

Conductors to Strategic and Functional Integration and the Impact over Performance: Study in Firms Configured into Supply Chain

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Abstract

The aim of this article is to verify the relation between two kinds of intrafirm integration conductors and the business performance. The first kind is the strategic, and the second one is the functional. The study has been conducted through a survey in firms, which are supply chain members of the metal-mechanical sector of Caxias do Sul, RS, Brazil. The sample data of 170 companies, with at least 10 employees each one, have been analysed using multivariate statistical: correlation analysis; factor analysis; multiple linear regression; and the clusters analysis. The analysis revealed the presence of two firms groups on the sample: one emphasizes as much the Strategic Integration as the Functional Integration in its internal environment and the other emphasizes only the Strategic Integration. The multiple linear regression analysis also revealed that only in medium and large firms there is a tendency of a better performance through a higher Functional Integration, but not from a higher Strategic Integration.

Key-words: strategic integration, functional integration, performance, supply chain

1. Introduction

Integration is the result of the companies' effort in fit their processes, employees, operations, and technology to the intended targets and obtain a competitive advantage of long term. Some denominations give greater specificity to the desired integration. Consistency or strategic integration, for instance, is present when functional strategies as marketing, finance, production and others are carried out to reach the business strategy. Internal coherence or functional integration is the kind of integration, which the activities from different functional areas are developed to support themselves mutually. Both kind of integrations, either strategic or functional, tend to contribute to the business strategy success and tend to influence positively the companies' performance (Hill, 1985; O'Reagan & Ghobadian, 2005; Porter, 1996; Wheelwright, 1984).

The companies, mainly the industrial ones, have permanently developed new processes and technologies, as much technical as management. Problems with synergy from these constant adaptations are unavoidable, consequently, the reestablishment of the strategic consistency and internal coherence between processes become necessary. These companies are under strong influence of the environmental dynamism imposed by the industrial sector, and face the hard duality, the misalignment, and the constant realignment (Edelman, Brush & Manolova, 2005; Scherpereel, 2006). Companies configured into supply chains, besides dealing with the dynamicity of the environment, are submitted to the frequent misalignments due to being the strategy followers of the chain leader companies. Under this condition, they are subordinated to the changes of the other companies along the chain (Halldorsson, Kotzab, Mikkola & Skjott-Larsen, 2007; Khan & Burnes, 2007).

In this research has been postulated that a firm to the communicate properly aspects of its business strategy, and enable the participation of its functional leaders in strategic decisions, this firm is trying to guide all its members towards the same direction and generate the strategic integration. In addition, the functional integration is possible when key processes of firms as, supply, production and distribution, share and make decisions to support each other mutually and achieve established targets earlier. To obtain a better performance is what provides theoretical sustentation to these firms' actions.

Do strategic integration and functional integration provide better performance to the firms? Are these results equal for all of the supply chain members? These are the research questions of this work.

2. Strategic and Functional Integration

The aim of the integration or fit strategic is to generate internal synergy between processes in all of the hierarchical levels as well as external synergy between the company and its business units to reach the business strategy (Kaplan & Norton, 2006). The main objective of the companies is to explore their resources properly to obtain competitive advantage. The integration of the companies' operations and processes contributes to achieve it. This kind of study has been conducted under the theoretical scope of SSP paradigm (*Strategy-Structure-Performance*) in which the organizational structure fits to the strategy (Defee & Stank, 2005; Henderson & Venkatraman, 1993).

From this time on, specific studies have been developed about external integration and internal integration of processes under the theoretical focus of business strategy. This research field grew up and includes approaches on strategic alignment, marketing, logistics, supply chain management, production and operations, information technology, finances and human resources, all attempting to contribute to the company's performance.

The integration is characterized as a hierarchical process of vertical and horizontal fit, starting by fitting of company to its external environment through corporate strategy development. The corporate strategy is deployed into business strategies and these should be consistent with the corporate strategy. The strategic fit becomes permanent and continuous through the consistency between functional activities and the business strategy, internal coherence between the different functional activities, and internal coherence into each functional activity (Kathuria, Joshi & Porth, 2007).

2.1 Conductors of Strategic and Functional Integration

Integration is considered as a sequence of vertical and horizontal fit, mainly horizontal, between activities, processes, practices and functions. When professionals work in synergy, the activities and processes tend to be conducted based on the same strategic guideline, on toward the business strategy (Joshi, Kathuria & Porth, 2003; Richardson, Taylor & Gordon, 1985).

The first level of integration is the strategic or vertical. In this context, the functional strategies must be consistent with the business strategy. The companies have used the strategic planning, the information technology (IT), and lately the balanced scorecard (BSC) to deploy the business strategy into functional strategies.

In spite of all the criticism to strategic planning, it is the most used, most consolidated, and maybe the most economical tool to integrate people and activities to the business targets. By clearly communicating the company's goals, leaders become able to make decisions more accurately and more consciously toward the goals of the company (Kargar & Parnell, 1996).

The information technology (IT) has been presented as an important tool to generate as much strategic integration as functional, mainly in companies where the information is crucial to the business success (Henderson & Venkatraman, 1993; Luftman, 2000).

The use of indicators in four perspective of the company (financial, client, internal and learning and knowledge) as does the BSC, becomes the professionals capable to make decisions looking at the same general indicators (Decoene & Bruggeman, 2006; Kaplan & Norton, 2006).

What enables these conductors generate strategic integration is the communication. Communication can be achieved through sharing of indicators, establishment of a common guideline for all of professionals, meetings to communicate what have been decided in the Strategic Planning, or through the participation of functional leaders on the Strategic Planning and others means. These aspects originated the variables and sub-variables (Figure 1) referring to the strategic integration conductors (Morita & Flynn, 1997; Papke-Shields & Malhotra, 2001).

I) Strategic Integration Conductors					
I.1) Strategy Communication					
	Disagree Strongly			Agree Strongly	
1) The company communicates clearly the mission, vision, principles, and objectives of short and long-term present of the Strategic Planning.	1	2	3	4	5
2) The company communicates the obtained results through meetings between the direction and the employees.	1	2	3	4	5
3) The company shares non-financial indicators with the production leader: market share, clients' satisfaction, productivity, quality, costs and others.	1	2	3	4	5
4) The company shares financial indicators with the production leader: revenue, profitability, ROI, ROA, ROS, EBTDA and others.	1	2	3	4	5
5) The company establishes a common guideline to all of functional areas.	1	2	3	4	5
I.2) Participation of Production Leader in Strategic Decisions referring to:					
	Never			Frequently	
1)... business strategy formulation.	1	2	3	4	5
2)... decisions involving long term investments and funding.	1	2	3	4	5
3)... formulation and revision of the strategic planning.	1	2	3	4	5
4)... the general business strategy.	1	2	3	4	5
5)... the production strategy.	1	2	3	4	5

Source: Morita & Flynn (1997); Kaplan & Norton (2006); Papke-Shields & Malhotra (2001)

Figure 1 – Strategic Integration Scales and Variables

The second level is the functional or horizontal integration which is obtained from the efforts coordination of company's professionals to generate integration between the functions, and inside the functions. For obtaining decisions' consistency, it is necessary changing and cooperation between functional activities to support one to another. Sharing in making decision, collaboration between staff groups, and development of action plans to generate coordination and mutual support between key functional areas, correspond to the variables referring to the functional integration conductors (Figure 2) in this research.

II) Functional Integration Conductors					
II.1) Frequency of committees formation for shared making decision					
	Rarely			Frequently	
1)... between (supply - production)	1	2	3	4	5
2)... between (supply – distribution)	1	2	3	4	5
3)... between (production – distribution)	1	2	3	4	5
II.2) Frequency of temporary staff groups to collaborate on specific projects					
1)... between (supply - production)	1	2	3	4	5
2)... between (supply – distribution)	1	2	3	4	5
3)... between (production – distribution)	1	2	3	4	5
II.3) Action plans aiming coordination					
1)... between (supply - production)	1	2	3	4	5
2)... between (supply – distribution)	1	2	3	4	5
3)... between (production – distribution)	1	2	3	4	5
II.4) Mutual support between functional areas					
1) How often do the supply decisions support the production area?	1	2	3	4	5
2) How often do the supply decisions support the distribution area?	1	2	3	4	5
3) How often do the production decisions support the distribution area?	1	2	3	4	5
4) How often do the production decisions support the supply area?	1	2	3	4	5

Source: Ward, McCreery & Anand (2007)

Figure 2 – Functional Integration Scales and Variables

The key functional areas considered in this research, correspond the dyads, supply – production, supply – distribution, production – distribution, since the study is conducted in industrial companies, where the business is the production, the factory.

2.2 Integration and Performance

In the most of the studies involving integration and processes fit, the performance has been presented as the dependent variable of explicative models for being the most adequate to explain the company’s market competitiveness. The fit or the strategic integration is one of the aspects that contributes to the competitiveness and consequently to a better performance (Mcadam & Bailie, 2002). The performance variables are showed on the Figure 3. Due to the difficulty to obtain objective measures about company performance, a comparative scale was used where each company answers comparing its performance with its competitors.

<i>III) Business Performance in the last year</i>					
	Much worse than its competitors			Much better than its competitors	
1) Net profitability	1	2	3	4	5
2) Net Revenue	1	2	3	4	5
3) Productivity (units per year)	1	2	3	4	5
4) Sales Growth	1	2	3	4	5
5) National Market Share	1	2	3	4	5

Source: Venkatraman (1989); Papke-Shields & Malhotra (2001)

Figure 3 – Performance Variables

2.3. Integration and Supply Chain Configuration

The configuration on specialized business units, each one producing a specific product or component, was the start point for the supply chain approach. Supply chain is originated from the interdependence by resources between companies, which are part of different business key processes. The success requirement of a supply chain is the mutual support between the members, along of the successive dyads in order to meet the needs of companies clients. Each one of the chain members can be visualized as a focal company that develops strategies to reach internal and external integration and become more efficient. For any focal company of any supply chain to adopt best practices, its suppliers should not be expensive and its distribution channels must be efficient in the attending to the customers (Aragão, Sacavarda, Hamacher & Pires, 2004; Di Serio & Sampaio, 2001; Skinner, 1974; Wanke, 2004).

These fit practices, inside companies, tend to be reproduced over the supply chain, and it happens every time that a member company demands new necessities. This relationship of interdependence by the resources and by the results generates an interdependence of strategy between the members companies. The strategy of a member company influences the strategy of the others members, such as it happens to the performance. The strategic and functional integrations are more decisive over these companies, by the effect that these ones generate through the chain (Chi, Kilduff & Gargeya, 2009). It is possible infer that all members companies should use means to promote the strategic and functional integration, so internal as external.

3. The Research Model

This research theoretical model is originated from the strategic alignment models, in which is postulated that the used means to generate strategic integration and functional integration tend to create a positive effect over the firms performance (Figure 4).

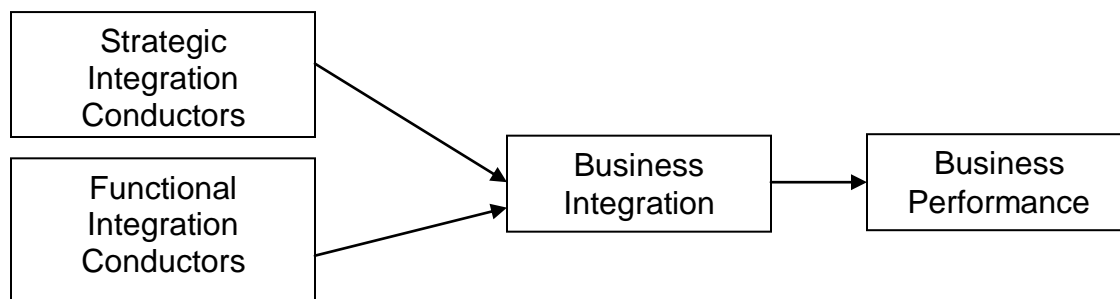


Figure 4 – Research Theoretical Model

Based on the model (Figure 4) and on the bibliographical review, the business performance can be interpreted as:

$P = f(\text{Strategic Integration; Functional Integration})$

$P = f(\text{Communication; Manager Participation}) + f(\text{Shared Decision; Collaboration; Coordination; Mutual Support})$.

4. Method

This descriptive study was conducted through a survey in industrial firms. The purpose of this study typology is to describe the characteristics of a specific population or phenomena, or find out associations between variables, and the end of the research be able to understand the effects over the firms' practicalities (Gil, 1999).

4.1. The Research Population

The study population consists by metal-mechanical sector firms of Caxias do Sul. Most of the 2,000 firms listed in this sector, are members of specific segments of supply chains. They are distributed into metallurgical industry, mechanical industry, electrical material industry, and communication and transport material industry subsectors. Most of these firms are small, typically familiar.

4.2. Phase Qualitative Research

Prior to constructing the questionnaire, interviews have been conducted in two firms, medium and large respectively, belonging to the study population. The objective of this qualitative phase was to confirm the variables and the comprehension of the questions by the interviewed ones. Two professionals have been interviewed in each firm, director and manufacturing manager. In the interview with directors, the questions were referring to the firm strategy and its deployment to further areas, strategic planning and to the means used to communicate the goals of short, medium and long-term to the employees. In the interview with manufacturing managers, the questions were referring to the manager participation in strategic decisions in his functional area and in all of the firm, as well as, his level of collaboration and information sharing with supply and distribution areas.

4.3. The Questionnaire

Multiple scales were used on the questionnaire where some measurement scales were original and others scales were adapted, which references are found on the Figures 2, 3, and 4. The answer categories vary from 1 to 5 on the effective use of means to generate strategic and functional integration by the firm. The 27 measurement items, which represent the three variables of the research model (Figure 4), strategic integration conductors, functional integration conductors and business performance, integrate the questionnaire.

4.4. The Questionnaire Test

The questions block (Figures 2, 3, and 4) was elaborated over some adapted scales, and original scales. Because of this, it was necessary to conduct a previous test with the original questionnaire. The test was conducted on 50 firms that represent the study population. The validation of each hypothesis and the reliability of the measuring scales, as well as the reliability of the whole questionnaire was conducted through the Exploratory Factor Analysis and the Internal Consistency Measurement by *Chronbach* Alpha, respectively (Hair, Anderson, Tatham & Black, 2005). The lowest explained variance value by only factor of each scale was 45%, the lowest KMO (Kaiser-Meyer-Olkin) value was 0.600; and *Chronbach* Alpha was superior to 0.700 in all of the measurement scales, and at the questionnaire as a whole was 0.900.

4.5. The Data Collect

The answers were obtained by telephone, and electronically registered by ten interviewers. The start point of data collect was catalogue division containing the 2,000 companies listed at the Syndicate of metal-mechanical Sector of Caxias do Sul, on 10 equal parts. Each part was distributed to the ten interviewers. They were oriented to interview two companies to each three pages up to complete 500 interviews. Each interview was sent electronically to the database and lasted fifteen minutes each one.

4.6. The Respondents

The respondent was the owner, when the firm was less than 10 employees, or the manufacturing manager, when the firm was large. Only one respondent, owner or manufacturing manager, answered all of the questionnaire questions in each firm.

4.7. The Sample

At the end of data collect, 500 companies had been interviewed. After data cleaning, outliers analysing, and cases excluding, which presented non-answered blocks of questions (Hair, Anderson, Tatham & Black, 2005), the final sample stayed with 400 valid cases. The 50 cases used on the questionnaire test and the two cases used on the qualitative phase did not integrate the 400 cases at the final sample. It is essential for this research the presence of interactions between the firm direction and its functional leaders, and between the functional leaders too. In this context became important that the employees' number of each firm was higher or equal than 10. In very small companies, usually the same professional is responsible by the different functional areas. It is conjectured that there is a better chance of success towards research model (Figure 1 and 2) if the firm has a larger number of employees. Using this requirement, where the employees' number should be higher or equal to 10, the final sample stayed in 170 valid cases.

4.8. The Data Analysis

The data was analysed through univariate, bivariate and multivariate statistics analysis, through Exploratory Factor Analysis, Multiple Linear Regression, and Clusters Analysis. The scores of variables were standardized to vary from 0 to 1.

5. Final Sample Results Analysis

5.1. Final Sample Characteristics

Based on the Table 1 is possible to verify that mostly of the 170 cases extracted are really members of supply chain, because 71.2% have other industrial companies as their main clients, 2.4% have vehicles assemblers as their main clients, and 0.5% (one firm) is the vehicles assembler itself. The sample reveals be representative of the study population, because 90% of the firms are small. The employees' number in the sample ranged from 10 to 2,300.

<i>Characteristics</i>	<i>Percentual (%)</i>	<i>Cases Number</i>
Subsector of Metal Mechanical Sector		
Metallurgic Industry	87.6	149
Mechanical Industry	8.8	15
Electrical and Communications Industry	2.9	5
Transport Material Industry	0.7	1
Main Clients		
Other industrial firm	71.2	121
Commerce and services companies	18.8	32
Final consumer	7.1	12
Vehicles Assemblers	2.4	4
Company is a vehicles' assembler	0.5	1
Employees number/ size		
10 - 19 micro	41.2	70
20 - 99 small	48.8	83
100 - 500 medium	7.6	13
+ 500 large	2.4	4

Table 1 – General Characterization of the Research Sample

5.2. Analysis of Functional and Strategic Integration Conductors and the Performance

The results showed on Table 2 reveal that scales are reliable to measure the variables on the sample.

Variables Research Model	Cronbach's Alpha Coefficient	Eigenvalue	Explained Variance (%)	KMO
I) Strategic Integration				
I.1) Strategy Communication	0.851	3.165	63.29	0.809
I.2) Production Leader participation over Strategic Decisions	0.900	3.594	71.87	0.834
II) Functional Integration				
II.1) Frequency of committees formation to make decision shared	0.899	2.501	83.35	0.749
II.2) Frequency of temporary staff groups for collaboration on specific projects.	0.926	2.61	87.31	0.746
II.3) Action plans aiming coordination	0.878	2.416	80.54	0.722
II.4) Mutual support between functional areas	0.911	2.552	85.08	0.757
III) Business Performance				
	0.884	3.455	69.10	0.841

N= 170 cases. Exploratory Factor Analysis by Principal Component Method. Eigenvalue higher or equal to 1. Questionnaire Cronbach's Alpha Coefficient = 0.9454.

Table 2- Validation Test and Reliability of Questionnaire Scales

Table 3 shows the correlations between the dependent variable of the research model, Business Performance, and the independent variables, Strategic Integration and Functional Integration. Sub samples were obtained from the global sample to understand better and to identify the most significant relations between these variables. The criterion for global sample stratification was the firm size.

Dependent Variable on Sub-samples	Strategic Integration		Functional Integration between Sup-Pro-Dis			
	Strategy Communication	Manager Participation	Shared Decision	Collaboration	Coordination	Mutual Support
Global Sample Performance N = 170	0.219**	0.247**	0.310**	0.281**	0.247**	0.234**
Micro Firms Performance N=70	0.207 (n.s.)	0.160 (n.s.)	0.178 (n.s.)	0.138 (n.s.)	0.173 (n.s.)	0.164 (n.s.)
Small Firms Performance N = 83	0.670 (n.s.)	0.216*	0.305**	0.281*	0.179 (n.s.)	0.113 (n.s.)
Medium Firms Performance N=13	0.508 (n.s.)	0.381 (n.s.)	0.717**	0.732**	0.566*	0.773**
Large Firms Performance N= 4	-0.333 (n.s.)	-0.333 (n.s.)	-0.333 (n.s.)	-0.132 (n.s.)	0.000 (n.s.)	0.522 (n.s.)
Medium Firms + Large Firms Performance N= 17	0.625**	0.518*	0.663**	0.641**	0.611**	0.760**

Standardized scores from 0 to 1. *Pearson* correlation coefficient. N= Sample Size and Sub-samples Size. **Significance < 0.01. *Significance < 0.05; (n.s.) = not significant at the 0.05 level (two-tailed).

Table 3 – Correlation between Performance and the Functional and Strategic Integration Conductors

In the global sample, the correlations (Table 3) between Performance and Strategic Integration and between Performance and Functional Integration are low and all are significant at 0.01 level, which indicate a tendency of obtaining better performance when the companies increase the using of conductors to provide Functional Integration and Strategic Integration.

In the stratified samples, the correlations between Performance and Strategic Integration and between Performance and Functional Integration, are higher than in the global sample, nevertheless there are not significant at 0.05 level in some sizes of firms, as in the sub-samples of micro and large companies. In large firms, the cases number is insufficient to provide accurate inferences about the negative correlations. On the other hand, when this sub-sample is added to the sub-sample of medium firms, it is possible to observe higher and significant correlations. The significant correlations on the medium firms can be interpreted as a tendency of obtaining better performance with a greater: Manager Participation in strategic decisions, Decision Sharing between professionals from Supply-Production-Distribution, and Collaboration between professionals from Supply-Production-Distribution.

5.3. Relation between Functional and Strategic Integration and Business Performance

Based on Table 3, the result of multiple linear regression considering only two sub-samples, the first constituted by the medium firms (Table 4), and the second constituted by the medium firms + large firms (Table 5). These sub-samples revealed higher and significant correlations between the independent variables and dependent variable, Business Performance (Table 3).

Multiple Linear Regression – Stepwise Method Medium Firms Sample (N= 13)					ANOVA	
Model Explicative Variables	Coefficients	t-Significance	R	R ² _{adjusted}	F	Significance
Constant	0.332	0.002	0.773	0.561	16.363	0.002
Mutual Support between Sup-Pro-Dis	0.495	0.002				

Standardized scores from 0 to 1. Dependent Variable: Business Performance

Table 4 – Performance Regression Model to Medium Firms

Table 4 shows the linear regression model obtained (Table 4) to the sub-sample containing the medium firms (100 to 500 employees). This model is significant at 5% level (F significance = 0.002), and explains 56.1% the variability of Performance, the dependent variable. Nevertheless, only one independent variable from the research model is capable to explain it at 5% significance level, is the Mutual Support between Supply, Production and Distribution belonging to the Functional Integration (t = 0,002). None of conductors of Strategic Integration that was postulated at the research model was capable to explain at an acceptable level, the firm Performance, are they: Strategy Communication and Manager Participation.

In the sub-sample constituted by medium firms + large firms (over 100 employees), the linear regression model obtained to the Performance (Table 5) revealed be significant, explaining 54.9% the total variability of the Performance, where only one variable revealed to be significant, is the Mutual Support between Supply (Sup), Production (Pro) and Distribution (Dis) again.

Multiple Linear Regression –Stepwise Method Large + Medium Firms Subsample (N= 17)					ANOVA	
Explicative Variables	Coefficients	t (Sig.)	R	R ² _{adjusted}	F	Significance
Constant	0.307	0.007	0.760	0.549	20.451	0.000
Mutual Support between Sup-Pro-Dis	0.607	0.000				

Standardized scores from 0 to 1. Dependent variable: Performance compared to competitors.

Table 5 – Regression Model for Medium and Large Firms Performance

The Cluster analysis was conducted to better understand the integrations emphasized by the different companies, members of supply chains.

Table 6 shows two *clusters*, Cluster 1 that emphasizes both, Strategic and Functional Integration equally, and Cluster 2, which scores are lower, as much Strategic Integration as Functional Integration, with a discrete valorization to the Strategic Integration.

ANOVA results of Cluster Analysis (Table 6) pointed out all variables, as much Functional Integration as Strategic Integration, are significant at 5% level in the clusters formation. The higher F statistics' values reveal that variables belonging to the Functional Integration contributed more to discriminate one cluster from the other.

Clusters formation considered variables	Cluster 1	Cluster 2	ANOVA	
Functional Integration			F	Sig.
Shared decision between Sup-Pro-Dis	0.82	0.34	361.477	0.000
Collaboration between Sup-Pro-Dis	0.82	0.37	259.268	0.000
Coordination between Sup-Pro-Dis	0.83	0.44	235.651	0.000
Mutual Support between Sup-Pro-Dis	0.85	0.46	210.196	0.000
Strategic Integration				
Manager Participation	0.82	0.63	57.312	0.000
Strategy Communication	0.77	0.53	65.225	0.000

Standardized scores from 0 to 1. K-means Cluster Analysis

Table 6 – Clusters of Strategic and Functional Integration

6. Conclusions

In the worldwide context of sustainability, the supply chain configuration is a strategy that allows to their members obtain, mainly, economic, financial and commercial development. Improving the efficiency, so much strategically as operationally, became crucial for all companies. The vertical and horizontal integration of processes are elementary practices for all and any company that aims being at least competitive. Furthermore, the study reveals that firms of the sample act more operationally than strategically. These emphasize more the use of conductors to generate functional integration than strategic integration. This is a coherent behavior between the members of a supply chain.

In the empirical study, the proposed research model (Figure 4) was partially validated by the cases studied. For the analyzed sample, only a greater Functional Integration is capable to influence the Firm Performance improving. This became evident in two of the sub-samples: in medium firms and in large firms + medium firms. For these sub-samples or companies, the linear regression model obtained to explain the Performance, presented only one significant explanatory variable, the Mutual Support between Supply, Production, and Distribution that explained more than 50% of the total performance variability (Table 4 and 5). Based on these results it is possible to infer that the making decision into each functional area aiming to give support to another areas, tends to provide more effect over the performance than the actions of firm directors in communicate their strategic goals and in stimulate the participation of production leaders in the firm's decisions. These findings are suggestive of supply chain members, where reliable operational and functional decisions tend to prevail over more strategic decisions. Vertical relationships between companies, typical from supply chain, contribute that operational and functional decisions have priority over the strategic decisions. The most of supply chain members assumes a strategy follower profile from chain leaders companies.

The results pointed out that relation between Functional and Strategic Integration and the Performance is not homogeneous along the global sample, because only in the medium firms and large firms was proved this relation. Medium and large companies tend to occupy most privileged positions into the supply chain. Generally, the micro and small companies occupy less favourable and more reactive positions, whose performance as profit margin, tends to be lower, when compared to the largest companies. The studies that have been analyzing the companies' performance configured into supply chain corroborate about the impact that companies size has on performance improvement through the implementation of integration or fit strategies (Chi et al., 2009; Sun, Hsu & Hwang, 2009).

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