

INFLUENCE OF THE ORGANIZATIONAL STRUCTURE IN THE ORGANIZATIONAL LEARNING CAPACITY: THE CASE OF A WORLD MANUFACTURER OF COMMERCIAL VEHICLES

INFLUÊNCIA DA ESTRUTURA ORGANIZACIONAL NA CAPACIDADE DE APRENDIZADO ORGANIZACIONAL: O CASO DE UMA FABRICANTE MUNDIAL DE VEÍCULOS COMERCIAIS

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ABSTRACT

Purpose – This study aims to analyze the influence of the dimensions of the organizational structure on the organizational learning capacity in a transport company.

Design/methodology/approach – For this, we adopted as a research design the method of case study and for data collection and analysis, using the quantitative and qualitative procedures. For the purposes of this study, the choice was made of the Administrative Unit of Construction Equipment of a worldwide manufacturer of commercial vehicles.

Findings – Among the results it was verified that: (i) an environment conducive to organizational learning must be supported by organizational organizational structures; (ii) the dimensions of centralization and integration when working in congruence tend to reinforce processes and levels of learning; (iii) the high degree of formalization has no influence on organizational learning capacity.

Research limitations/implications – As limiting factors of the research, the cross-sectional approach is considered to study the theme of organizational learning. Still, the data collection in only one Unit of the company Alpha, the number of interviews carried out and the fact that it involves only managers from the commercial and sales sectors.

Practical implications – The dimensions Centralization and Integration influence the Capacity for Organizational Learning.

Originality/value – In order to develop an environment conducive to organizational learning, organizations should make use of more flexible structural forms, which encourage people's autonomy and freedom through decentralization. Also, that organizations seek a high level of integration, information sharing and that communication is fluid throughout the company.

Keywords - Organizational structure; Organizational Learning Capacity; Transport sector.



RESUMO

Objetivo – O objetivo deste estudo consiste em analisar a influência das dimensões da estrutura organizacional na capacidade de aprendizado organizacional em uma empresa do setor de transportes.

Design / metodologia / abordagem – Para isso, adotou-se como delineamento de pesquisa o método de estudo de caso e para coleta e análise dos dados, utilizou-se os procedimentos quantitativo e qualitativo. Para fins deste estudo, optou-se pela escolha da Unidade Administrativa de Equipamentos de Construção de uma fabricante mundial de veículos comerciais.

Resultados – Dentre os resultados constatou-se que: (i) um ambiente propício ao aprendizado organizacional deve ser apoiado por estruturas organizacionais orgânicas; (ii) as dimensões centralização e integração quando atuam em congruência tendem a reforçar os processos e níveis de aprendizado; e, (iii) o elevado grau de formalização não exerce influência na capacidade de aprendizado organizacional.

Limitações/implicações da pesquisa – Como fatores limitantes da pesquisa, considera-se a abordagem de corte transversal para estudar a temática de aprendizado organizacional. Ainda, a coleta de dados em apenas uma Unidade da empresa Alfa, o número de entrevistas realizadas e o fato de envolver somente gestores dos setores comerciais e de vendas.

Implicações práticas – As dimensões Centralização e Integração exercem influência na Capacidade de Aprendizado Organizacional.

Originalidade/valor – Para desenvolver um ambiente propício ao aprendizado organizacional, as organizações devam fazer uso de formas estruturais mais flexíveis, que incentivem a autonomia e a liberdade das pessoas por meio da descentralização. Também que as organizações busquem um alto nível de integração, compartilhamento de informações e que a comunicação seja fluída por toda a empresa.

Palavras-chave - Estrutura Organizacional; Capacidade de Aprendizado Organizacional; Setor de Transportes.

1 INTRODUCTION

The growing interest in the study of organizational learning is related to the belief that it has become an essential concept to understand how organizations evolve over time and adapt to environments of permanent change, in addition to being considered a critical driver of success innovation and fundamental for survival in competitive and dynamic environments (POLENZ, 2015; ZAWISLAK, FRACASSO, & TELLO-GAMARRA, 2018). According to Chiva, Alegre and Lapiedra (2007) an organization's learning capacity depends on a set of guidelines, organizational characteristics and management practices that enhance a greater or lesser probability for learning to occur.

The organizational structure, through its dimensions (formalization, centralization and integration) can act as a facilitator or inhibitor of the ability to learn (CHEN & HUANG, 2007). In this way, identifying which dimensions of the organizational structure predict characteristics and management practices considered essential for the organization to learn becomes relevant for the enrichment of academic production in the area and for the development of management practices aligned with the learning challenge, change, flexibility and innovation (ALVES, 2017; VICTER, 2020), especially when talking about companies in the transport sector, since this sector is considered fundamental for the development of the nation, as it is through it that products reach the hands of their consumers. In addition to being considered a motivator in the industry, generating jobs, both in the industrial sector, as well as in the commercial and service sectors (SCHMIDT, 2011).

Faced with the pressure for competitiveness, organizations that operate in sectors of significant notoriety for the development of the country, as is the case of the transport sector, end up



facing responsibilities, among them that of effecting changes and innovation seeking improvements in organizational processes and, consequently, provide benefits to the consumer population as a whole. And this is the scenario for the development of this research, carried out in a worldwide manufacturer of commercial vehicles that presents a trajectory of pioneering and innovation of its products, facing the demands of the market and, above all, remaining competitive.

Thus, the general objective of this study is to analyze the influence of the dimensions of the organizational structure on the organizational learning capacity in a company in the transport sector. In specific terms, it aims to: i) Describe and analyze the dimensions of the organizational structure; ii) Check the factors that enhance and hinder organizational learning. Therefore, this article is structured as follows: in the next section, the theoretical and empirical contributions referring to the organizational structure and learning are presented; next, the adopted methodological procedures are described; in the fourth section the data are presented, analyzed and discussed according to the theories listed; finally, the conclusions of this research are presented in the last section.

2 ORGANIZATIONAL STRUCTURE AND ORGANIZATIONAL LEARNING: THEORETICAL AND EMPIRICAL CONTRIBUTIONS

From the 90s onwards, a prescriptive perspective focused on the development of guidelines about the creation of learning organizations emerges in the organizational learning literature (CHIVA, ALEGRE, & LAPIEDRA, 2007). At this point, the literature starts to approach organizational learning as the result of a process and to identify factors that facilitate and / or hinder it, mainly from the studies of Goh and Richards (1997) and Hult and Ferrell (1997).

Goh and Richard (1997) developed a research instrument, which will be used in this study, called *Organizational Learning Scale* (OLS), as an empirical attempt to systematize characteristics and aspects present in the management literature considered relevant to evaluate an organization's learning ability. These authors identified five categories that group characteristics and management practices considered essential for the learning organization: Clarity of Purpose and Mission (degree of understanding of employees about the organization's vision and mission and how they can contribute to organizational success); Empowerment and Leadership Commitment (role of leaders in promoting behaviors consistent with a culture of change and experimentation); Experimentation (freedom of employees to experiment with new ways of doing work and taking risks); Knowledge Transfer (clear, fast and comprehensive communication process); Group Work and Problem Solving (encouraging teamwork to solve problems and generate new ideas).

For Cantner, Joel and Schmidt (2009) sustaining a management focused on learning requires, in most cases, a structure designed to proactively embrace initiatives aimed at a continuous and lasting learning process. The organizational structure is a multidimensional construction that highlights the division of work, roles and responsibilities, the degree of specialization, the centralization or decentralization of communication and coordination mechanisms, as well as the degree of formalization and organizational flexibility (HAO et al., 2012).

In this work, the models of Hage and Aiken (1967) and Nahm et al. (2003) to analyze the organizational structure, which considers the following dimensions: Formalization, Centralization and Integration. Formalization is subdivided into two dimensions - work standards (representing how well job descriptions are specified) and rule control (degree to which occupants are supervised in relation to compliance with established standards). Centralization is subdivided into two variables: participation in decision-making (represents how much the occupants of various positions partici-



pate in decisions) and hierarchy of authority (refers to decisions involving the work associated with each social position). Integration is subdivided into three variables: number of hierarchical levels (whether the organization has many or few levels of management), level of horizontal integration (determines how much employees are functionally specialized versus integrated in their work) and level of communication (characterizes how slow, difficult and limited vertical and horizontal communication versus fast, easy and abundant).

The role of the organizational structure in fostering the learning process is evidenced in the empirical contributions of Martínez-León and Martínez-García (2011), Hao et al. (2012) and Steiger (2013). The work of Martínez-León and Martínez-García (2011) sought to determine the type of structure that provides adequate conditions for the development of organizational learning. The results showed that when the characteristics of the organizational structure are closer to the organic model, the levels of learning tend to be reinforced. Conversely, when a mechanistic model is approached, the level of learning is lower. In organic structures, communication flows between organizational levels and boundaries, consequently, relevant knowledge and experience are widely distributed among group members within organizations. The mechanical structure, on the other hand, is less conducive to effective learning, because it encourages the differentiation between the units and their dissociation in different reporting lines (MARTÍNEZ-LEÓN & MARTÍNEZ-GARCÍA, 2011).

The study by Hao et al. (2012) aimed to investigate the relationship between organizational structure and performance, through organizational learning and innovation. Among the conclusions, the authors reinforce that the organizational structure has more effects on organizational learning than on innovation: that is, organizational learning leads to superior performance since it promotes the innovation process.

Steiger (2013) in his doctoral thesis aimed to investigate the difference between the types of organizational structure on knowledge management practices within organizations. The results obtained demonstrate that the practices of knowledge transfer and information filtering are influenced by the organizational structure. Still, the matrix structure model was the one that presented higher levels in relation to knowledge management practices, when compared to other types of structure, since the matrix structure is strongly associated with autonomy, the need to share knowledge and solve problems in multidisciplinary groups.

3 METHOD

The method used was the case study, through quantitative and qualitative procedures for data collection and analysis. The unit of analysis was a company in the transport sector, which operates in the manufacture of commercial vehicles (Empresa Alfa). In addition to the relevance of this sector for the country's development, as well as the central role of that company, its choice is justified by: (i) being considered one of the world's largest manufacturers of commercial vehicles; (ii) be a multinational belonging to a robust business group based in Sweden; (iii) present a trajectory surrounded by achievements, pioneering spirit and technological evolution of its products (creator of the three-point seat belt; first brand to apply Airbags; first automaker to introduce trucks with electronic engines in the national territory); (iv) to be a pioneer in innovations in the company's management (first Brazilian automaker to implement a 40-hour week; first to encourage the creation of an Ethics Committee; it was the first Brazilian automaker to define an employee participation system results, in the operational areas, management through Self-Managed Teams is a differential).

For the purpose of this study, the Construction Equipment Administrative Unit was chosen, located at the company's headquarters in Curitiba / PA, whose target population was represented by 70 employees. The data collection for this research took place in January 2016. The questionnaire applied



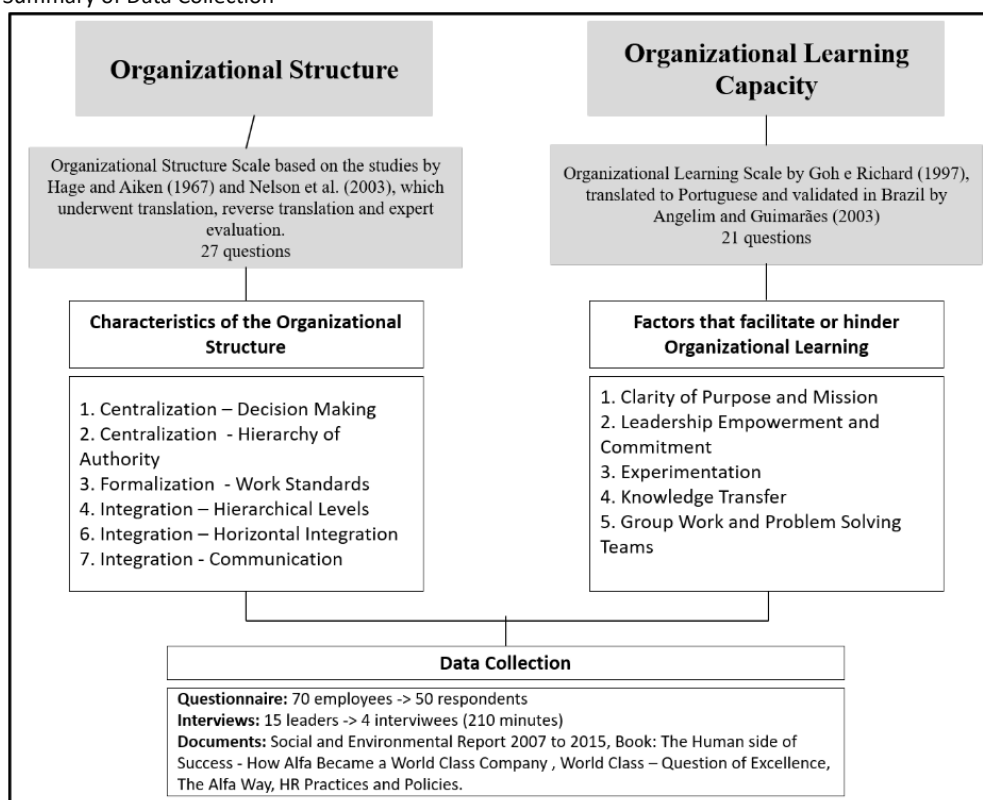
in this stage was composed of three parts: (I) Profile identification: sociodemographic and professional issues; (II) Goh and Richard's Organizational Learning Capacity Scale (1997), translated into Portuguese and validated in Brazil by Angelim and Guimarães (2003), composed of 21 items, grouped into 5 categories and; (III) Organizational Structure Scale, based on studies by Hage and Aiken (1967) and Nahm et al. (2003), which underwent translation, reverse translation and expert evaluation, consisting of 27 questions, divided into 7 dimensions. It should be noted that the questions referring to parts II and III of the questionnaire were assessed using a 5-point Likert scale (from 'I totally disagree' to 'I totally agree').

The qualitative data collection took place through semi-structured interviews and document analysis. The interviews were conducted at the company's headquarters with 4 of the 15 leaders of the investigated Unit, totaling 210 minutes of recording. The documents were obtained by accessing the company's website, among which were analyzed: Socioenvironmental Report from 2007 to 2015 (published annually, contains information on Grupo Alfa's Profile and Strategy, solutions for sustainable development from the company to the Brazilian market, the value shared with customers, society and the internal community, corporate governance, results and indicators for each year); Book: The Human Side of Success - How Alfa Became A World-Class Company (written by a Human Resources Director at the company, published in 2012 tells the story and trajectory of Alfa); World Class - Question of Excellence (published by the National Quality Foundation - FNQ presents and discloses the winners of the National Quality Award - PNQ in 2015. Pages 78 to 85 show the main policies and practices of Alfa that meet the PNQ criteria); The Alfa Way (developed by Grupo Alfa and translated into Portuguese by Alfa do Brasil presents the Group's culture, behaviors and values); HR Practices and Policies (28-page document developed by Alfa do Brasil presents the company's main differentials in terms of people management practices and policies).

After collected, the quantitative data was transferred to the software "Statistical Package for the Social Sciences - SPSS 20.0". To profile the respondents, statistical and frequency analysis related to the sociodemographic and professional variables surveyed were carried out. Subsequently, a factor analysis was carried out, in which the following criteria were followed: Kaiser-Meyer-Olkin (KMO) tests **considering values above 0.5; Bartlett sphericity test; communal values greater than 0.6**; percentage of at least 60% of the explained variance; factorial loads above +/- 0.30 with a difference of at least 0.10 for loads directed to other factors; and internal consistency index considering values above 0.7 for Cronbach's Alpha (HAIR et al., 2009). Once this was done, descriptive analysis (average and standard deviation) of the factors obtained were carried out, based on the average of the variables of each factor. Finally, in view of the objective of the study, the Multiple Regression Analysis was chosen. The analysis of qualitative data, on the other hand, took place, through Content Analysis, proposed by Bardin (2011). Next, Figure 1 summarizes the information regarding the collection of qualitative and quantitative data.



Figure 1- Summary of Data Collection



Source: Developed by the authors.

4 RESULTS

4.1 PROFILE OF RESPONDENTS

Fifty employees participated in the quantitative stage, 68.0% of whom were male, with an average of 37.42 years old, with Specialization / Post-Graduate degrees (50.0%). Regarding the professional profile, most are allocated to the After Sales (36.0%) and Commercial departments (32.0%), holding the position of Analyst (26.0%) and Manager (20.0%) and have an average of 8.70 years of experience in the Company, and 3.58 years in their current position. In the qualitative stage, 4 managers, all male, between 29 and 45 years old, with specialization / postgraduate courses were investigated. Regarding the company time, only one said he had been there for about 1 year, and the others about 8 years. Two of the interviewees work in the After-Sales sector, one as a Director and the other as a Coordinator. The other two interviewees work in the Commercial Sector in the positions of Director and Manager.

4.2 ANALYSIS OF THE ORGANIZATIONAL STRUCTURE OF THE ALPHA COMPANY

Initially, the **Organizational Structure model adopted by the company Alfa was identified, which refers to the matrix, based on the business areas related to its products and support activities. Within this structure, the company works with eight hierarchical levels: Presidents, Directors, Managers, Coordinators, Administrative, Technical, Sales and Operational. There are also, in the company, the Apprentices and Interns categories.** In the sequence, Table 1 presents the data referring to the analysis of the average of the factors obtained with the application of the Organizational Structure instrument.

Table 1- Analysis of Averages (Organizational Structure)

Factor	Alpha	Average	Deviation
Centralization - Decision Making (CTD)	0,926	2,33	1,124
Centralization- Hierarchy of Authority (CHA)	0,835	2,00	1,056
Integration- Communication (CI)	0,883	3,50	1,134
Integration - Hierarchical Levels (INH)	0,819	2,93	1,273
Formalization- Work Standards (FPT)	0,780	2,36	0,966
Integration- Horizontal Integration (IIH)	0,810	3,42	0,924

Source: Research Data

The analysis of the data obtained with the accomplishment of the exploratory factor analysis of the Organizational Structure instrument applied with the employees of Empresa Alfa began. The factor analysis showed satisfactory values (KMO tests of 0.719 and Bartlett (sig 0.000) for the six-factor solution. Which, explains 73.94% of the variance, with the first factor concentrating 31.03% of the total variance. The analysis of the commonality for this solution led to the exclusion of two variables: 14 “Employees are constantly checked for rule violations” and 22 “The most important tasks in the company are performed by multifunctional teams”, for having values below 0.6. Thus, the instrument totaled 25 questions. All factors had significant reliability indexes, ranging from 0.780 (FPT) to 0.926 (CTD).

In general, the questions were grouped according to the original constructs of Hage and Aiken (1967) and Nahm et al.(2003), with the exception of factor 2 that grouped the questions referring to the dimension “Centralization - Hierarchy of Authority” and questions 15 “I feel like I am being constantly watched to see if I obey all the rules “and 16” There are many levels of management between the lowest and the highest hierarchical level of the company “, belonging to the respective dimensions: Formalization - Rules Control; and Integration - Hierarchical Levels. Thus, it was decided to maintain the original name “Centralization - Hierarchy of Authority”, due to the predominance of the variables of this dimension and the semantic analysis of questions 15 and 16 present coherence between these and the meaning of the factor.

Regarding the analysis of the averages of the Organizational Structure instrument, it appears that the company is characterized as highly integrated, that is, it has an easy and fluid communication between people and between the different hierarchical levels (IC-3,5), a high level of performance / work through multifunctional teams (IIH- 3.42) and has few levels of management (INH- 2.93). In the document “The Alfa Way “, it appears that the company values the integration between the different units, areas and people in the Group by emphasizing the importance of behaviors such as: synergy, open dialogue and teamwork in the day to day of the organization. By adopting a matrix structure, the company seeks to integrate the different areas and units through working in multifunctional teams. In Interviewee 1’s speech, these behaviors and their importance were emphasized in order to create new opportunities in the company “We not only understand but we know that it is very important that there are several interactions [...] most of the time when there are several people talking about a potential idea is where we end up creating the opportunity to do something, it’s the synergy factor!!! I have several ideas, another guy has other ideas, the moment we put things together it starts to make sense !!!” (E1).

The culture of social interaction in the organizational environment, involving exchanges of knowledge, experiences and skills between employees provides access to relevant information and construction, and the use of knowledge networks within organizations. This process is characterized by formal and informal collaborations to disseminate knowledge among people, groups or organizations. Formal knowledge sharing is done through structured channels for the purpose of creating and exchanging knowledge, and the informal one is made by mechanisms that facilitate, but which they are not structured to dedicate themselves to this activity (FRIESL, SACKMANN, & KREMSER, 2011).



Among the formal channels for sharing knowledge / information at Empresa Alfa, the following were highlighted: *websites, intranet, communication and disclosure meetings, pamphlets, television in the cafeteria, murals with news from newspapers and general headlines*. On a daily basis, the exchange of knowledge / information between departments occurs in a spontaneous, unstructured way, as evidenced by the interviewee's speech 2: *"Interdepartmentally it (communication) occurs in a more spontaneous way, it is not so structured [...] So communication is open, more structured from a corporate point of view and spontaneous from a daily point of view"* (E2).

As for the strategic decision-making process in the company, it was found that it starts at the Swedish headquarters, in a global forum in which the first management level participates. In this forum, annual objectives, guidelines and strategic goals for the short, medium and long term are defined and / or revised. Subsequently, the communication of strategic information is made until the individual level, at which point each employee starts has their Personal Business Plan, aligned with the company's macro plan. This process can be seen as a two-way street, as the leaders identify the input provided by the employees, according to the demands obtained from customers and distributors in the organizational day-to-day, and later discuss them in periodic meetings to evaluate and review processes and indicators, and thereby generate information that will assist and support strategic decisions in the global forum, as illustrated by Interviewee 4's statement: *"It is, in fact, the global strategy comes from inputs from all regions ... once a year we send our plans, what is important to do, what are the products, the markets we are going to invest in ... and they come up with a global strategy considering all these inputs"* (E4).

Such evidence corroborates the analysis of the averages of the Centralization dimension, which reveals that the company Alpha is characterized as decentralized, that is, the research participants understand that managers seek information and feedback from employees, and seek to involve them in important company decisions (CTD- 2.33), believe that there is autonomy and that, in most cases, they are not dependent on their superiors for decision making and problem solving; which means that the company Alpha has a low hierarchy of authority (CHA- 2.00). Regarding autonomy Interviewee 2 mentions that managers encourage this behavior among people and work teams, especially in relation to operational decisions: *"In operational areas, we usually give a lot of freedom for employees to make the decision in front of the customer or distributor, because it is a demand of our situation as a sales company [...] Some of the decisions end up being taken to the higher level of hierarchy, but in general, I would tell you that they are developed to make 80%, 90% of the decisions."* [1 AND 2). (E2).

The importance of decentralizing decisions at the operational level is highlighted in the study by Chong et al. (2011), in which he states that the organizational structure model that deals with the centralization of strategic decisions and the decentralization of operational ones is based on the recognition of the need to have quality, reliability, flexibility and responsiveness at all levels of the organization, in particular, in getting the organization to offer a service that meets the needs and expectations of its customers.

Regarding formalization, the research participants agree that there are rules that guide the execution of the work, which does not prevent them from carrying out their activities with autonomy (FTP-2.36). **The company Alfa has a very strong compliance, that is, a set of practices and guidelines established for the business and the activities of the organization. The company's guidelines, as well as its macroprocesses, are defined by the Swedish headquarters and its performance is guided by "The Alfa Way", by the code of conduct and by strategic policies in the areas of Quality, Environment, Safety, Health and Well-being at work. However, the excess of formalization brings a positive return for the company because it facilitates the understanding of new employees about the**



organization of work in the company, as highlighted by Interviewee 3: *“In the beginning, it seems to hinder (so much formalization), but in the long run it helps a lot, especially when you have a higher turnover [...] you have these well designed processes help new people to integrate better and understand how we work, why we do it that way”* (E3).

Formalization in the case of the company Alfa helps to clarify acceptable behaviors from people and provides an understanding of how the organization operates, supporting the decentralization of decisions. In a way, this position confirms the considerations of Martínez-León and Martínez-García (2011) who state that depending on the nature of formalization, it can be restrictive, or support decentralization, flexibility and work autonomy.

4.3 ANALYSIS OF THE ORGANIZATIONAL LEARNING CAPACITY OF THE ALFA COMPANY

For the analysis of the data related to Organizational Learning Capacity, an exploratory factor analysis of the 21 variables that make up the Organizational Learning instrument was performed initially, which indicated the solution with four factors as the most appropriate (KM0 0.878; Bartlett sphericity test (sig 0.000)). The extraction of four factors explains 70.77% of the variance, with the first factor concentrating 19.84% of the total variance. Questions 1 *“In the company where I work, employees often have the opportunity to talk with other employees about successful work experiences”* were excluded by commonality; 14 *“Informal groups are usually created to solve company problems”* and 19 *“Employees have the opportunity to self-assess the achievement of organizational goals”* because they have lower values to 0.6. **Thus, the instrument totaled 18 questions.** All factors had significant reliability indexes, ranging from 0.767 to 0.876.

The four dimensions of factors and managerial practices that enhance organizational learning were named considering their content and their theoretical basis, such as: Factor 1, *“Culture of Incentive to Experimentation and Suggestion of New Ideas”*; Factor 2, *“Leadership Incentive to Participation in Decision Making and Group Problem Solving”*; Factor 3, *“Clarity of Purpose and Mission”*; and Factor 4, *“Interaction with the External Environment, Absorptive Capacity and Knowledge Transfer”*. In the study by Angelim and Guimarães (2003), the authors identified three factors that potentiate organizational learning, which, despite not grouping the same variables, produced clusters whose characteristics are similar to those found in this study, namely: Factor 1, *“Organizational Practices or Attitudes of Support Managers to Employees’ Freedom of Action”*; Factor 2, *“Group Work”*; and Factor 3, *“Understanding, Sharing the Institutional Mission”*. In the sequence, Table 2 presents the averages of the factors obtained with the application of the Organizational Learning Capacity instrument.

Table 2- Analysis of Means (Organizational Learning Capacity Scale)

Factor	Alpha	Average	Deviation
Culture of Encouraging Experimentation and Suggesting New Ideas (AO1)	0,876	3,82	0,922
Leadership Incentive to Participation in Decision Making and Group Problem Solving (AO2)	0,875	3,55	0,994
Clarity of Purpose and Mission (AO3)	0,767	3,87	0,877
Interaction with the External Environment Absorptive Capacity and Knowledge Transfer (AO4)	0,844	3,75	0,910

Source: Research Data



According to the analysis of averages, it appears that the research participants perceive that at Alfa, employees and managers share a common vision and have clarity and understanding of the organizational vision / mission and how they can contribute to its success and realization (AO3-3.87). These characteristics are confirmed by the speech of the managers who stated that there is a concern of the company in **presenting a clear strategy, broad communication and moments for participation, discussions and alignment of actions to achieve the organizational objectives, being considered by the interviewees the main points that contribute to the understanding of mission employees and organizational purposes.** For Senge (1990), the shared vision is essential for the learning organization, as it provides the focus and energy for learning. The dissemination of a common vision results from a process of communication and reinforcement of assumptions, beliefs and success strategies, in order to make them aware and visible to individuals. Because only then can beliefs and assumptions be put to the test, and they can be modified or reinforced by employees. In this sense, the organization as a whole needs to understand the effect and how the work they do contributes to the realization of the organization's vision. That is, employees must understand the difference between the vision and the current state and how they can best strive to bridge this gap. Goh and Richard (1997) add that a shared vision of reality depends on an effective communication process, which must be accessible and transparent to all members so that individual knowledge can be transformed into organizational knowledge, coupled with a third condition that is integration.

In this sense, the PBP (**Personal Business Plan**) was cited as an important tool for communicating the company's strategy **applied throughout the Alfa Group based on the dialogue between the leadership and employees, in order to align the organization's objectives with the personal development plan. Thus, in addition to the tool allowing for monitoring of individual results, and immediate feedback , the employee clearly understands what their annual objectives are, the skills development goals and , also the career prospects in the medium and long term.**

The survey results also indicate that the company's employees agree that the leaders are acting in a way that promotes management based on dialogue and employee participation in decision making (AO2- 3.55). **For the company, the dialogue between the leaders and their teams is important, because, in addition to ensuring an understanding of employees about the business, it allows the performance, needs and expectations of employees to be monitored, so that leaders can guide them in their performance and development plans. For Scott-Ladd and Chan (2004) the clear and open dialogue between leaders and team members gives better access to information and improves the quality and ownership of the results of the decision. In addition, promoting participatory management can benefit the organization from motivational effects and greater employee involvement, job satisfaction and organizational commitment.**

Factor 4 investigated the company's absorptive capacity, which refers to its ability to recognize the value of new external information, assimilate it and apply it for commercial purposes. The company understands the participation of employees in external events as a way to internally channel information from the market, generate discussions and contribute to organizational improvements, as evidenced by the interviewee's statement: "Participation in fairs is always very valid, and one of the objectives is this, so that they bring new ideas and develop new activities"(E3). The interviewees perceive that the process of gathering information to bring discussions to the team by the employees is something that happens naturally, that is internalized in the organizational culture and that it is part of the profile of the people who work in the company to want to seek and contribute with continuous improvement. Likewise, employees agree that they are encouraged to bring new ideas into the company based on learning from other organizations' successful practices (AO4- 3.75).

Still, the research participants agree that the Alfa company culture encourages questioning and suggesting new ideas, as well as promoting the experimentation of new management processes



and practices (AO1- 3.82). Among the main mechanisms used by the organization to encourage the contribution of employees with new ideas, the interviewees mentioned the business case, opportunities where people meet in work groups and generate a project that will be presented to a committee and evaluated its effectiveness and opportunity to be implemented. Another important action of the company was the creation in 2011 of the Alfa Innovation Excellence Council, with the objective of promoting among employees the practice of innovation linked to the brand's businesses, whether in processes, management or improvement of products and services.

One of the main factors for the organization to be motivated to learn is to have an organizational culture that reinforces an open attitude towards experimentation, innovations, calculated risks, the recognition of its mistakes and failures and the need to learn from them. The organization's attitude towards failures is an important element of the relationship between the culture of experimentation and the creative process (IRANI et al., 2009).

From the interviewees' report, it was possible to perceive that the company tends to deal with errors and failures as a natural process, since taking into account Alfa's structure and its form of governance, more errors occur than successes, since many decisions regarding the implementation of processes or product development depend on global support (Swedish headquarters), which makes approval and implementation more difficult. As follows in the speech of Interviewee 4: *"Here, a lot of errors happen, because the structure of Alfa is large and we need support [...]. What we try to do is learn, try to understand what didn't work and if there was any way to do it differently"* (E4).

In the case of Alfa, the analysis show that the company has an integrated, clear and comprehensive communication system that seeks to involve all people, areas, units and hierarchical levels. Which in a way contributes to higher chances that knowledge will be transformed and applied in improvements and innovations for the organization. Because, it is useless for the company to encourage the participation of employees in fairs and external events if employees are not willing or do not see in the organization the openness and opportunities for the acquired knowledge to be applied and shared with the other members of the organization.

4.4 ORGANIZATIONAL STRUCTURE AND ORGANIZATIONAL LEARNING CAPACITY: REGRESSION ANALYSIS.

To analyze the influence of the dimensions of the organizational structure on the organizational learning capacity, multiple regression analysis were performed, in which the four factors of the Organizational Learning Capacity construct were designated as dependent variables of the tested models: 1- Culture of Incentive to Experimentation and Suggestion of New Ideas; 2 - Leadership Incentive to Participation in Decision Making and Group Problem Solving; 3 - Clarity of Purpose and Mission; 4 - Interaction with the External Environment, Absorptive Capacity and Knowledge Transfer. In the list of independent variables that comprised the tested models, the three factors and their sub-dimensions relevant to the Organizational Structure construct were used, which are: Centralization (Taking of and Hierarchy of Authority); Integration (Communication, Hierarchical Levels, Horizontal Integration); Formalization (Work Standards).

As a method of analysis of the proposed models, the stepwise estimation was used, which, explains Hair et al. (2009), allows the researcher to find out how much each independent variable contributes to the regression model. Thus, the models found for the dependent variables associated with Organizational Learning Capacity are presented in Table 3.



Table 3- Beta coefficient, significance and adjusted determination coefficient (R²) for the regression models

Dependent Variable	Regression model for Organizational Structure				R ² Adj
	Centralization		Integration		
	Coef	Sig	Coef	Sig	
Culture of Encouraging Experimentation and Suggesting New Ideas	-,444	,004			,400
Leadership Incentive to Participation in Decision Making and Group Problem Solving	-,585	,000	,291	,014	,640
Clarity of Purpose and Mission	-,429	,005			,395
Interaction with the External Environment Absorptive Capacity and Knowledge Transfer	-,508	,000	,328	,010	,592
General Organizational Learning Capacity	-,559	,000	,317	,008	,637

Source: Research data.

As shown in Table 3, the results emerged the factors Centralization and Integration as predictors of organizational learning capacity. Such results corroborate the findings by Martínez-Leon and Martínez-García (2011) that the critical variables that facilitate learning are centralization and socialization. Knowing that companies with a high level of organizational learning have low centralization and high socialization, while companies with a low level of learning have average scores on these two variables.

For the dependent variables of Culture of Incentive to Experimentation and Suggestion of New Ideas and Clarity of Purpose and Mission, it was found that the influencing independent variable was Centralization. Also, the analysis of beta coefficients (Coef.), which express the impact and direction of the relationship of each of the independent variables with the dependent variables (HAIR et al., 2009), indicated that the influence is negative. In this way, it can be inferred that the greater the centralization of decisions and information in the company, the smaller the culture of incentive to experiment and suggest new ideas and the clarity of purpose and mission tends to be. Table 2 also shows the display of the Adjusted R² coefficient (R² Adj.), or coefficient of determination indicating which part of the variance of each dependent variable can be explained by the independent variables. Pestana and Gageiro (2008) clarify that this coefficient, when multiplied by 100, indicates the percentage of variation of one variable that is determined by the other. In this investigation, the Adjusted R² demonstrated that the model conceived by the dependent variables Culture of Incentive to Experimentation and Suggestion of New Ideas and Clarity of Purpose and Mission can be explained by 40.0% and 39.5% by the degree of centralization of the Organizational Structure.

Based on the concept of centralization, Hage and Aiken (1967) propose that this dimension explains how much the occupants of various positions participate in decisions about the allocation of resources and in the determination of organizational policies. As Lee et al. (2012) (2012) encouraging employee participation in decision making improves the process of discovering and using knowledge in the organization. In addition, people at all hierarchical levels feel responsible for their processes, creating a direct connection with the organization's objectives; managers are involved in the process of disseminating the knowledge culture; as well as employees at all levels of the organization are encouraged to exploit and exploit the knowledge acquired in improvement and innovation activities, in a process of trial and error.

Aiken and Hage (1971) found that in decentralized organizations, communication is greater. Since, in participatory work environments, communication and information flow are stimulated throughout the organization. In this way, decentralized organizations, by providing an accessible, transparent, clear, and fast communication process, allow a shared vision of reality (GOH; RICHARDS, 1997). Corroborating this idea Inari et al. (2009) point out that the degree of identification of employees with the organization is directly associated with the process of sharing information and



knowledge and involving employees in organizational decisions.

Regarding the dependent variables Leadership Incentive to Participation in Decision Making and Problem Solving in Groups and Interaction with the External Environment, Absorptive Capacity and Knowledge Transfer, the independent variables Centralization and Integration exerted a negative and positive influence, respectively on both cases. This indicates that the lower the degree of centralization of decisions and the greater the level of integration of information and knowledge in the organization, the greater the incidence of leadership behaviors in fostering a culture based on dialogue and employee participation in decision making, as well as the greater it is the company's ability to absorb information from the external environment, transfer it to the organization and, through discussions in multidisciplinary groups, provide solutions to organizational problems and contribute with the suggestion of new ideas.

Such evidence corroborates the findings of Martínez-León and Martínez-García (2011) that companies learn more when the interaction of low centralization and high socialization occurs, than when the inverse of these variables occurs. For Janz and Prasarnphanich (2003) the more decentralized an organization is and the higher its level of integration, the greater are the interpersonal exchanges and social interaction, encouraging the promotion of a climate of cooperation among team members, making individuals more inclined to work together, which allows the exchange of experiences and knowledge and, consequently, greater learning opportunities for people and the possibility of a better performance in terms of innovation and development of new products. These characteristics refer to the organic structure model, which Burns and Stalker (1961) point out, is considered the most suitable for changing environments that demand immediate and innovative responses. These characteristics refer to the organic structure model, which Burns and Stalker (1961) point out, is considered the most suitable for changing environments that demand immediate and innovative responses. This structure is characterized by its fluidity and flexibility to the demands of environmental changes, since this model encourages the use of individuals' capacities. Leaders are encouraged to adopt practices that value human motivation, decision-making and employee responsibility, thereby propagating a commitment to the organization as a whole.

According to Sakiru et al. (2013), leaders are responsible for influencing the day-to-day life of organizations, creating conditions for the development of monitoring processes, implementation actions and dissemination of knowledge, as well as serving as a model for other members, affecting the behavior of subordinates and the organization's culture. Those being led are inspired by the motivation for the commitment and engagement of a shared vision of the organization, in addition to being encouraged to be more creative and innovative. These aspects contribute to making leadership decisive in the development of strategies, dynamic capabilities and competencies. The leader assumes the role of facilitator and supports followers in the institutionalization of innovative approaches to deal with organizational issues, thus providing a favorable climate for learning and fundamental in the innovation processes (CROSSAN & APAYDIN, 2010).

5 FINAL REMARKS

Based on the results, it was found that the dimensions Centralization and Integration influence the Capacity for Organizational Learning, corroborating the findings of Martínez-León and Martínez-García (2011). In addition, the results show that the Centralization dimension when alone or combined with the Integration dimension acts as an element that facilitates or hinders Organizational Learning.

Centralization means that decision-making power is situated at the highest levels of a hierarchical relationship, creating a non-participatory environment that reduces communication, motivation, social interaction and involvement with tasks and projects between participants; which conse-



quently hinder learning in the workplace. between decision makers ends up compromising the link between learning and action, and the ability to adapt quickly to a dynamic and uncertain world, being recommended that organizations develop organizational structures with characteristics of decentralization, favoring participation, creativity and innovation (MARTÍNEZ-LEÓN & MARTÍNEZ-GARCÍA, 2011). Therefore, decentralization is recommended to: (i) allow changes in behavior, beliefs and actions; (ii) increase interpersonal exchanges and social interactions; (iii) providing opportunities for employees to learn from their colleagues; (iv) allowing the organization to act close to its customers, meeting their needs and expectations; (v) respond quickly to the internal and external demands of the organizational environment and; (v) expand the vision and commitment of the company's employees.

Another result that deserves to be highlighted in this work refers to the level of formalization that did not influence the Capacity for Organizational Learning, once again corroborating the results obtained by Martínez-León and Martínez-García (2011), which showed that the high level Formalization is a common characteristic in large companies, but it is not a critical factor that differentiates the levels of learning between them.

In general, the theoretical approaches that served as foundations for the development of this research, together with the empirical findings found, brought contributions to both the academic and managerial context. In academic terms, it can be concluded that: (i) an environment conducive to organizational learning must be supported by organic organizational structures (decentralized, which encourage autonomy, favor the freedom of people in carrying out their tasks, allow the integration of information and knowledge); (ii) the centralization and integration dimensions when they act in congruence tend to reinforce the learning processes and levels and; (iii) the high degree of formalization does not influence the organizational learning capacity. Subsequently, the main managerial implications arising from the study are considered, after knowing the reality and main characteristics, with regard to the Organizational Structure and Capacity of Organizational Learning of a worldwide manufacturer of commercial vehicles that presents a path of pioneering and innovation of its products facing market demands and, above all, remaining competitive in the market.

It is suggested that in order to develop an environment conducive to organizational learning, organizations should make use of more flexible structural forms, which encourage people's autonomy and freedom through decentralization. To this end, managers must act in order to know the profile of the employees of their teams, identifying needs and expectations, and thus delegating activities and providing autonomy according to the knowledge and trust shown by employees. It is also suggested that organizations seek a high level of integration, information sharing and that communication is fluid throughout the company. In this sense, the importance of the diversity of people and knowledge in the organization is emphasized, where people are encouraged to experiment and are open to giving ideas, in a sense of collaboration, partnership and cooperation.

As limiting factors of the research, the cross-sectional approach is considered to study the theme of organizational learning. In this sense, an attempt was made to overcome this limitation, through the use of multiple sources of evidence (triangulation), which enabled a greater understanding of the factors and practices that contribute to enhance or hinder the learning processes. Still, the data collection in only one Unit of the company Alpha, the number of interviews carried out and the fact that it involves only managers from the commercial and sales sectors can be considered another limitation of the study. Therefore, for future research it is suggested to carry out a longitudinal study that allows the monitoring of the evolution of learning and the search for other possible micro and macro variables that are potentially capable of acting as predictors of organizational learning. As well as, further study could be obtained with the expansion of the research sample.



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1. Definition of research problem	√	√	√	√
2. Development of hypotheses or research questions (empirical studies)	√	√	√	√
3. Development of theoretical propositions (theoretical work)	√	√	√	√
4. Theoretical foundation / Literature review	√	√	√	√
5. Definition of methodological procedures	√	√	√	√
6. Data collection	√	√	√	√
7. Statistical analysis	√	√	√	√
8. Analysis and interpretation of data	√	√	√	√
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