



Business Logistics: Interrelationship between managerial and financial accounting – a strategy generating competitive advantage

**Geisa Pereira Nunes¹, Gabriel Azeredo Coutinho², Alice Nascimento Rocha Moura³,
Maurício Ferreira Chaves⁴**

^{1,2,3,4} Research Department of the Faculty of the Lakes Region – Cabo Frio – Brazil

Abstract — This article aims to analyze the relevance within business logistics as a management tool, Financial Accounting and Management Accounting, bringing to light the interrelationship between these, in order to generate competitive advantage for organizations. The reflection on Business Logistics and its relevance as a management tool, representing a competitive advantage and adding value for companies, supported by Financial and Management Accounting, closely related to the evolution of society and consequently the information needs of each moment and context economic. The new world scenario, and why not say national too, tends to design a new logistics for the need to create a valuation base for the company's consumers and suppliers, values that are expressed by the aspects of time and place, raising the integrated logistics, as a strong competitive differentiation feature among competitors, playing a decisive role in the survival or decay of a company. On the other hand, advances lead us to understand that there is a need for an evolution also on the part of Accounting as to how it was organized that no longer corresponded to market demands, therefore expanding its range of operations from financial to managerial too, that is , to assist companies in more strategic matters.

Keywords — Business logistics; Management accounting; Financial Accounting; Competitive advantage; Business strategy.

I. INTRODUCTION

It is known that from the moment in history when man replaces his extractive economy with organized productive activities, he has the need to create an operating system that would enable him to supply the acquired raw material, the products in production and finished products, and efficiently meet the demands of its consumers. All this productive routine of economic operations involves movements such as production, storage and transport modes. This set of activities represents the logistics part of the company.

Today's capitalist world, with a high-level economy and demandability, makes it necessary for the company to develop in its environment an effective management of its logistical activities, where the logistical process, as a whole, adds value to the products or services offered, in order to fulfill the essentiality of final consumer satisfaction, thus ensuring increased sales. The frantic increase in competitiveness due to the many forms of consumption and production at a globalized level creates the need for frequent launches of innovative or new products, which already enter the market with a very short useful life, as we know it as programmed obsolescence. In addition to the fact that this whole mechanism develops rapid changes in the consumer profiles of customers, making them increasingly demanding because they are so well informed.

In the national context, what happened before the apparent stabilization of the economy was that due to the instability in the pricing of products and services caused by inflation, wide loopholes were opened to practice speculation in the buying and selling process, which resulted in great

inefficiencies in the use of assets because of the need to scale resources for peak monthly demand resulting from the concentration of purchases at the end of every month. Today, however, with the end of an era that the dictatorial rules were the inflationary process, a major change in the practice of logistics is taking place, leading to the growth of cooperation between customers and suppliers in the supply chain, and leading to the evolution of today well-known management tool with the concept of Supply Chain Management or the English term Supply Chain Management (GCS or SMM). This process automatically encourages companies in general to be more creative, effective and flexible, which also results in increased quality and reliability in their products and services. All of this has created challenges for many executives, as it requires even greater efforts and tougher competition.

This work presents the presentation of the concept of financial accounting and managerial accounting, pointing out through them the boundaries present between these two main branches of accounting and their availability as an essential and strategic tool for business logistics.

Financial accounting is the most used today, as accounting professionals are not paying attention to the real need of the company, which would be a support for specific accounting knowledge for the management of the company and its strategic decision making. It aims to demonstrate the interrelationship between financial and managerial accounting aiming at the feasibility of accounting that meets both fiscal and managerial needs. In fact, there is no confrontation between them, but the essential need to unite different points of view and information.

The interrelation mentioned in this work means the existence of a fine line that brings together the two types of accounting studied here, the divergences presented in their conceptual structures, such as the users, the type of information, the objectives of using the information, among others, help to define and conceptualize the mutual relationship between them.

The proposal is to bring the reflection about the relevance of the two branches of accounting - financial and managerial - as a strategic tool used in business logistics.

In recent years, when listening to accounting professionals, with greater experience in the business, it appears that many companies have suffered from the financial crisis, needing to reorganize themselves to maintain it in the market, thus, companies need trained people to help them, the narrowing between financial accounting and management accounting has the means to assume this role of bringing more practicality and objectivity to those who need the information. And this interrelation generating competitive advantage within the business logistics.

The descriptive and exploratory research intends to reflect on the concepts involved in the study, contributing to the efficiency and effectiveness in the use of managerial information.

II. THEORETICAL REFERENCE

Today, a high degree of technological sophistication is noticeable and required to promote and program the integration of existing processes, information and businesses in this very complex and challenging environment. The management of logistics and the flow of information throughout the chain allow any logistics administrator and executives to assess strengths and weaknesses existing in the supply chain, helping to make decisions. The use of advanced technologies contributes to improving results, by reducing costs and increasing results and the contribution margin. It is basically to reaffirm what has already been defined by [12], that logistical operational competence stems from the relative assessment of the company's ability to provide the customer with a competitively superior service and at the lowest cost, that is, this modern logistics seeks to eliminate everything that does not represents added value for the customer, and that is just increased costs and lost time in the process between production and final delivery of products or services.

Relevant to the subject, [12] properly affirms this situation in relation to business logistics, which this definition also suggests that logistics is a process, which means that it includes all the important activities for the provision of goods and services to consumers, when wherever they want to acquire them. Even though it is a utopian goal, but attainable, it is the target of this improved line of the logistics segment, which has been standing out as an activity that integrates sectors and participants

at both ends of the process. Being directly focused on attempts to solve the big question of the business world: how to add more value while reducing costs, ensuring increased profitability. According to [12] "logistical activities are the bridge that connects production sites and markets separated by time and distance" and that "efficient logistical systems give world trade the conditions to take advantage of the fact that it is not land and land. People who live in them uniformly productive".

Interesting how [12] defines logistics, placing it as a value maker.

These definitions attest to the important context in which logistics operates, that is, business logistics, because of the important sectional integration it is producing. This fact is evidenced by the main characteristic of this management system, which is the efficient, horizontal exchange of information relevant to the entire process of the company's activities, from the purchase of inputs, to the preparation of final results and most notably, the delivery of these. To the final consumer. Logistics, therefore, is seen as the area responsible for the physical flow of information about inputs and products along the supply chain, dimensioning logistics among the core competencies for organizational performance. The importance of accounting data and information that permeates the entire logistical business process and the relevance of their effective evaluation is never lost.

2.1. Business logistics

Business logistics studies how management can promote the best level of profitability in distribution services to customers and consumers, through organization and effective controls for handling and storage activities that aim to facilitate the flow of products. Its goal is to provide consumers with goods and services when and where they want, and in the physical condition they want. This, through integrated planning, whose mission is to adjust the total logistical process, combining physical distribution and materials management as part of the organization's overall effort to perform well in its organizational environment.

The changes in the competitive environment require a realignment of the logistical rules, and the present research through the positions of reputable researchers, demonstrated the importance of visualizing business logistics in a larger scope by interpreting the functionalities of logistics activities directed to the organization's strategies.

Even though logistics has proved to be an essential part of the whole process, it is not yet the process itself. It represents part of the supply chain process, which is usually known as Supply Chain Management or the English term Supply Chain Management (GCS or SMM), which are codenames representative of integrated logistics, surpassing this meaning due to its scope. This management highlights logistical interactions that occur between the marketing, logistics and production functions in a company's environment, and from these same interactions between companies legally separated in the sphere of the product flow channel.

Basically, you can organize the most likely and common components in a logistics system or a supply channel between main and support activities. According to [12] some decisions characteristic of each of these activities: key and support, separated as a result of the fact that some of them usually happen in all logistics channels, while others take place in specific circumstances.

These activities are subdivided into the following steps, according to [12], in a succinct manner:

- ✓ Key activities: involve standardized customer services that cooperate with marketing, indicating possible customer needs, their reaction to the service and the quality of the services offered; transport - type of transport (modal), freight, itineraries, programming and selection of vehicles / equipment involved, complaints and audit; inventory management with storage policies; information flow and order processing.
- ✓ Support activities: incorporate storage activities; handling of materials; shopping area; cooperation with production operations; maintenance of information and control.

It is observed that this whole process is permeated by the cost analysis involved in financial and managerial accounting, highlighting that it is exactly there that the integrated management should

pay attention to the production of associated strategies, which corroborate the success of this business logistic goal. , with sectorial areas aligned, cooperating with each other towards the same objective - optimizing the use of all organizational resources.

2.2. Accounting, function and objective

Accounting arose from the need that human beings needed to obtain financial and economic information to better monitor their business.

Referent [1] "is the science that studies heritage phenomena, concerned with their reality, evidence and behavior, in relation to the functional effectiveness of social cells". And he complements "establishes the limits, the object and the nature of the study of accounting science".

As a complement to the definition presented by [1], it is registered the definition presented by [9], which understands accounting as a science too, but which studies the phenomena arising from the organizations' heritage, through registration, classification, expository demonstration , analysis and interpretation of these facts, with the purpose of providing information and guidance, which are essential for decision making, regarding the structuring of assets, their variations and the economic result resulting from asset management.

Based on the definitions presented above, it can be said that accounting is a management technique that seeks, through the records, to demonstrate the changes in equity, and their results, taking into account and always exposing the company's reality. Seeking to serve the target audience, whether internal or external. Accounting aims to analyze, interpret and expose the statements, corroborating for better decision making.

Resolution 774 of [4] mentions that "the existence of specific objectives is not essential to the characterization of a science, because, if it were, there would be no pure science, one that focuses only on its object". The aforementioned Resolution says that the correct presentation of assets and the analysis of the causes and effects of their mutations is what represent the scientific objective of accounting.

Gradually accounting has been developing, being a source of information that aims at a systemic view of the situation in which the company finds itself.

2.3. Financial Accounting and its statements

According to [5] financial accounting has the main purpose of making the financial statements, in the sense that it is able to pass on to the external public the notions that show the financial framework and the consequences of the definitions and evolution of the process performed by its administrators. The external public in which financial accounting is directed are shareholders, creditors (finance, banks and suppliers) as well as regulatory authorities and government tax authorities (International Accounts Standard Board –IASB, Financial Accounting Standard Board - FASB and in Brazil the Commission Securities - CVM).

Financial accounting then plays a very important role, as it comes directly to the company's finances, helping them with expenses and capital inflows and outflows, consequently in their logistics.

Based on these statements, another important concept comes up, the financial statements, which [10] say are extremely relevant for companies, as they present their operations in a certain period of time, and when they are analyzed technically, they can be examined the aspects that are strengthening or weakening its operating activity and capabilities, serving as a support tool in the definition of plans and decision making that will be taken by its users - the financial statements.

The purpose of financial statements is to generate information about the company's financial results and changes in its position. The main qualitative characteristics are formed in the clarity of the reports for a good understanding of their addressee, the relevance and reliability of the data, which must be prepared with rigor and accuracy, comparability and stability in the preparation, between cost and benefit, of the financial statements, as described in [10].

Nowadays with globalization, the market is more and more demanding, needing a much more refined and elaborated accounting advice, that is, professionals who can, in addition to performing the traditional general (tax) accounting, also be able to guide through their statements, the company results and the best way to deal with business administration, bringing suggestions and solutions for the company's progress and continuity, according to [7].

However, we can see that Financial Accounting is more concerned with communicating through financial and economic income statements with external users, being trapped by the currently accepted accounting principles. As it does not meet all the needs of its users, Management Accounting is aimed at complementing this part that is not done by financial accounting, such as, for example, to reach accounting information capable of facilitating managerial decision making [7].

Accounting is no longer a science where the objective is simple data entry and results verification, nowadays, it has a fundamental role - providing strategies, actions and decision making, as well as advising, keeping updated and indicate the path to business profitability.

2.4. Management accounting

Management Accounting is concerned with accounting information useful to management. Administrators use managerial data for adequate planning, evaluation and control of the organization, through an Accounting Information System [3].

Both internal and external users use accounting information. The difference is in the type of information and the way they use it. Management Accounting is a type of accounting information created for managers within an organization. It is the process of identifying, evaluating, gathering, researching, organizing, interpreting and exposing information that helps managers to achieve organizational goals [3]. This type of Management Accounting tries to be comprehensive and brief, and at the same time, able to adapt to technological changes and the new needs of managers and other functional areas of the business. This concept may also be appropriate for organizations that do not aim to profit. Regardless of the company's purpose, everyone needs to manage the use of their resources.

Currently, companies are increasingly evolving with new technologies. Information technology (IT) is present in all companies and is no longer a differential, becoming common in the market. This technology favors action in logistics, due to competition in the market (market share), speed and flexibility in decision making. As accounting is an information system, and the main tool for analyzing financial information and for managers, it also tends to grow [3].

With this growth, the need for more precise controls and information to prove the reality of the business is indispensable so that they can adapt their operations to new changes. Accounting was seen for years as a tax information system, where the main (or only) function was to calculate taxes. Currently, it is clear that due to the need for growth, it is chosen as a management tool that is used for assessment and control within the company.

Management accounting is an organization of knowledge obtained from information collected in the operation of a company that aims to have an impact in the direction of business, whether profitable or even, only for the addition of knowledge aimed at the realization of new ideas. Therefore, there is no other accounting, only management techniques are used together with the existing accounting techniques in order to establish an effective and efficient management of assets.

Managerial Accounting can be superficially characterized as: a special focus, given to several accounting techniques and procedures already known and dealt with in the financial field, in costs, in the financial analysis of balance sheets, among others, placed in a different perspective, a degree of detail more analytical or in a differentiated presentation and classification, in order to assist the managers of organizations in their decision-making process [7].

Management Accounting, it can be said that it is for the exclusive use of management within its internal scope, seeking to supply the manager's decision-making model with the collected information, applied in a valid and effective manner to meet its management needs. These internal

users are, according to [7], those who use the information reports provided by management accounting, as involved members of the company process, from the entrepreneur to the simplest hierarchical level employees, covered by the planning / control / activity performance of the company's goals and targets [7].

Management Accounting, in the service to the user, can aggregate different references, always considering the situation in which the information must be generated and the result expected in its application.

Some organizations use the figure of the managerial accountant, defined by the International Federation of Accounting - IFAC, according to [6] as the one who identifies, measures, accumulates, analyzes, prepares, interprets and reports information related to organizational administration, in the planning functions, evaluating and controlling its activities and ensuring the proper use and comprehensive responsibility of its resources.

Referent [6] states that the accounting professional has to pay attention to the company's planning functions, as currently the need for both financial and operational information is being demanded by managers, in order to provide support for better administration and evaluation of their activities. In today's competitive world, the accountant has great influence on the decisions of a company, so his ideas, opinions and suggestions can contribute to both business success and failure.

According to [6], within the accounting area there are several functions where the accountant can be exploited, bringing to the organization several types of information and analysis, in addition to providing tax assistance (which refer to managing 40% of a company's revenue). It is of great importance to check how the company has been in the past based on information provided by financial accounting. And it is also of great value for the entrepreneur to be able to do future planning, where he can be prepared to face possible difficulties, plan activities and work with cash flow and sales budgets. In other words, making accounting an instrument for business management. The accountant who goes beyond his tax functions, in the registration of administrative acts and facts, will meet the needs and expectations of business administration, becoming a managerial accountant.

2.5. Strategic tool

Business logistics as a managerial tool, using information from financial and managerial accounting, investigates how management can promote a better level of profitability in distribution services to customers and consumers, through a set of planning, operation and control of flow of materials, goods, services and mainly information inside and outside the company. The intention is to rationally integrate systemic functions, ranging from supplies, production, and storage to distribution, thus ensuring competitive advantages and the high standard of service in the distribution chain, which results in the satisfaction of shareholders and customers. Therefore, it denotes that the management of the company's entire logistics movement has come to be considered as a strategic area that adds value to products and services. Therefore, with a profound interrelation with the financial and managerial accounting instruments.

According to [12], the strategic management of logistics merges with that of supply chain management, as both have the scope of "putting the right products or services in the right place, at the right time and under the desired conditions, giving the best possible contribution to the company".

It is clear that the logistics service must be measured in terms of availability, operational performance and flexibility. It means to mention that as for availability, it is considered to have sufficient stock to serve the customer at the right time and place, as for operational performance it refers to the time between receipt and delivery of the order and with regard to flexibility is the ability to respond to unforeseen situations. And that for such conditions to consolidate the accounting information and knowledge of availability, investments and applications are fundamental.

Aiming at these aspects and due to the increase in competitiveness in the globalized world, companies have been looking for the continuous improvement of organizational productivity and the increase of operational efficiency. Thus justifying the use of business logistics as a strategic management tool, thus assuming an extremely important role. As corroborated [11] that “economic changes have transformed the business vision about logistics, which has come to be seen no longer as a simple operational activity, a cost center, in a strategic activity, a managerial tool, a potential source of competitive advantage ”

The authors convincingly agree that the integrated management of the various components of the logistics system is a necessary condition for companies to achieve operational excellence at low cost. External integration, another dimension of logistical excellence, means developing cooperative relationships with the various participants in the supply chain, based on trust, technical training and exchange of information. This external integration allows eliminating duplications, reducing costs, accelerating learning and customizing services. It is then noted that adding value to products is directly related to consumer satisfaction in relation to the product offered to them [11].

2.6. Competitive advantage

Business Logistics based on the reports provided by management and financial accounting can provide conditions to support the search for opportunities, to reduce costs, improve quality and offer faster products and services. Its current ideology seeks to be concerned with obtaining competitive advantage in increasingly volatile markets, surviving in this format, companies that manage to achieve this goal by adding value to their customers in increasingly smaller deliveries.

Treating this management tool from the perspective of a competitive advantage, it can be the way to differentiate a company, in the eyes of its customers, which can directly influence cost reduction, as well as adding value - which will reflect the possible increase in profitability - and a positive chain reaction with regard to the organization's business logistical management.

The crucial point is to see the potential of an integrated logistics system, using it as a competitive advantage. In what way? Making integrated logistics allow organizations a greater competitive power by contributing to the reduction of the total cost of production and customer loyalty, through the fulfillment of pre-established delivery deadlines. The challenge in combining competence with customers' expectations and basic needs must be the basic commitment to plan and formulate strategic logistics operations. It is worth mentioning that this competence is conceived when there is a well-understood methodological structure of integration in the company, as we mentioned before, which has a series of activities that must be harmoniously interconnected that will serve as a business strategy. This thesis is in agreement with [8], which says that logistical competence is every attribute of producing and reaching the final consumer, but that “the biggest challenge is management so that everyone works in harmony, generating the necessary capacity to attend to logistics requirement”.

It is noteworthy the [2] statement that mentions about the organization gaining a competitive advantage when it executes these strategically important activities in a cheaper or better way than its competitors. The competitive advantage over its competitors will then arise from the way in which companies perform these discrete activities within the value chain. A company must provide value to its customers by performing activities more efficiently than its competitors or performing activities in a way that creates greater value perceived by the customer.

The cost advantage can be obtained through logistics management, which makes rationalization and cost reduction feasible, generating increased productivity through various means. One of them is through the economy of scale, which leads to the dilution of fixed costs. Such management is a great auxiliary potential for organization, as it tends to achieve the cost / productivity advantage and the value advantage.

It highlights the purpose of achieving efficiency and effectiveness at the same time in this entire process. One means by which such excellence is achieved, with possible cost reduction, is by smoothing and correctly executing the flow of materials, which is being done in a synchronized way

as a flow of information, forming a horizontalized process within the organization itself. The result will be a significant reduction in inventories, greater use and targeting of the assets involved a significant reduction in waste and the improvement of transportation and storage systems.

III. METHODOLOGY

The methodological option for the elaboration of this article was the hypothetical-inductive method, as the work seeks to expand the knowledge on the highlighted subject, with inductive arguments that increase the content of the ideals defended here. Through particular data, conclusions are reached that are broader than the premises on which they were based. Exploratory and empirical research, which analyzes data and offers materiality to the arguments, exploring content and discovering the causes and effects of some phenomenon. It had a qualitative approach, which considers a relationship between the real world and the subject of the action, which cannot be transformed into numbers because it involves a personal significance of the phenomena and the attribution of meanings, where the use of statistical methods and techniques is not required. The process itself and its meaning are the main focus of the approach.

IV. FINAL CONSIDERATIONS

In view of the global scenario, organizations realized that to meet the needs of their customers, it is incompatible with reality to have to work in isolation. For this reason, they have sought to integrate their suppliers and customers to reach the final customer, successfully satisfying their needs and expectations. Thus, Logistics begins to be seen as a starting point to satisfy the needs of its customers, and that without this, there is no movement in production, much less any result in the form of profits.

Assuming that customer satisfaction and success have been vital aspects in the race to increase competitiveness among competitors, such integration enters the search for business logistics that aims to achieve this satisfaction by integrating functions, both internal and external. Those that are characteristic of your production chain. It assumes the responsibility for where the product will arrive or the performance of a certain service, from its departure or its beginning, until its conclusion. A new role is defined through this certainty, where logistics becomes the basis for creating value for the company's consumers and suppliers, values expressed in time and place, becoming a strong resource for competitive differentiation between competitors, playing a role decisive in the survival or decay of a company. The logistical factors are established from suppliers of raw materials and inputs, with service providers, partners, customers, product distribution, but now under a complete view of the supply chain, in perfect harmony with the business objectives.

In this context, accounting has gradually developed, being a source of information that aims at a systemic view of the situation in which the company finds itself. Discuss Management Accounting and its interrelation with Financial Accounting and start thinking about what one can mean for the other, betting on facing the difficulties that the company is going through.

A company is a group, one cannot think of it in a fragmented way: Finance, Human Resources, Marketing, and Production. Even though each sector has greater influence on one or another job, it is essential that there is a joint organization. And managerial accounting comes to provide this, objective and thematic of the work that brought the discussion about the interrelationship between Managerial and Financial Accounting, in the universe of business logistics.

Throughout this work it was found that managerial accounting can be defined as a set of accounting techniques and procedures, involved in management, providing information for the decision-making process, unlike financial accounting, which is associated only with cost calculations and expenses, that is, an analysis of applications and investments.

Management Accounting helps through spreadsheets and reports based on data and observations, in the preparation of budgets for the company to plan its strategies and actions. This type of accounting is focused on the interior and exterior of the company - its logistics. With regard to the interior, we

seek to get to know it better, from financial investments to the organizational climate. In the external part, it makes an analysis of the market in which it is inserted, using forecasts and trends to project a future of its activities and makes a comparison for the company helping with guidelines on how to move forward.

Business Logistics translates these business requirements into physical achievements, ensuring organizational success, through this new concept of integrated management, with interrelated activities to replace archaic practices. With efficient and strategic forms of administration for the company, allowing it to gain a competitive advantage over competitors, relating to the customer more effectively. Through an interconnected production chain there is a more agile exchange of information, horizontalized, where the achievement of the final objective will be closer - which is to be operating in the market with prominence. This business modernity, especially in the Brazilian reality, works as a productive link, which gains space and recognition when it comes to focusing costs and revenues, precisely when it manages to adjust the elements of delivery in the right place, in the agreed time and of what was contracted.

REFERENCES

- I. A.L. Sá, Administração e Contabilidade - amálgama para a prosperidade, Diário do Comércio, Minas Gerais, 23 jul. 2008. Caderno LEIA & COLECIONE, p. 2.
- II. A.P.C. D'Alvia, Logística empresarial. Disponível em: www.tempodelogistica.com.br. Acesso: 07 jan 2020.
- III. C.L. Padoveze. Contabilidade gerencial, 5th ed., São Paulo: Atlas, 2008.
- IV. Conselho Federal de Contabilidade – CRC - 2000. Disponível em: <https://cfc.org.br/tecnica/normas-brasileiras-de-contabilidade/normas-completas/> Acesso em: 07 jan 2020.
- V. C.P. Stickney and R.L. Weil, Contabilidade financeira, 9th ed., São Paulo: Atlas, 2001.
- VI. C.T. Horngren, G.L. Sundem and W.O. Stratton, Contabilidade gerencial, 12th ed., São Paulo: Prentice-Hall, 2004.
- VII. D.C. Matarazzo, Análise financeira dos balanços, 6th ed., São Paulo: Atlas, 2003.
- VIII. D.J. Bowersox and D.J. Closs, Logística empresarial - o processo de integração da cadeia de suprimento, São Paulo: Atlas, 2001.
- IX. H. Franco, Contabilidade geral, 23rd ed., São Paulo: Atlas, 1997.
- X. J.C. Marion, Análise das demonstrações contábeis, 6th ed., São Paulo: Atlas, 2010.
- XI. P.F. Fleury (org). Logística empresarial - a perspectiva brasileira, 1st ed., São Paulo: Atlas, 2013.
- XII. R. H. Ballou, Gerenciamento da cadeia de suprimentos - logística empresarial, 5th ed., tradução Raul Rubenich, Porto Alegre: Bookman, 2006.