



THE LOGISTICS CONTROLLER: THE CONTRIBUTION OF A LOGISTICS SPECIALIZED PROFESSIONAL

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Submission: 29/03/2018
Accept: 29/03/2018

ABSTRACT

Faced with the adversities that arise in a widespread competition scenario, new concepts and opportunities emerge over time, whether in the form of a competitor that answer customer needs in less time, or as a technological innovation that needs to be dominated. Within this context, Logistics managers have realized that besides the ordinary challenge to maintain their own business, they must seek the continuous improvement of their services, make fewer mistakes, to be more effective and efficient in logistics processes. The objective of this work is characterize and describe the application of the logistics controller, to understand within the logistics structure what is its benefits, understanding the role of controllership and the role of logistics, the relationship between controllership and logistics, the role of logistics controller, its duties, the activities to be carried out, the relationship with the various hierarchical levels, the knowledge that must be mastered and finally, what it can do for logistics. For this study, the descriptive case study with multiple cases was applied. The data acquired demonstrate that managers has a notion of the importance of having a professional that can unify the information and for this to have knowledge and competence in controllership exist, but that at the same time can be inserted in the logistics area.

Keywords: Logistics, Controllership, and Management



1. INTRODUCTION

In the last decades, the logistics concept has been widely disseminated among large organizations as well as in classrooms. It spread through the small and medium companies that seek excellence in customer service, both in the back office and in the front line, with the customer.

As in the face of the adversities that arise in a scenario of fully competition, new concepts and opportunities emerge, whether in a form of a competitor that serves in less time, or as a technological innovation that needs to be mastered. There is a constant need to adapt to ensure business survival.

Within this context, logistics managers perceived that beyond the ordinary challenges of maintaining one's own business, it must seek continuous improvement of their services, less erroneous, more effective and efficient logistics processes.

In companies where logistic cost represents a large amount of its costs, the presence of a professional in logistics is discussed that not only point and correct cost deviations, but also point to opportunities for business improvement, giving support to the manager in decision-making through performance indicators or best business practices, where there is a controllership mentality, however with activities that are adherent and proper to logistics area.

In a more traditional way, the controllership professional, the Controller, acts as an information support at the medium and high management levels, or tactical and strategic levels, where it also interacts with activities of monitoring and performance control of various sectors of the organization, with a view toward the accounting area.

When proposing to develop the activities of a Logistics Controller, it is possible to predict benefits that may be relevant and cause positive impacts to the management of the area and towards its continuous improvement, since the activities developed by the professional are duly adapted and adherent to the logistics environment, in other words, that the activities are developed with the mentality of controllership area, added to the context of the logistic environment.

This work aims to characterize and describe the application of the logistics controller, to understand within the logistics structure what is its benefits, understanding the role of controllership and the role of logistics, the relationship



between controllership and logistics, the role of logistics controller, its duties, the activities to be carried out, the relationship with the various hierarchical levels, the knowledge that must be mastered and finally, what it can do for logistics.

In order to achieve this objective, this work is divided into five parts, namely: this introduction, the theoretical basis, the research methodology, the data obtained with their discussion and finally our considerations.

2. THEORETICAL FOUNDATION

The theoretical basis will describe the role of Controllership and Logistics, the relationship between Controllership and Logistics, the proposed role of the Logistics Controller, its responsibilities, the activities to be developed, the relationship with the various hierarchical levels, and the knowledge that should be mastered.

2.1. The role of Controllership

According to Figueiredo and Caggiano (2008, p. 26), the Controllership function "is to guarantee for the continuity of the company, ensuring the optimization of the global business". It is also possible to complement that the Controller also provides information as an organ of control and observation of the organization's administrative summit (BEUREN; ARTIFON, 2011).

The role of Controllership is not to manage the organization's accounting system only, it is necessary to be a multidisciplinary profile department, due to the breadth of its functions, which requires the need to be formed by professionals of different knowledge, since the Controllership is a set of principles originating in the areas of Administration, Economics, Statistics, Psychology and Accounting in order to better understand all the sectors of the organization in which it operates (BEUREN; ARTIFON, 2011; LUNKES; SCHNORRENBARGER, 2009).

Controllership can also be observed by two approaches, being as a guiding organ of the organization's management model or, as a knowledge area of other sciences (FIGUEIREDO; CAGGIANO, 2008).

One of the main advantages of the Controllership multidisciplinary nature is the understanding of the causes and consequences of how organizations are managed from the known view of other areas, so the more knowledge of the areas that make

up the company's management, the greater its ability to monitor the system as a whole (BIRTH; REGINATO, 2010).

Therefore, it is possible to see that Controllershship plays a very important role within organizations and that goes beyond Accounting itself, due to the range of knowledge gathered in the this area, an area that needs to have multidisciplinary knowledge, usually obtained of diverse areas of knowledge, including Logistics. But how is the routine of this area? What are the functions and activities developed by the Controller?

According to Kanitz (1976), the functions of Controllershship are: to understand the information generated by the company, acting on the behavior of the altering their motivation, proposing solutions based on possible inconsistencies within the organization, interpret data and evaluate if a given outcome is good, consistently to deliver tangible results and measurable, follow the evolution of the planned planning and interfere with the when necessary for correction or fault adjustment.

In short, the Controllershship is supported by three definitive functions, which cover any activity necessary for its execution: planning, execution and control (MOURA; BEUREN, 2003). Otherwise, according to Lunkes and Schnorrenberger (2009, p.19):

Perspectives	Basic Functions
Operational Management	Planning (operational);
	Reporting and interpretation;
	Evaluation and deliberation;
	Tax administration;
	Preparation of reports to regulatory and public
	Assets Protection;
	Assessments of political economy.
Economic Management	Subsidize the management process;
	Support performance evaluation;
	Support the evaluation of results;
	Manage the information system;
Strategic management	Respond to market players.
	Planning
	Information system;
	Control;
	People management;
	Organizational.

Figure 1: Controllershship basic functions list
 Source: Adapted from Lunkes and Schnorrenberger, 2009, p. 19

Since Controllershship is responsible for all these activities, it is clear that the area coordinates all the information quoted and this does not exempt the managers of each one the areas of their responsibilities, because "*managers are responsible for operational, financial, economic and equity management of their respective areas and of the company*" (BEUREN; ARTIFON, 2011, p. 86). Defining the role of the Controller, we will continue to define the role of Logistics.

2.2. The role of Logistics

The Council of Supply Chain Management Professionals (CSCMP) defines:

Logistics management is that part of supply chain management that plans, implements, and controls the efficient, effective forward and reverses flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customers' requirements. (CSCMP, 2017)

Through this concept we can perceive the breadth of its meaning, that is, it is a set of activities that covers from the moment of purchase of the raw material, through the production process, storage and distribution to the customer. Several scholars have contributed in a very significant way in defining what is a deal with the subject Logistics.

Logistics can be defined in many ways, but the concept that can be considered as guiding is that: Logistics is the strategic management of material and information flows, economic and customer service (BALLOU, 1993; CHRISTOPHER, 1997; CORONADO, 2010; MARTINS; ALT, 2009; ROJAS, 2008). With these definitions, it is clear that Logistics is a form of management used to manage activities of the supply chain.

Since Logistics manages the activities of the supply chain, that is, manages a series of interrelated activities for a common purpose, similarly, management should be unique and not done separately.

According to Guarnieri (2011), logistics management should seek and focus on the integration of chain activities, since all activities have as main function satisfy the end customer, so they need to be managed together within a integrated process.

The Integrated Logistics, according to Faria and Costa (2011), activities and processes that seek to perfect the process as a all with the main mission of



optimizing costs, that is, doing more with less, more with the same or the same with less.

From the concept of Integrated Logistics, some scholars have highlighted four Logistics areas of activity: logistics of supplies, logistics of production, distribution logistics and reverse logistics (GUARNIERI, 2011; LEANDRO, 2006).

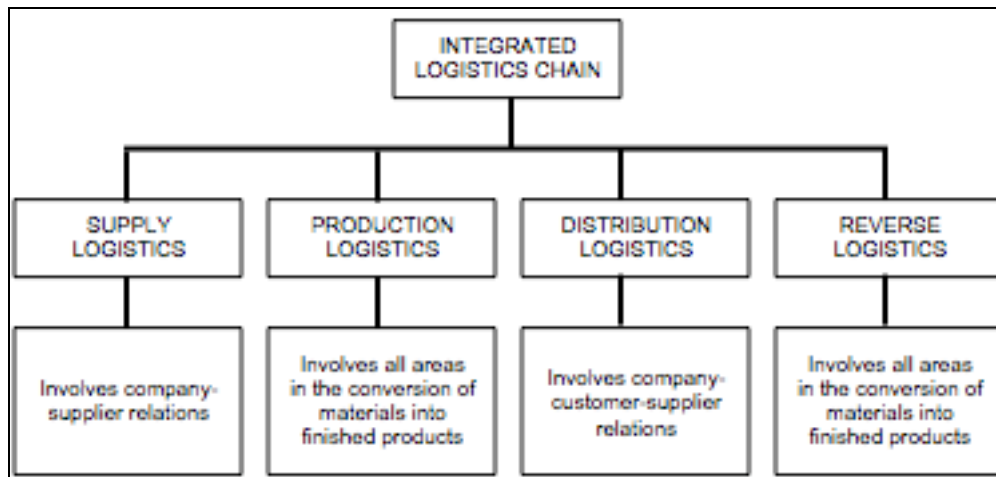


Figure 2: Integrated Logistic Chain.
Source: Adapted from Guarneri (2006, p.34)

In this way, Integrated Logistics is a comprehensive management system that starts with the supply of raw material until distribution of the finished product at the customer, considering also the return of any residues originating from the product (MOURA, et al., 2004).

Logistical management includes the administration of systems to control the flow of materials and information on inventories and products to strengthen the organization's strategy (BOWERSOX; CLOSS, 2001; MOURA; BEUREN, 2003).

It can be said, then, that Logistics plays an important and strategic role in organizations, due to the fact that manage material flows at the lowest possible cost and, above all, manage information flows to better serve the customer. And this flow of information, nowadays, is directly linked to technology.

In order to be able to incorporate all these elements in a concise way, that is, the management of material and information flows through the use of technology, Logistics is organized and governed by some principles. According to Machline (2003), four principles governing Logistics: a) Principle of location in points for your business, giving preference to rent rather than purchasing b) the principle of the construction and physical arrangement of warehouses to optimize the space

available, c) transport principle preferably using pallets and containers in order to standardize shipments and landings and, finally, d) principle of inventory management, which seeks to establish rules for the inventory management such as security stock levels, inventory, to seek a better approximation of demand forecast versus availability of products, rigid inventory controls, among others.

Once the fundamental principles are settled, Logistics can then incorporate into its routine, all the elements that characterize it strategically. These elements would be: (a) to agree and monitor the deadlines for all stages of jail; b) systemic integration of the whole chain and departments of the company; c) close and complete integration with suppliers and logistics partners; d) seek the improvement of the process aiming at reducing chain costs and; e) maintain levels of services agreed upon and suitable for satisfactory customer service (BEUREN; ARTIFON, 2011; NOVAES, 2001). Knowing the role of Logistics and of the Controllership, one can analyze their relationship between these two areas.

2.3. The relationship between Logistics and Controllership

According to Alvarenga et al. (2015), the Controllership is a kind of magic "for organizations, as it provides all the information necessary to decision-makers to improve the quality of their goals. According Vatan et al. (2017), the Controllership has the basic activity to support the organization of the "decision-action-information-control" process, through controls and monitoring, where the manager of each area is responsible for its result, being the Controllership responsible for the information of the results of these same ones areas and also to support and coordinate the management of planning activities, control and protection of the organization's interests.

According to Facci (2000), one of the challenges of the traditional Controllership itself is the understanding of the elements, concepts and techniques used in Logistics, so that the Controllership has greater efficiency in the pursuit of its objectives.

The Controllership important role in the decision-making of organizations and many inherent to Logistics, pointing out deviations and suggesting improvements, but the real management of its resources and activities who does is the own Logistics.



Therefore, if pointed out to the Logistics manager that its percentage of freight on sales is much higher than expected by the Controllershship, what actions should this manager take? At first, it seems be obvious that reducing the freight value is the solution.

But, does the reduction in value of freight really is the best action with regard to this? Does it not exist other action to be taken that can reduce the cost with freight? And the extra costs, who is aware of what is being overcharged? And how many sale? Are the applications adequately consolidated virtually and physically? Is it really that the freight cost is correct? Who did you validate this information in its source? It is precisely in this context that we can position the Logistics Controller.

2.4. The role of Logistics Controller

In traditional Controllershship, by itself, the Controller is already largely responsible for coordinate the entire flow of information that will be used to make decision of the company in the economic sphere. According to Garrison (apud MOSIMANN; FISCH, 1999). But how would the role of Logistics Controller? What activities should it play? What are your responsibilities? Which relationship with hierarchical levels? What knowledge does this need to master to perform their tasks?

2.5. The responsibilities and activities of Logistics Controller

According to Goldenberg (1994), the Controller has some inherent functions as the generation of data, the projection of strategies, the conversion of strategic plans into budgets and monitoring of past plans. For Nakagawa (1993), design, implement, maintain and coordinate systems of information appropriate to the need of the organization are some of the functions of the Controller.

Riccio and Peters (1993) say that monitoring quality paradigms, reporting and interacting with other areas of the organization, seeking business excellence in costs and quality are also activities of the Controllershship.

The Logistics Controller, then, has the role of designing logistics costs, defining and implement indicators of costs, levels of service and productivity operational, thus creating an information system capable of feeding and creating the visibility required for each manager involved in the operation, signaling possible deviations at any of these points, suggesting preventions and their possible

corrections when identified, such as the traditional Controller that it works the same way on a broader level.

As a first step, the Logistics Controller should not only observe the cost goals, but also the service levels and productivity. This triangulation not only allows the Controller to view its performance in cost, but also visualize the reasons that lead to your performance in cost related to service level and productivity.

Going beyond of the traditional Controller, Logistics Controller becomes aware of the cause performance at the global level, allowing the development and management, new tactical and strategic improvements in order to achieve better financial results. And why not say, that it is possible to suggest improvements at operational? If the Controller has previous experience at the operational level, can collaborate at this level.

In a second step, the Controller assumes a management support, where it is clear that their activity is not to achieve the goal, but rather to assist the manager throughout the process. Also, it is clear that the manager's responsibility remains intact, following the example of the Comptroller's Office traditional, that is, each manager is responsible for its operational management, financial, economic, patrimonial and all that it is given to manage within the their area (BEUREN; ARTIFON, 2011; VATAN et al., 2017).

Already in a third stage, It should be noted that in addition to monitoring the indicators of cost, service level and productivity and develop / suggest corrective actions and appropriate improvements, it will be Controller also checks whether the source of the information used in the These indicators come from reliable sources and duly polished for their purpose, given that developments in technology have contributed significantly to the relevant for the integration of information between areas (FACCI, 2000).

Once the Controller has knowledge about the numbers of the Logistics area, thanks to the monitored during the year or for a specific period of time feeling and observing its variations, it may project the budget for future periods, always through the supervision of a manager or even a director of Logistics, so that everything remains within the approximate expectation.

The Logistics Controller assumes, then, an important role in the corporate scenario of the logistics area, as it performs the entire internal interface of the area with what is required by the goals defined by the organization, passing through the dimensions of cost, service level and productivity, seeking the interrelation of all these strategic, tactical and operational dimensions, taking all the necessary support necessary for the managers of the area to be able to give the best achieve the goals and objectives set. Therefore, regardless of all the work presented by the Logistics Controller, are still the managers of the areas responsible for the decisions and direction of the area.

2.6. The responsibilities of Logistics Controller and their hierarchical relationship

The participation of the Logistics Controller in day to day certainly has great positive influence on the results of the area. Without a doubt, its acting to search better results is unique and of great assistance, especially to refine information, validate data, and truthfulness of the facts. Given their assignments, it is then possible to visualize which place the Logistics Controller would occupy in the hierarchy of the Logistics area, occupying a position of great influencing the process, on the protection of the top management.

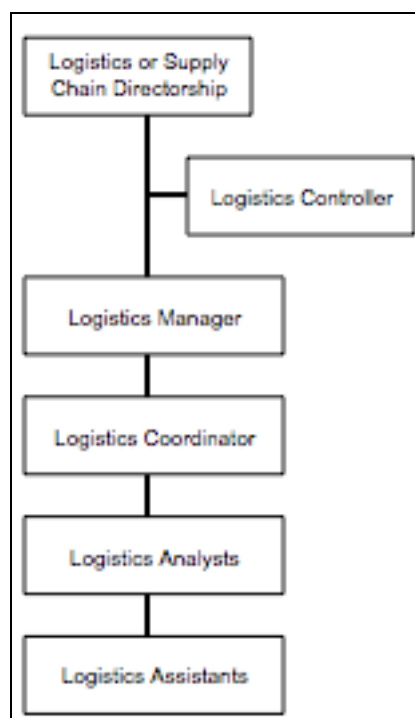


Figure 3: Hierarchical position of Logistics Controller
Source: Adapted from Neves (2009)

2.7. The Logistics Controller profile

Faced with such an important role, what is the knowledge that a Logistics Controller must master? According to Vatan et al. (2017), the traditional controller could have a degree in Business Administration, Accounting, Economics or Engineering, summed up to specialization would be considered important differentials. In case of Logistics Controller, in addition to similar training, previous experience in Logistics area would be a great differential.

Know the best practices of companies called world class companies, in other words, world class companies that adopt revolutionary practices of management, are important for the intellectual and professional growth of traditional controller (OLIVEIRA et al., 2003), a practice that is perfectly adaptable to the Logistics Controller.

According to Calijuri, Santos and Santos (2005), a Controllershship with 31 years of experience added that in addition to specialization, it is important that the controller performs researches, make several readings of technical books and to seek permanent knowledge in other areas.

According to Tung (1980), there are some skills that the controller must possess are:

- Ability to predict problems when analyzing collected data;
- Ability to discern information for to elaborate fast and accurate reports;
- Ability to provide specific information to the employee, with the language adapted to the professional who receives it;
- Ability to demonstrate temporal performances in graphics, trends and indexes;
- Ability to work proactively, aiming for the future;
- Ability to invest in the analysis and study of reported problems;
- Ability to take on the role of counselor whenever possible;
- Ability to be impartial in criticizing and commenting;
- Ability to be a great salesperson of your ideas, rather than impose on peers;

- Ability to understand that your recommendations and contributions for other areas, may not happen in the expected time due to limitations of the area itself.

According to Vatan et al. (2017), the controller must also have some attitudes market that has come to require professionals who greater dynamism in their activities and that surpass the conventional condition. The most relevant attitudes are: initiative, economic vision, leadership, ethics and vision of the future. All of these skills and attitudes are perfectly suited to the Logistics controller's performance, since they will play a similar role, even in a smaller universe, which is the Logistics area, but which has shared challenges with the whole organization and departments that make it up.

2.8. Advantages and disadvantages of the controller's performance in Logistics

Once the controller in Logistics has its activities based, structured and then implemented, what kind of contributions to the routine of this can provide the logistics area? What advantages and disadvantages can Logistics observe, with the performance of a controller in its daily routine? According to Neves (2014), there are eight advantages that can be application of the Controllershship in the area of Logistics:

"01 - Field of activity through objective information and focused on the result; 02 - Qualified and timely information to guide actions, keeping the focus of the result; 03 - Guiding the tax / fiscal model more suitable for logistics operation / 04 - Intelligence to identify and the search for opportunities to improve key performance; 05 - Ensuring Competitiveness through Guidance costs, service level and productivity; 06 - Demonstrate and identify businesses, distribution channels, customers or mix of products that better composition of margins and results; 07 – Management exposure to internal and external factors; 08 - Effective support and basis for Good Governance practices Corporate " (NEVES, 2014, p.35).

One of the goals of the traditional Controllershship is to direct the organization effectiveness, supporting the search for optimized results (NASCIMENTO; REGINATO, 2013), so this is the same view that the controller in Logistics should follow. Like this as in the traditional Controller, we have seen that the controller in Logistics has the function to provide and support top management with information, which is necessary for the decision-making process and business direction, however, the exposure of these information may create conflicts between the

principal (owners, shareholders) and the (managers, employees), according to the agency theory, which according to Jensen and Meckling (1976) and Nascimento apud Birth and Reginato (2013), the generation conflicts between the primary called element and the element called agent are for example, the main element paid to the determined agent element remuneration in return for the same action in accordance with their interests, but the agent tends not to act this way, seeking first their own interests, since, by receiving delegated powers by the element principal element, the agent element is faced with bargaining powers and prestige that may be used for personal benefit, contrary to the interests of the main.

Therefore, the controller's performance in Logistics can be seen by his colleagues and peers as actions similar to those of an informer. The controller does not have the function of teaching let alone betray those managers who do not achieve their goals or not respect the metrics. Therefore, it is up to the organization to stimulate all involved, making clear what the purpose of the work to be by the controller, which seeks to prevent and correct situations that cause distancing between what the company is looking for versus what is happening (BIRTH, REGINATO, 2013).

3. METHODOLOGY

Most of the research conducted in the field of operations management is based on in rationalistic methods, primarily through the use of statistical analysis of survey and mathematical modeling. However, since there is a need for of the quantitative findings and the construction of theories based on these been consolidated by qualitative understandings, the case study has become very important for this field (VOSS; TSIKRIKTSIS; FROHLICH, 2002).

For this research were used elements of the descriptive case study. For YIN (2015), the case study constitutes an empirical investigation that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomena and context are not clearly defined. The case study also consists of an in-depth and exhaustive study of one or a few objects, in a way that allows its ample and detailed knowledge (GIL, 2002).

More than one case was used, thus constituting a study of multiple cases, reducing fragility in an attempt to find points in in which one can move towards a



generalization. Although the number of cases is small, they are large organizations in different segments. The respondents are managers of the logistics or operations area, with experience in management positions and experience in the area. And according to Mintzberg quoted by Voss, Tsikriktsis and Frohlich (VOSS; TSIKRIKTSIS; FROHLICH, 2002): No matter how small our sample, or our interest, we always try enter into organizations with a well-defined focus.

For the data collection, a questionnaire was used, so that faster and more accurate responses, with more security (because they are not identified), less distortion risks (without the influence of the researcher) convenience for the researched (answer in a more favorable time) and more uniformity by the impersonal nature of the instrument (MARCONI; LAKATOS, 2011). And unfavorable points include: small return index, reading anticipated all the questions may influence responses, late return preclude its use and there is no certainty that was answered by the researched (MARCONI; LAKATOS, 2011).

In order to keep the focus on the issue of Controller in logistics, it was a questionnaire with open questions so that they get the sought researched answers indirectly on the importance of Controller in logistics. No direct questions about this professional were made, but on the necessary features so that it can perform this function in the area of logistics. The questions were developed for the purpose of evaluating the relevance of skills considered to be essential for the Logistics Controller.

3.1. Data analysis and discussion

Ten questionnaires sent to be answered by logistics and operations area managers of organizations, which the researcher had access. Only three returned within the deadline for this study, but the number is within the expected return of 25% (MARCONI; LAKATOS, 2011). Respondents will be called Log1, Log2 and log3.

When asked about the field of activities performed and information they have so that they can act focused on results, responses were regarding the action of efficiency, because it has "little time to reverse any error or situation that goes impact the delivery "(Log1) and being accurate "to save time in resolving situations" (Log2).



But if "You are a bad indicator, you need to know because it is bad, to act solve and improve the outcome "(log3).

"Working to improve results is why we are here every day" (Log3) because the "transport segment has very small margins and Therefore, any new situation or practices that are beneficial to identify improve our results "(Log1). In addition to "the indicator gives you visibility where you need to act to improve, with due time it is possible to know the indicator of behavior "(Log2) and so maintain continuous improvement.

In order to maintain the levels of logistics costs, service and productivity levels adequate, one can "guarantee the survival of the business and bring greater profitability for the company "(log3). "Because of the very small margins, we don't have plenty of room to make mistakes and mistakes cost a breakdown or loss of goods that have to pay or delay penalties "(Log1). "Service levels considered good for our customers bring satisfaction to all and do it with good levels of cost, it is even better "(Log2).

About having expertise in the tax area and provide guidance on what tax/fiscal model is more suitable for logistics operation the answers are not so homogeneous. For Log2 and log3 is important to know about it so that it there can be dialogue and discussion, but the decision is the tax area. Organizing Log1 tax area is very participatory thus does not become the determinative knowledge on the subject.

Regarding risk management, as we have seen previously, "any situation we can predict and avoid not to have financial losses are important to maintain the profitability of the business "(Log1) because the margins are very small. Thus, "what can be predicted and controlled is good to avoid losses and be covered by insurance "(Log2), or," Why do I prepare just in case that was not planned, and not suffer losses "(log3). It may be noted by the answers that there is a strong concern to avoid losses to maintain profitability.

Another point to be noted is the adherence to good governance practices corporate organization, "because everyone needs to work under the rules of company "(log3) and thus" ensure the security of business "(Log1). "There is not how to work presenting results out of what was established as rule. Save by buying something without an invoice, for example, is a very bad example of working out of



corporate governance "(Log2). Everyone understands the importance of the issue and is unanimous on the issue.

What draws more attention and so it should be highlighted is on the data used to control, as told by Log2: "There is general discomfort time to show the results when it comes to measuring the data, if It asks a lot about how it was done. " Or as quoted by Log1: "... sometimes arises much doubt about what is being controlled, if the numbers are using are correct, we do one way, another drive is another way and we are in doubt about what is really right. " And also log3: "There much doubt about the numbers that are used because they often stir in system and the number you are using is different. "

To minimize this problem arise proposals as told by Log2: "I believe that centralize everything a person would help a lot, because the sources of data and information would be only one, there would be no doubt in determining net income. " Or Moreover, as log3 "we would gain in processing time and data information would be centralized in one person. " And in this way, as Log1: "I could focus on improving the numbers directly, working where you need improvement, instead of getting up the numbers to know how it is and then try to act, gain much time with it. "

It is noted with the data that there is a notion of the importance of managers there is a professional who can unify the information and to have it knowledge and expertise in Accounting, but at the same time can It is inserted in logistics.

4. CONCLUSION

The Controller, inserted then in the logistics environment, gained great prominence in support decision-making, as it is fully inserted and connected with all the elements that make up the routine of logistics, that can influence directly in the results expected and mainly due to its relationship directly to the hierarchical levels of the high-ranking lead and direct the area.

Through its monitoring, can alert everyone involved, as well as the top management about the path that has been taken and if it is in According to what has been pre-set initially. Its performance is only proactive, serving to control and act on the elimination of deviations, thus preventing the results from being harmed, always seeking work in the continuous improvement of processes and other variables within the area of Logistics, proposing and suggesting solutions for the evolution of



processes, their best to be performed taking into account all the scenarios that unfold before the logistic operation, always following the initial premise established by senior management of the organization.

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