SUPPLY CHAIN MANAGERS: PROFESSIONAL PROFILE AND THE ROLE IN THE CROSS-FUNCTIONAL INTEGRATION OF SUPPLY CHAIN MANAGEMENT

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ABSTRACT

Supply Chain Management can be seen as a way to achieve integration of all corporate functions. In practice, Supply Chain Management is complex and characterized by numerous activities spread over multiple functions and organizations, which pose challenges to reach effective implementation. Based on literature review, the objective of this paper is to present the theoretical indications regarding professional profile recommended for the Supply Chain Management and discuss the role of these professionals in cross-functional business processes. The literature review demonstrated a growing interest in the thematic, especially because the "soft" aspects (human and behavioral) to achieve supply chain internal and external integration. All functions must be involved in Supply Chain Management and supply chain managers have a critical role to play: challenge the supremacy of functions in the organizational structure, implementing the practice of "horizontal work" through cross-functional teams. Overall, this research contributes to academic and practical professionals by the description of the job profile of the supply chain managers and presentation of forms to achieve internal integration.

Keywords: supply chain management; supply chain managers; integration.

1. INTRODUCTION

Despite the popularization of the concept since its introduction in the 1980s, the Supply Chain Management (SCM) is considered a discipline still in formation (CHEN; PAULRAJ, 2004; TIWARI et al., 2014). Its body of knowledge has been formed in confluence with areas such as logistics, operations management, information technology and marketing, resulting in principles and specific strategies, as demand management, postponement, e-supply chain, sustainable chain and others.

In practice, SCM is complex and characterized by numerous activities spread over multiple functions and organizations, which pose challenges to reach effective implementation (MALEKI; CRUZ-MACHADO, 2013). According to Teller et al. (2012) most of the initiatives to implement the practices and principles of SCM fail or are not completed. Studies have pointed out two main reasons for this fact: (i) the low observance of the human factor in behavioral and professional profile terms (ROSSETTI; DOOLEY, 2010; SOHAL; 2013) and (ii) inadequate organizational structure to promote intra-organizational flows (KIM, 2007; OLIVA; WATSON, 2011), both have a negative impact on integration (COUSINS; MENGUC, 2006; KOTZAB et al., 2006; FAWCETT et al., 2008).

Internal and external integration as a key factor in achieving improvements has been one of the main themes in the SCM literature (FLYNN et al., 2010). While the external integration focuses on the relationship between the other members of the supply chain like suppliers and consumers, the internal integration seeks to make possible the different flows (information, money, material, decision) among all corporate functions (MENTZER et al., 2001; FABBE-COSTES; JAHRE, 2008; SHOENHERR; SWINK, 2012). In this point, Lambert et al. (2008, p.113) assert "academics and managers need to consider the linkages between SCM and the business functions and business processes".

Although regarded as a primordial condition for the benefits of participating in a supply chain are effectively achieved (SHUB; STONEBRAKER, 2009; DANESE, 2013), integration is much more difficult to achieve in practice than in theory predicts (FABBE-COSTES; JAHRE, 2008). Despite the definitions of SCM suggest the areas of purchases, operations and logistics as cross-functional, in business practice do

not occur: the chain management is more focused on improving external processes rather than to internal functional integration (KOULIKOFF-SOUVIRON; HARRISON, 2010; ROSSETTI; DOOLEY, 2010).

Because the crucial role in ensuring the continued firm competitiveness, formulation the strategies and monitor the execution, the role of supply chain managers has become increasingly prominent. There is a visible growth in the studies which seek to measure its proper professional profile and its role in promoting internal integration role (MANGAN; CHRISTOPHER, 2005; LAMBERT et al., 2008; ESPER et al., 2010; MENON, 2012; OMAR et al., 2012; FAWCETT; WALLER, 2013; LORENTZ et al., 2013; WU et al., 2013). However, there is still a lack of agreement on the domain of supply chain managers, situation which justifies the need for more studies on the theme.

This article is based on literature review, and aims to integrate the discussions about the existing issue. Specifically, our goal is to present the theoretical indications regarding professional profile recommended for the SCM and discuss the role of these professionals in cross-functional business processes.

2. INTERNAL INTEGRATION IN SUPPLY CHAINS

Supply chain management is actually the main theme in discussions on business competitiveness. Fawcett et al. (2011, p.116) discussed that SCM is the "business of business", but it has been managed as back office by companies. Some difficulties in its operationalization have drawn the attention of academics, entrepreneurs and managers of this issue (KOTZAB et al., 2006; TELLER et al., 2012; KHAN et al., 2013), mainly those related to integration. The literature recognizes that collaboration in the supply chain can only be achieved with the integration of intra and interorganizational functions and with the establishment of common goals (MENTZER et al., 2001; CHEN; PAULRAJ, 2004; LAMBERT et al., 2005; JUTTNER et al., 2007).

SCM implies a "horizontal" organizational orientation rather than a "vertical" one (MANGAN; CHRISTOPHER, 2005; TRENT, 2007; MALEKI; CRUZ-MACHADO, 2013). Vertical orientation is associated with the idea of external integration, while horizontal orientation is associated with the internal integration between functional areas and teams, including logistics, sales, marketing, finance, operations, and

purchasing. Trent (2007) asserts that a horizontal perspective features as organization designed around supply processes: supplier evaluation and selection, supplier development and new product development. Information accurate and fast, cost effective, product development, quality, innovations and right decisions are the main benefits of internal integration (SHOENHERR; SWINK, 2012). Likewise, the internal integration has been understood as a prerequisite, or antecedent, to the desired external integration between the links upstream and downstream of a supply chain (MENTZER et al., 2001; MELLO; STANK, 2005; ESPER et al., 2010; MIOCEVIC; CRNJAK-KARANOVIC, 2012).

In this sense, internal integration is commonly defined as the collaboration and linkages between and across organizational functions as well as organizational partners, including customers and suppliers. Miocevic and Crnjak-Karanovic (2012) claim that value creation is a process in which all members of the supply chain should invest their resources, skills and knowledge internally, interacting results of this creating value throughout the chain. As a consequence, the value is delivered to the final costumer. In fact, the models SCOR – Supply Chain Operations References e GSCF – Global Supply Chain Forum predict the need for internal flows as complementary to external flows (LAMBERT et al., 2005).

The basic level of integration is the internal operation of each company. The benefits which are gained are directly related to capacity efficiencies across functions within a company based on strategic alignment of each functional area related to SCM (CHOPRA; MEINDL, 2012). Trent (2007) presents organizational features that correlate whit supply effectiveness (Table 1):

Table 1: Creating the right supply organization

- A corporate-level steering committee guides global procurement and supply initiatives.
- Regular strategy coordination and review sessions occur between business units and functional groups.
- Centrally coordinated commodity teams have responsibility for developing supply strategies.
- A chief procurement officer regularly makes strategy presentations to the executive committee and board of director.
- Specific individuals are assigned responsibility for managing key supplier relationships, including strategic supplier alliances.
- Cross-functional teams work directly with supplier to develop performance capabilities.
- Lead buyers or site-based experts are designated to manage no commodity team items.
- Supply personnel are collocated with internal customers as required, including operations, engineering, and marketing.

- Supply managers and suppliers are actively involved with new product development teams.
- On-site suppliers manage routine inventory requirements, including ordering, replenishment, and inventory control.
- A formal group is responsible for demand and supply planning.
- A shared services model is used to coordinate and manage common activities across business units.
- Procurement and supply personnel are separated according to operational and strategic responsibilities.
- An executive position is responsible for coordinating and integrating key supply chain activities from supplier through customers.
- Global matrix organizational structures are used to achieve full integration across global locations and product lines.
- An executive buyer-supplier council meets regularly with suppliers to coordinate strategies and long-range plans

Source: Trent (2007, p.39)

However, reaching this level of integration is not easy to obtain, with many barriers. Bowersox et al. (2007) present those who consider the main ones:

(1) *Organization*: the organizational structure of a company may restrain the interdepartmental processes. The traditional practice has been grouped all the people involved in performing a given task in functional departments with silo mentality, complicating the process management;

(2) *Measurement and reward systems*: traditional systems of measurement and reward hamper cross-functional coordination by relying on functional realization isolated instead of measure the overall performance of the process;

(3) *Leveraging of inventory*: inventories are leveraged to facilitate functional performance. The traditional position is to maintain sufficient level to protect the operational uncertainties and demand or achieve economy of scale in production, passing the problem of excessive inventory to other departments;

(4) *Infocratic structure*: information technology is an enabler of process integration. However, the structures and philosophies of traditional management does not favor the exchange of information between functional areas, occurring slowly and fragmented;

(5) *Knowledge transfer*: there is a lack of understanding about how to share knowledge, coming from the excessive strengthening of functional specialization and the lack of people willingness.

It is noticed that two factors stand out among these barriers: (i) people and (ii) organizational structure. The first relates to the supply chain professional, in terms of technical and behavioral skills and functions to be performed. The second relates to the organizational format currently recognized as inefficient in allow flows (information, knowledge, material) required for SCM. There are also issues related to organizational strategy, planning (tactical and operational) and human resources policies. In this scenario, a figure has emerged: the supply chain manager and its role in integration, especially intra-organizational. The next sections expose this subject.

3.   SUPPLY CHAIN MANAGERS: CURRENT CHARACTERISTICS

The SCM is human centric (MAKU et al., 2005; THORNTON et al., 2013). Getting strategy execution right is the essence of any strategy formulation exercise. However, there is a gap between SCM performance measurement, business strategy, human resources system and organizational structure (OMAR et al., 2012; TELLER et al., 2012). Because of this, supply chain managers are been considered a critical dimension in SCM (VAN HOEK et al., 2002; MANGAN; CHRISTOPHER, 2005; LORENTZ et al., 2013).

The way companies need to think the modern supply chain executive has significantly changed over the years. Initially with a focus on logistics functions (GAMMELGARD; LARSON, 2001; MURPHY; POIST, 2007) and supplies (LARGE, 2005; OTHMAN; GHANI, 2008), discussions were progressing to a broader view of the performance prerogatives of this professional (HARVEY; RICHEY, 2001; KOVÁCS et al., 2012; HARVEY et al., 2013; SOHAL, 2013). Christopher (2004) presented one decade ago seven major business transformations and its implications for management skills and competencies (Table 2).

According to the author, the skills profile for supply chain managers is wide, varied and broader than for many other management categories. However, questions like "who are we" and "what do we do" have not been fully answered (FAWCETT; WALLER, 2013) and their professional identity is still poorly defined (ZINN; GOLDSBY, 2014) being "difficult to assess who supply chain professionals are when there is so much variance in what they do—in terms of their scope of responsibilities" (p.25). Only recently companies have designated a specific post for supply chain

managers and universities have included the discipline of SCM in its curriculum (RICHEY et al., 2006; FAWCETT et al., 2010; WU et al., 2013).

Table 2: Business transformations and the implications for supply chain managers

Business transformation	Leading to	Skills required
From supplier- to customer-centric	The design of customer-driven supply chains	Market understanding and customer insight
From push to pull	Higher levels of agility and flexibility	Management of complexity and change
From inventory to information	Capturing and sharing information on real demand	Information systems and information technology expertise
From transactions to relationships	Focus on service and responsiveness as the basis for customer retention	Ability to define, measure and manage service requirements by market segment
From "trucks and sheds" to end-to-end pipeline management	A wider definition of supply chain cost	Understanding of the "cost-to-serve" and time-based performance indicators
From functions to processes	The creation of cross-functional teams focused on value creation	Specific functional excellence with cross-functional understanding. Team working capabilities
From standalone competition to network rivalry	More collaborative working with supply chain partners	Relationship management and win-win orientation

Source: Christopher (2004)

Rossetti and Dooley (2010) indicate a justification for this fact: the absence of consensus on the concept of SCM, causing a lack of clarity in defining what are the professional practices and the types of jobs associated with SCM. The authors suggest eight possible positions of management associated with SCM: (1) Supply manager – develops activities aimed at improvement and management of the supply network, (2) Operations manager – develops activities aimed at process improvement in global operations, (3) Service operations manager – monitors the service providers and outsourced companies, (4) Purchasing manager – develops activities aimed the controlling inventory and supplies usage, (5) Information manager - develops activities aimed the global information management in the supply chain, (6) Integration logistics manager - develops activities aimed the internal and external monitoring of product flow, (7) External logistics manager - promotes the interface between company and consumer, (8) Manufacturing manager - develops activities aimed the production management and also quality management and processes.

Supply chain managers are a quite varied group: they often come into a logistics, transportation, procurement and sales (MANGAN; CHRISTOPHER, 2005)

being common the reference "logistics manager" and "supply chain manager" similarly (GAMMELGAARD; LARSON, 2001; MURPHY; POIST, 2007; LAMBERT et al., 2008). In a study performed with senior level executives in more than 100 companies, whose aim was to identify the skills required of logistics managers relative to the beginning of the 1990s, Murphy and Poist (2007) realized redefining the role of these executives. The comparison suggested that the skills for the management of contemporary logistics are defined from the supply chain orientation, which requires human management skills and systems view of the business and not only technical skills related to specific functional area. Gammelgaard and Larson (2001) posited a three-factor model of SCM skill areas for executive development and other programmers aimed at logistics managers: interpersonal/managerial basic skills, quantitative/technological skills, and SCM core skills. They also stressed the importance of good communications skills for today's logisticians, both upward and downwards communication within the organization. Large (2005) stressed the same. A survey with buyers and purchasing executives in German companies suggested that interpersonal communication plays as important role in the management of supplier-customer relationships. So, purchasing executives should support intensive, open and friendly communication behavior of their subordinates but, as preconditions, should have oral interpersonal communication capability and positive attitudes with suppliers.

Concerning professional qualification, Esper et al. (2010) suggest that supply chain managers have not only functional skills, but also managerial and interpersonal. Interpersonal characteristics are: openness, trust, awareness, adaptability, willingness to constant learning and extroversion (to deal with employees and customers). Ability to make decisions, solve problems and manage work time (own and team) are the managerial skills. Already functional skills relates to specific knowledge in functional area allocation and the business as a whole. Barnes and Liao (2012) suggest that supply chain managers should have knowledge of other functions and business processes of the company and possess skills of cooperation and problem solving. In selection processes should recruit professionals with openness to cooperation and interpersonal skills to ensure the exchange of information, an essential factor for collaboration in operating activities.

Mangan and Christopher (2005, p.181) appointed that this re-orientation of the supply chain manager require a "T-shaped" skills: managers have in-depth expertise in one discipline (for example, logistics) combined with enough breadth to see the connections with others (business process engineering, asset management, activity-based costing). Using a triangulation research approach (focus group, interviews/surveys and a case study) in order to capture the views of the professionals, students and providers of education and training in SCM about the key knowledge areas and competencies/skills required by logistics and supply chain managers, the authors found: (1) General – finance, information technology, management/strategy, (2) Logistics and SCM specific – operations/SCM, focus on processes/flows, legal, security and international trade, multimodal logistics, logistics in emerging markets, (3) Competencies and skills – analytical, interpersonal, leadership, change management, project management.

The ability to see the "big picture" is included in the supply chain manager professional profile. Due to the competition in the global marketplace, supply chain manager need to possess multicultural knowledge, foreign languages, and external focus on local social and economic conditions and develop a management style that is concert with the local environment (HARVEY; RICHEY, 2001; KOVÁCS et al., 2012; HARVEY et al., 2013). Ellinger and Ellinger (2014) presents four requisite skills for global supply chain manager: (1) Higher order problem solving – analytical, technical skills, creative thinking and ability to see the "big picture", (2) Managing ambiguity – high order diplomacy and commercial awareness who can learn from past experiences and apply that learning in new imprecise situations are needed, (3) Multi-level communicator – ability to converse horizontally and vertically within organizations and across communities of trading partners and be able to explain the SCM concept and (4) World citizen – manage and relate teams located in multiple countries. The personal characteristics are equally important. According Harvey et al. (2013), their cultural heritage and past experiences directly affect their ability to interact effectively with others in a foreign context.

In summary, multicultural knowledge, knowledge of the general business scenario, technical knowledge in SCM, training and monitoring of work teams (including multifunctional), change management, conflict resolution, breach of functional barriers, interpersonal and communication skills, ethical awareness and

social responsibility are the main skills, competencies and functions expected of the modern supply chain managers. These findings further emphasize that supply chain managers should be manager first and technical specialist second (COUSINS; MENGUC, 2006; MURPHY; POIST, 2007; LORENTZ et al., 2013).

4. DISCUSSION: SUPPLY CHAIN MANAGERS AND SUPPLY CHAIN INTERNAL INTEGRATION

As noted earlier, people involvement is critical to the success of strategic initiative implementations in supply chains (MAKU et al., 2005; SHUB; STONEBRAKER, 2009; SMITH-DOERFLEIN et al., 2011; SWEENEY, 2013). At the same time, also the organizational structure (KOTZAB et al., 2006; KIM, 2007; OLIVA; WATSON, 2011). According Maleki and Cruz-Machado (2013), in the context of SCM a large number of individual interact with other using specific internal structures. Additionally, Lambert et al. (2008, p.117) state that each functional area plays an important role in the successful implementation of SCM, in which "no function should dominate; that is, all functional efforts should be aligned with the business goals and focused on the management of relationships with customers and suppliers".

Nevertheless, cross-functional opportunities are easier to identify than to implement. The fact is that organizations have been unable to find the harmony among people, structure and cross-functional flows (CANTOR et al., 2012; TELLER et al., 2012; KHAN et al., 2013). This is the scenario wherein the role of supply chain managers becomes crucial. Fawcett et al. (2010, p.22) argue that supply chain leader "is a cross-functionalist who understands the key supply chain functions and keeps them rolling in synch, a choreographer who sees the "big picture" while understanding where individual pieces fit the pattern".

Human aspects are fundamental to organizational integration (BARKI; PINSONNEAULT, 2005). The adoption of practices enablers of SCM (for example, quality management, demand management, partnership with suppliers, benchmarking, VMI) requires internal modifications, including organizational culture (MELLO; STANK, 2005), in order to promote cross-functional relationships between the areas related to creating customer value (LAMBERT et al., 2005; JUTTNER et al., 2007; FAWCETT et al., 2008). However, effective implementation is considered

dependent on the human factor in terms of skills, capabilities and favorable predisposition of employees to perform the functional tasks of these practices (GOWEN III; TALLON, 2003; TELLER et al., 2012; LENGNICK-HALL et al., 2013). Aversion to change and the challenges of managing people in the operational routine are also found in the sphere of SCM (KOTZAB et al., 2006; OMAR et al., 2012). Therefore, support actions, reinforcement, monitoring and development of the human factor are vital for the proper performance of intra-organizational professional activities (KOULIKOFF-SOUVIRON; HARRISON, 2010; CANTOR et al., 2012).

Since human interactions influence SCM practice largely, human resource development strategy significantly affects supply chain performance (SWEENEY, 2013; ELLINGER; ELLINGER, 2014). Regarding the impact of human interaction on supply chain practices, Maku et al. (2005, p.29) propose an operational definition: "human interaction within supply chains can be defined as the region of intersection between the HR system and supply chain strategy execution". Lengnick-Hall et al. (2013) define HR system as a multilevel construct (HR architecture, principles and philosophy) that direct the management of human capital, some mid-range elements (HR policies and programs) that provide alternate means for aligning HR activities with the specific activities implemented within a firm. The HR practices usually considered in the literature on people management in SCM are: (a) staffing, (b) job design, (c) performance appraisal, (d) reward and compensation, (e) training, (f) socialization and (g) communication (GOWEN III; TALLON, 2003; SHUB; STONEBRAKER, 2009; KOULIKOFF-SOUVIRON; HARRISON, 2010; BARNES; LIAO, 2012). In view of this, Smith-Doerflein et al. (2011) suggest that supply chain management must be managed aligned with the human resource management instead of isolated areas. It is estimated that with the support of the principles and practices of people management common barriers to integration, including external, may be more easily overcome (COUSINS; MENGUC, 2006). Exactly at this point is the supply manager as a "people manager" not only a "technical specialist manager".

Menon (2012) conducted a study with 228 professionals involved with the SCM aimed analyzing the contribution of human resource practices to professional satisfaction and the relationship with internal integration. The results showed that the training and development of team work practices have greater influence. Flexible working and establishing performance goals for obtaining rewards also present

significant relationship between professional satisfaction and supply chain performance. Given these results suggested that training related to SCM promotes technical formation and process analysis, as well as behavioral formation aimed the building capacity for teamwork and establishing collaborative relationships.

Similar study was conducted by Koulikoff-Souviron and Harrison (2010) in a large European pharmaceutical company, which aimed explores how HR practices evolve within the strategic intra-firm supply relationship. The results showed that interdependent operations requires an HR system that is designed to invest heavily in the relationships and aimed all employees involved in the interaction of the intra-firm supply chain, not just top management. Another interesting finding was that HR practices could have positive and negative effects on collaborations and integration. In case, if they are implemented with specific and distinct goals among functional areas, causing internal disputes, and not focusing on the overall performance of the supply chain. Because of this, the authors propose to supply chain managers: (a) a focus on employees and jobs related to broad supply chain rather than local optimization, (b) encouraging information and knowledge sharing and relational abilities that allow employees to leverage value and (c) collective reward systems that support achieving mutual and interdependent goals.

Considering the people dimension in SCM and the interactions between functional areas, Van Hoek et al. (2002) propose that supply chain managers, also as a leader, should encourage constant change rather than developing rigid structure and "putting people in boxes within the organization" (p.123), supporting both intellectual and emotional capability. The authors suggest changes in management and leadership roles (Table 3).

The issues relating to organizational structure directed to SCM are also liable to be managed from the practices of human resource management. As traditional format of division labor between functional areas has been unable to promote synergy required for the SCM, the role of supply chain managers has also been highlighted in the organizational structure factor. Omar et al. (2012) emphasize the social dilemma is common within the company, a reflection of rivalry among the people allocated in different functional areas, very encouraged by the structures (functional silos) and metrics and performance evaluation systems distinguished. The

same is highlighted by Koulikoff-Souviron and Harrison (2010) and Mangan and Christopher (2005).

Table 3: Changes for supply chain managers

Change in:	Manager		Leader	
	From…	…to	From…	…to
Approach	Reactive	Proactive	Tell what to do and how to do it	Ask questions and assign people
Problem solving	Reproduce actions	Own problems	Give answers	Responsibilities over challenges
Work	Doing the job (and not much more)	Buy-in and commitment	Supervise/control, message: "Here is a task. Go and do it"	Coach, message: "Learn and enjoy"
Effort	Input focus – time and energy	Output focus – product and impact	Evaluate problems with work	Support and leverage strong capabilities
Leadership	Blame the boss	Challenge the boss	Forced motivation (wrong reasons, tap on the shoulder)	Self-motivation, entrepreneurial (people success, change your workplace for the batter)
Recognition	Recognition based on authority-position in the hierarchy	Recognition based on insights, learning and problem-ownership	Recognition based on control and problem-ownership	Recognition based on empowering and supporting people
Organizing	Rigid standardized organization	Fluid organization with teams and constant progression	Steer around structures	Steer around process of change and progress

Source: Van Hoek et al. (2002, p.124)

Rossetti and Dooley (2010) indicate internal functional integration and process management as two activities to be carried by supply chain managers. The first aims to increase and improve the information flow between functional areas intra and interorganizational and, the second aims to measure, analyze and improve processes in the supply chain. Lambert et al. (2008) discussed how logistics managers contribute and gain from their involvement in the eight cross-functional processes identified by The Global Supply Chain Forum (GSCF): customer relationship management, supplier relationship management, customer service management, demand management, order fulfillment, manufacturing flow management, product development and commercialization, and returns management. In the demand management process, for example, the main benefits are more accurate forecasts, better planning and smoother execution of logistics activities, better capacity utilization and reduced inventory levels, well-crafted

contingency management plans, capabilities and costs of logistics-based flexibility are understood throughout the organization.

For that, managers should promote and maintain the redefinition of organizational structures of "vertical flow" type for "horizontal flows" type, principally in the behavioral management of persons involved (TRENT, 2007; DEFFE; FUGATE, 2010). In this same line of reasoning, Gammelgaard and Larson (2001) and Teller et al. (2012) highlight the importance of the decision makers in considering the internal focus and promote the interconnection actions between the areas of purchasing, logistics, marketing and product development actions in the supply chain. To promote a greater level of cross-training across functional boundaries to ensure this interconnection is one of the strategies indicates to the supply chain managers (GOWEN III; TALLON, 2003; MANGAN; CHRISTOPHER, 2005; ELLINGER; ELLINGER, 2014).

To break down functional silos and obtain cooperation for the SCM, including interorganizational, Sandberg and Abrahamsson (2010) introduce fours supply chain managers archetypes:

(1) *The supply chain thinker*: has a wider scope looking beyond company borders. Focuses on the supply chain processes and exploits the whole supply chain's conditions, design and opportunities as a result of this wider view. Cross-functional communication where interfaces between functions are continuously evaluated and developed. To avoid double work the division of the roles for the actors in their supply chain network is a part of this;

(2) *The relationship manager*: focuses more deeply on cross-functional processes both internally among different functions (close communication and jointly agreed goals) and between companies (continuum ranging from collaborative to transaction-based relationships and what type of relationship in a situation given);

(3) *The controller*: the main task is to measure, follow up and control measurements in the company and in the supply chain. The measurements are seen as a prerequisite for successful change and a proper IT system is a prerequisite;

(4) *The organiser for the future:* the ability to continuously adapt supply chain operations, typically including knowledge on how to set up and design interfaces between the functions and actors in the supply chain. Structuring the company so that communication is facilitated by giving the personnel a large degree of freedom and responsibility to create an atmosphere of continuous learning.

For authors, the four archetypes are not exclusively independent from each other: on the contrary, they are linked to each other and should be seen as equally important.

Formation of work teams, including multifunctional, is considered one of the most effective strategies to eliminate structural barriers and human relationship, whose development and monitoring is responsibility of supply chain managers. Training, evaluation and feedback, remuneration and compensation, attention to organizational climate and motivation are among the management practices recommended for the development and monitoring teams (KOULIKOFF-SOUVIRON; HARRISON, 2010). Encouraging teamwork, joint problem solving, exchange of information and knowledge are ways to eliminate the structural difficulties supported by the principles of people management (OTHMAN; GHANI, 2008; ROSSETTI; DOOLEY, 2010; MENON, 2012; MIOCEVIC; CRNJAK-KARANOVIC, 2012).

5. CONCLUSION

This paper reinforces the importance of discussing the current role of supply chain managers in cross-functional business process. The literature review demonstrated a growing interest in the thematic, especially because the "soft" aspects (human and behavioral) to achieve supply chain internal and external integration. In the internal integration, there are inherent organizational barriers, like structure (department, hierarchy, information flows), human conflicts, functional disputes and lack of professional qualification. Nevertheless, all functions must be involved in SCM and supply chain managers have a critical role to play: challenge the supremacy of functions in the organizational structure, implementing the practice of "horizontal work" through cross-functional teams. On the other hand, this professionals need to have a set of skills, abilities and competencies to achieve this intra-organizational configuration and to be leader just a technical specialist.

In summary, it is expected of supply chain managers: strategic orientation with a global perspective, ability to manage change processes and to balance the external needs of the function with the internal vision of efficiency, align strategic objectives of SCM with the overall strategy of the organization, expertise to manage risk and uncertainty, motivate people for mutualism and cooperation, obtain positive operating performance of work teams, good communication (written and oral) to influence their subordinates and other parties related to the business (including external partners), translate "client vision" into strategic and operational practices, establish metrics and reward systems aligned and coherent across functional areas.

The companies, local or global, need to recognize the importance of supply chain managers to competitiveness and find alternatives to develop and retain these professionals, since the demand for experienced and qualified has been greater than the current supply. Besides the development of internal policies, there is the possibility of collaboration between business, universities/colleges and industry associations which aim the developing of an appropriate set of competencies for supply chain professionals. Future research could consider this issue, as there is little understanding about the types and curriculum of training adequate for logistics and supply chain managers. Another area identified for further investigation is Human Resource Management (HRM) and Supply Chain Management connection. It is becoming increasingly crucial establish HR practices capable of manage the individual knowledge and commitment to the supply chain integration processes.

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