supply of production lines or supply to the final customer.

The necessity of cultural change to act inside a new condition demands a differentiated posture from the one that has been practiced nowadays by this company that will be reached with great investments in materials like equipment, storage area and mainly personnel training to put together a team to reach the proposed goals.
As the study demonstrate, some steps have already been taken by the studied company in relation to characterization as a logistics operator, but as mentioned above, great investments will be necessary to eliminate the gap among the characterized attributes: storage, equipment, packing, systems, labor, policies of supplies and quality. In accordance, it is fundamental to fix the concept of logistics operator in its managerial culture and to establish a clear vision of your business because if it continues like this, you might have great problems assuming activities that do not aggregate value to the client.

The competitive scenery, pushed by other factors as the start of e-commerce, signals a strong tendency for the current transport operators; the consolidation of positioning itself as a logistics operator. Because of the great investments necessary for this positioning what comes in evidence is the accomplishment of joint ventures among many companies of this sector. This tendency should not be discarded by the studied company, because the market is more selective and will not leave any space for the “undefined” or amateurs”. 
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