



UNIVERSITY of NAVARRA

School of Economics and Business

**Participation of SCM Strategy in the definition of Business
Strategy and its further conditions for operationalization. The
status of SCM in LATAM**

Dissertation

Submitted for the Degree of Doctor of Philosophy by

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List of acronyms

ARLOG	Asociación Argentina de Logística Empresaria
CLM	Council of Logistics Management
CSCMP	Council of Supply Chain Management Professionals
DNA	Deoxyribonucleic acid
ERP	Enterprise Resource Planning
HMMS	Holt, Modigliani, Muth and Simon
IJOPM	International Journal of Operations & Production Management
IO	Industrial Organization
JIT	Just In Time
JOM	Journal of Operations Management
KBV	Knowledge Based View
LATAM	Latin America
MRP	Material Resource Planning
MRP II	Material resource Planning II
MS	Management Science
MS/OR	Management Science / Operations Research
OI	Industrial organization
OM	Operations Management
OM/OR	Operations Management/Operations Research
OMA	Operations Management Association
OMA-UK	Operations Management Association – United Kingdom
OR	Operations Research

POMS	Production and Operations Management Society
P/OM	Production / Operations Management
RBV	Resource Based View
SATRA	British Boot, Shoe and Allied Trades Research
SC	Supply Chain
SCM	Supply Chain Management
SME's	Small and medium-sized enterprises
TCE	Transaction Cost Economics
USA	United States of America
WWII	Second World War

ABSTRACT

Supply Chain Management (SCM) is a discipline of management that can be seen in different ways. However, only a strategic approach of SCM derived into subsequent tactical decisions and an operational implementation will provide the benefit that promises.

SCM decisions must be considered at the strategic level; this is because the decisions in SCM contain several edges that necessarily involve the coordination of multiple areas of the company and therefore their guidelines must be defined to the highest managerial level. In this thesis is emphasize the strategic nature of SCM and the importance of being considered this way.

Most research on SCM focuses on the relationship among organizations within the supply chain; but scarce literature exists that addresses the issue of internal conditions that allow proper management of the supply chain out of the borders of the organization.

The purpose of this paper is to explore how SCM strategy is taken into account when the organization delineates the business strategy and how those conditions have to be met internally within the organization to be successfully implemented at the tactical and operational levels.

This research is centered in Latin America where SCM's development from the strategic point of view is scarce, more than this, SCM's development in this region is wrongly oriented. While not considering at the strategic level, any effort organizations want to make in the area of SCM will hardly get satisfactory results in the medium and long term.

In order to get this, a set of constructs was explored, proposed and defined as critical, to be considered as the first steps for a successful implementation of a SCM strategy. As it will be developed through this work, seven constructs were considered: *Degree of participation of SCM strategy in the business strategy; Parameters to guide segmentation of providers and customers; Culture of the organization; Distribution of benefits along the chain's criteria; Internal alignment of all the firm's areas that participate in the SCM*

strategy; Coherence between strategic SCM'S alignment and Incentive program for managers; SCM manager's role and profile

Through two qualitative field studies (a Delphi panel of experts, the first and a case study the second) conducted in Latin America, the aim was to demonstrate the status of SCM in the region and how, through a correct application of the constructs, the organizations can raise their SCM strategy and from there achieve a correct operationalization.

1. CHAPTER I - INTRODUCTION TO THE STUDY

In this introductory chapter, it is explained, first, the personal background that explains why to write this dissertation. Second, the research purpose is described and, then, the geographical scope of the thesis is presented. Finally, it is analysed the evolution of the Supply Chain Management concept. These four sections permit the readers to be introduced to the content of this study.

1.1 Why to write this dissertation?

My profile is not the typical one of a PhD. student: a person who finishes his career and decides to make a research master and to develop an academic career, starting with a doctoral thesis meanwhile working as a teaching assistant.

This is not my case, because of this, it is important to explain how I decided to write a dissertation about Supply Chain Management (SCM).

There is a personal motivation both in the chosen theme and in its approach. After twenty years of experience in the field of logistics in which I have been developing myself and specializing as a consultant and as a teacher, just to be considered more as a practitioner than a researcher. During my professional career in Argentina and also, in many countries of Latin America, I witnessed the appearance and development of that new topic named Supply Chain Management.

At first, it was difficult for me to understand what SCM was about, but I quickly discovered my logistian colleagues explaining SCM but, what a surprise! still talking about logistics. They had just changed the name.

What does really SCM mean? Sailing across the SCM sea of knowledge it is not difficult to see how, when a new field in science appears, the concepts and principles developed are still confused, presented in a rather disorderly way, sometimes contradictory, as normally happens in these cases. Many times it takes several different paths, simultaneously, in parallel and therefore, generating in these first

steps, more confusion than clarity. This happens particularly in management and probably in other soft sciences where frontiers are not clearly defined and different fields of science overlap. So, there were some questions that I asked myself about SCM:

- Is still, after more or less two decades, SCM a new fashion in management?
- Is there anything new to discover?
- Would this discipline bring new insights and improvement to management?

I realized most of my colleagues were genuine practitioners or consultants and that the knowledge they handled was superficial and tailored to their needs and conveniences. Probably my academic side (I have two master's degree, one in logistics and one in business, apart from being a university professor since more than ten years), led me questioning what was really SCM and which was its relevance in the firms.

During last ten years or more I have received many invitations to lectures, conferences and courses on Supply Chain Management, and I have attended many of them. Though, most of these activities that claim to be Supply Chain Management, were just logistics related activities.

It is very difficult to find today in several countries of Latin America some kind of institutional activity in the field of logistics that does not have the following title "Supply Chain Management and Logistics" or something similar.

In fact, for more than ten years I was part of the executive committee of ARLOG (Argentine Association of Corporate Logistics) where, currently, Logistics and Supply Chain Management were used or mentioned as nearly the same concept.

In fact, de 1st. of January of 2005 the benchmark organization in logistics, the Council of Logistics Management (CLM) -created in 1963- changed its name to Council of Supply Chain Management Professionals (CSCMP), that implies that, at a certain moment the logistics professionals became SCM professionals.

How is a change like that masked? With a consistent definition that contributes to the confusion. Here we see the definitions of Logistics and Supply Chain Management published by the CSCMP.

In 1986 the CLM defined logistics in the following terms:

“The process of planning, implementing, and controlling the efficient, cost-effective flow and storage of raw materials, in-process inventory, finished goods, and related information flow from point-of-origin to point-of-consumption for the purpose of conforming to customer requirements” (Council of Logistics Management, What is it All About?, Oak Brook, IL, 1986) cited by Cooper, Lambert, & Pagh, (1997)

While ten years later, as CSCMP, the definition of logistics is expressed in terms of SCM¹
“Logistics is that part of the Supply Chain Management that plans, implements and controls the flow - backwards and forwards - and the effective and efficient storage of goods, services and related information from the point of origin to the point of consumption with the objective of satisfying the requirements of the consumers”

On the other hand, the SCM’s definition adopted by the CSCMP is the one that prays:

“Supply Chain Management is the integration of key business processes from end user through original suppliers that provides products, services and information that add value for customers and other stakeholders”

What does this mean?, if it really means anything.

The CSCMP defines logistics as part of a whole, so it is licit trying to find other parts of this whole defined by the council as SCM, nevertheless, I couldn’t find another part of the whole, another area which formally states that its discipline is part of the SCM. Business’ areas like marketing, Information technology, production, finance, even purchasing, among other do not mention in their definitions be part of the Supply

¹Logistics and SCM definitions extracted from
https://cscmp.org/CSCMP/Educate/SCM_Definitions_and_Glossary_of_Terms

Chain (although they are part of it). Therefore, if logistics is part of the SCM but it is the only part of that, then the part is the whole, hence the definition of the CSCMP contains a fallacy.

In my opinion, while some of the basic concepts of SCM have begun to flourish, this has not happened at the same pace in different regions of the world.

Trying to understand how SCM had landed in Argentina first and then in the rest of Latin America (LATAM) I discovered a curious circumstance, international enterprises, specially from USA and some European's countries began to apply SCM practices in their subsidiaries in Latin America. Most of them had two principal characteristics, namely

- they were logistics practices and
- they had been applied using bargaining power.

I myself, as a logistics practitioner am convinced of the importance of logistics in the processes of the company and as a very important part of the supply chain, I am also convinced of the strategic nature that logistics has taken on in a world where more and more services are leading the demand of the clients and, as a consequence, through services (logistics) is how companies have the opportunity to compete beyond the products, adding value to business through logistics.

Nevertheless, SCM is not logistics, its definition is clear, SCM means managing the key processes of companies (including logistics, although there could be chains where logistics is not even a key process) that allow achieving the goal of better efficiency of the entire chain².

² It is important to clarify that throughout this dissertation I have used the term efficiency or performance of the company and efficiency or performance of the chain as the guide variable to obtain the improvements that, both the definition of logistics and that of SCM, point to as an objective. Any improvement, either in cost or service, is reflected in the short, medium or long term as efficiency.

I began studying literature about SCM and discovered a huge world of possibilities around the SCM concept, although diffuse. I foresaw the potential that SCM had to improve companies, and how it could contribute to a better development of management in Argentina and in LATAM while witnessing the poor development of the discipline in these countries, so I asked myself how to contributing to its correct develop in LATAM what led me to deepen in the study of SCM centered in this region.

As I progressed in the literature review I was discovering what edge of the SCM cube is still underdeveloped. I had my insight and decided to put it in the real word, proposing that

- SCM is about a philosophy (¿style?) of management,
- SCM is strongly related to widen the frontiers of the organization to obtain a better performance not for the company only but for the whole chain.

So, linking the fact of how the concept of SCM in the business environment was developing and my compromise with the university world made me think of writing a dissertation about this subject.

Much has been written -and is still being developed, almost exponentially- on, the still young in the field of business, Supply Chain Management.

This dissertation is about Supply Chain Management and has a clear focus on the aspects raised in this introduction, which is nothing more than to value the true meaning of SCM and its strategic importance in the decisions companies take.

This misconception of the real meaning of SCM, still strongly rooted in Latin America, is my first motivation for doing this doctoral thesis, convinced that is not possible to arrive at the objective SCM proposes if, first, we do not put it in its place. Only then - when understanding what SCM is and which is its strategic importance- can be channeled the necessary efforts so that these correct definitions can be taken to action. This was my original purpose and why I decided to develop the content of my dissertation thesis. What is really SCM about?

One of the biggest obstacles that Supply Chain Management finds is rooted in its origin and development to these days. For this reason, it is fundamental, before trying to understand the phenomenon and even project its development, to determine, from its origin, how its current status was reached.

Today, as with other new areas of science, there is no agreement on what SCM is, which its scope is and how it should be treated within organizations.

The most obvious way to understand it is the fact that there is not yet a clear definition that conceptualizes it precisely. This is the first and main obstacle that presents itself. Much progress has been made in recent years in SCM to the point that little by little it is being detached from its origins to become an independent area within the social sciences linked to business.

As it was said, this thesis seeks to return to the origins and determine the true role that companies must assume for a correct relationship within the supply chain, which is what Supply Chain Management should be about.

Also the nomenclature that has become popular for SCM contributed to this confusion. If we analyze in detail the term Supply Chain Management, we could say that the term is correct to define the management of the supply chain.

However, this definition has given rise to great controversies, one of which is the one that takes the term "Supply" and puts it in the center of the scene, leading the SCM to a problematic centered on purchasing and supply issues.

Perhaps, the most notable of the controversies is given by the logistical vision of the SCM. In this case the logisticians clung to the term "Chain" and simplified the problem of SCM to the management of the chain from the physical point of view, that is, how to manage the flow of materials and the related information through the chain. They modified the concept of logistics in order to get on the SCM train and in some way, taking control and "appropriating" the term; thus taking the logistics to an exclusively operative area in charge of the warehousing and transportation of goods; nothing further from the objectives of logistics.

This could explain why, beyond Supply Chain Management is the term most used, some authors call it "Value Chain Integration", "Supply Chain integration", among others

We will return to the logistics and purchasing vision of the SCM in next chapters because it is an issue that has become deeply rooted in Latin America and is the fundamental reason why it was chosen as the geographic scope for this research.

From these considerations and trying to understand the current status of the SCM is that there is a need to devote an important review -later in this chapter of the dissertation- to go the way from the origins of the SCM until reaching its current conception.

1.2 Research Purpose

From there, -guided by a series of constructs that are intended to be defined based on the previous experience of the researcher and a review of the literature on the subject- I have proposed to define which are the elements that should be taken into account for a correct operationalization of the aforementioned SCM strategy.

Understanding, -and after presenting- the causes that indicate that the development of the SCM in Latin America has not yet arrived to an adequate level, is that the purpose of this research is circumscribed to Latin America. As a corollary of this thesis, it is expected to present recommendations for its application in Latin American companies and to serve as a guide to next steps to deepen in theory building that serves as support for the proper development of the SCM in the mentioned region.

This dissertation is about Supply Chain Management. It seeks, as purpose, firstly, to demonstrate the strategic nature of the SCM and the importance of its link with the business strategy, specifically to develop SCM as a strategic tool that has to be used to aggregate value in the organization, understanding how through an extended efficiency that goes beyond the organization's frontier is possible to achieve its goals, namely better performance of the chain enhancing customer satisfaction.

However, the real challenge appears due to broaden the organization's frontiers where managers cannot control the environment and it is hard to formally establish norms, procedures or rules. In these conditions, traditional management practices have no effect.

The research I have developed (I wish!!!) represents a contribution to the SCM literature in two views:

- On the one hand, it helps to enrich the view of the field that can be defined as strategic supply chain management; this approach to SCM has as principal objective the intention to show SCM in the strategy arena. Going beyond the organization to work together with customers, providers and so on to obtain mutual benefits is only possible due to long terms agreements and sometimes cooperation; the umbrella that wraps these kind of decisions has to be established at a strategic level and only after this, it can be possible to operationalize this SCM strategy into tactical and operational decisions. When SCM is seen as a philosophy of management or as a management style, it is easy to understand the point of view I pose, far from the simplistic view of SCM as a new way to see logistics; it is not a minor issue the relation between SCM and Logistics as well as the relation between SCM and Operations Management; in fact, in many firms, there is a misunderstanding of both concepts and it is common that they are used as synonymous concepts. It is also important to note that if we focus on a Logistics view of the SCM we can realize we are in an operational field of the SCM, so, if we try to confine SCM into the OM's world we leave out strategic relations with areas outside OM, which are fundamental for a complete strategy of SCM.
- On the other hand, I present two qualitative researchs with scope on LATAM, which represent a contribution to the empirical literature of SCM.

In which extent firms in LATAM have captured the strategic SCM sense is the principal objective of this dissertation analyzing the degree of connection, if exists, between business strategy and SCM strategy.

Based on the principles of strategy and the SCM view proposed I will develop the SCM's strategy guidelines when outlining business strategy. I will define, analyze and propose the drivers that will make possible the further implementation of this SCM strategy.

As an ultimate objective, and based on the results to be obtained, is the theoretical contribution to SCM. Critical theory to SCM needs to be applied as an attempt at inducing radical change through an overt political agenda (H. L. Lee, Padmanabhan, & Whang, 1997), considering the constant comparison involved with reflexive data collection and analysis is one of the key concepts of grounded theory and can produce valuable insights when used appropriately (Suddaby, 2006)

1.3 Latin América axis of this thesis

As has already been said, a determined geographic scope has been defined, Latin America. The purpose of this research is to understand the Supply Chain Management's phenomenon in the countries of this region.

The development of SCM practice in Latin American has been very messy and confusing. There are cultural conditions that make difficult to achieve a long-term relationship -which is fundamental to achieving the objectives set out in the SCM's business view-. The history of Latin American countries, their slow development conditioned by the opportunist and short-term vision of politics, political and economic instability, has led these countries, their inhabitants and among them their leaders, not to commit themselves to the long-term. This is reflected directly in the relationship decisions companies take which are not culturally prepared to establish long-term relationships based on trust, commitment, and credibility.

The way in which these concepts landed in the region has also influenced the correct development of the SCM. Many multinational companies wanted to implement their SCM experience without taking into account their regionalization, keeping the SCM strategy at the corporate level by applying recipes at an operational level. This happened especially at the level of the logistics of the companies and this is what

probably has generated in Latin America this direct relationship between SCM and logistics, which, although it is not exclusive to this region, is magnified here.

The status of SCM in Latin America

SCM in Latin America has been influenced by practitioners' practices applied mostly by multinational organizations with subsidiaries in Latin America; the SCM's body of knowledge, with a mayor grade of developed in USA and Europe, was not always transferred but its implementation was. As a result, we have witnessed a degraded version of the SCM where logistics integration is nearly a synonymous of SCM.

Conferences, seminars, courses of SCM in Latin America have a very strong if not a full logistics component. As it was said, this heritage has affected not only practitioners. (Ruiz-Torres, Mahmoodi, & Ayala-Cruz, 2012) present a review of Supply Chain Management literature focusing on Latin America, in this paper the reference to SCM and logistics is reiterative as they suggest in the SCM scope "Note that supply chain management is broadly defined to include sourcing, logistics, transportation, distribution and inventory management" (Ruiz-Torres et al., 2012, p.21), the paper also shows the scarce and disseminated of the literature about SCM with focus in Latin America. Another example can be found in (Young & Esqueda, 2005) where the authors present in the literature review first the evolution of global SC then the complexity of the global SCM; from there they skip to Logistics in Latin America forgetting SCM. Again they present the SCM problematic in Latin America as a Logistics problem. Though, the central issue in that paper is related to the vulnerability of the SC when they present the problem in Latin America as a logistic one.

Notwithstanding what was said before we reinforce the importance of developing deeply all the aspects related to an integrated logistics in the context of a proper implementation of the SCM concept.

Consequently, is important to consider redefining the Latin America's view of SCM from a narrow concept around the improving of better logistics coordination to a broader concept of strategic breed where integrated logistics surely will have a protagonist role in the implementation stage of this SCM strategy.

The objective is to understanding the status of SCM in Latin America through a correct interpretation of what SCM is for managers from different areas of the organization.

To achieve the stated objective two empirical qualitative research will be conducted; a Delphi study based on the opinion of a selected panel of experts and a case study based in nonstructural interviews to managers of different areas from a company in Latin America.

1.4 SCM EVOLUTION

Through the evolution of the SCM, we can understand some features that are currently presented on the phenomenon of SCM, leaving established what is really understood by SCM and, from there, to present what this thesis is proposed, which is to determine the characteristics the SCM and the need to link it with the business strategy as a basis to achieve a correct implementation.

History -in terms of evolution of research approaches and subjects of interest- has had its role in helping to frame the right questions to ask when teaching, researching and/or practicing (Wren, 1987). To analyze the evolution of Operations Management we can go back to the time of the industrial revolution, even before; in fact, Sprague (2007) travels a path of evolution of Operations management (OM) beginning in the sixteenth century to the present day based on the 16 articles covering operations articles that had been published in the special issue of the Journal of Operations Management (JOM) in 2007 about Evolution of the Field of Operations Management.

As Factory management in its beginning, the field evolved first to an industrial management then to production management. The inclusion of the service's concept broadens its frontiers to the actual concept of Operations Management, and in the way several important facts were outlining the OM profile.

We consider extremely important to understand what is or what have to be perations Management. Though, it is crucial to understand, first, what Management is. So, what do managers do? It is important to emphasize the difference between the operative

and non-operative decisions; the former are those decisions that can be taken based on certain information, a good engineer with a spreadsheet, for example, could arrive to a solution and apply it; the latter are in the domain of uncertainty, there is not a unique solution hence no matter what decision you choose, you couldn't arrive to a full solution, the "correct" decision didn't exist. The managers had to deal with these kind of problems, the non-operative ones; their decisions will be based on what consequences, (problems) derived from those decisions, they want to live with. In my opinion, that is what management is about. This consideration is important because, especially in Operations Management, elapsed a period when Operations Research had the domain of Operations Management under the figure of OM/OR. In this period of more than 30 years OM had an unquestionable growth based on engineering decisions more than managerial ones (Ackoff, 1979; Buffa, 1980; Chase, 1980; J. R. Meredith, Raturi, Amoako-Gyampah, & Kaplan, 1989; Voss, 1984; Wren, 1987)

We can situate this period between post II World War and the 80's. From that date various scholars claim for a change proposing a new approach of the field, addressing the operation problems from theoretical approaches to more managerial ones. The consequence was an important shift in the applied methodology.

OM was oriented from its origins to production; hence topics and the most important issues remained for several decades focused on production problems. It is also in the 80's that a break is observed and services, technology and integration appeared as important issues in OM (Miller et al., 1981; Pannirselvam et al., 1999)

This journey along the history and evolution of OM considers the evolution in matter of topics; the transition from production management to a strategic view of the operations; changes in the methodology directly related with the imperious necessity of linking theory with practice, scholars with managers; the interrelationship with others fields of knowledge to finally get out of the firms frontier linking operations with providers, customers and the rest of stakeholders, participants of the whole business, the Supply Chain Management concept.

We explore different approaches of SCM, from SCM as a Logistics synonymous to a strategic approach as a philosophy of management. Once we establish the origin of SCM, we will discuss the strategic role of SCM in the organization and the importance of linking the SCM strategy to the business strategy.

1.4.1 From the beginnings of OM to SCM

The next revision of the OM evolution isn't exhaustive, rather the aims pursued are to understand the line of thought that guided the OM into what is known as SCM establishing the basic concepts that gave rise to this new discipline.

Before the Industrial revolution production was poorly organized. Production was agriculture, livestock and mining. It was in 16th century when Georgius Agricola wrote "De re metallica" (On the nature of metals). The book catalogues the state of the art of mining, refining, and smelting metals³. It has numerous woodcuts that provide annotated diagrams illustrating equipment and processes described in the text as well as the organization, management issues and tools to be used; probably the first Operations Management textbook (Voss, 2007).

Lewis, (2007) goes back to 19th century to rescue the works of Charles Babbage, centering the body of his work on his book "On the Economy of Machinery and Manufactures"; Babbage is an OM pioneer, arguably his work is linked with Adam Smith's "Inquiry into the Nature and Causes of the Wealth of Nations" and hence a protagonist role in his contribution to the Industrial Revolution.

Evidently the Industrial revolution is a milestone for OM. Those first attracted to the writings of Taylor were engineers who had seen his experiments and publications appear in the transactions of the American Society of Mechanical Engineers (Wren,

³ Voss worked with the 1^o English translation by Hoover and Hoover in 1950

2011) and had read his first book, "Shop Management". In 1911 he published his seminal work, "The Principles of Scientific Management", in which he laid out the process of scientifically studying work to increase worker and organizational efficiency (Giannantonio & Hurley-Hanson, 2011). Taylor's work goes beyond OM, he is considered one of the most important contributors to management. Smith, Babbage and Taylor are exemplars of a widespread phenomenon during the 19th and into the early 20th century (Sprague, 2007). Taylor shift from study the machinery to study the workers, their work and management. From the ending of 19th century up to II world war knowledge moved to a new approach: Productivity Revolution

Gilbreth (Frank and Lilian) and Ford were other two important protagonists in the development of OM at the beginnings of 20th century, the former with the study of movements, the latter with the assembly line; Henry Ford and Charles Sorenson developed a comprehensive manufacturing strategy by combining standardized parts with an assembly line in 1913 (Bayraktar, Jothishankar, Tatoglu, & Wu, 2007); much more, it is well known that Ohno's Toyota Production System, rescue principles laid down by Ford⁴. The period of 1890-1920 with the works of Taylor, Gilbreth and Gantt was later defined as "scientific management". However, notwithstanding the great depression in 1930s, in many ways the period from 1920 to 1960 can be considered as the "golden age" for the development of industry in the USA (Bayraktar et al., 2007).

Beyond Taylor's and Gilbreth's work, focused on machinery and workers the OM paradigm needed other explications; was Elton Mayo who showed an important aspect of operations; while efficiency through different techniques was the focus in OM, Mayo discovered that other factors had great influence. His experiments at the Hawthorne factory between 1924 and 1927 shown the importance of the human behavior provoking a shift in the efficiency paradigm (Brown, 1954).

⁴ Taiichi Ohno devoted a chapter of his book "Toyota Production System" to the Ford System

WWII provoked a race that USA was not prepared for, U.S. had a quasi-obsolete fleet, no merchant ships or very few ones nor destroyers to protect them and a not well developed industry, especially in the field of precision optics. The applications of Taylor's "task study" allowed US to reverse the situation; in less than three months, unskilled workers were converted into first-rate welders and shipbuilders (Drucker, 1993). It was necessary for industry a shift from the commercial role to a military one. After WWII, Factory management and production management was the center of the development in operations. A singular fact happened in 1959; almost simultaneously the Carnegie foundation and the Ford foundation published two studies related to education. The conclusion of both was similar, the sound education in business was not happening and business schools had to change their goals and methods. As a result, the OR/OM era began; industrial and production engineers began to move from engineer schools to business schools. The American Production and Inventory Society -APICS- has played an important role in the evolution of the field. Founded in 1957 by "practitioners" in production and inventory control. (Singhal & Singhal, 2007) in the special issue Evolution of the field of OM wrote that the work of Holt, Modigliani, Muth and Simon (HMMS) contributed to the renaissance of the field of Operations management as we know today, they show how aggregate production planning evolve to the actual concept of sales and operations. HMMS work links between strategic and tactical decisions in a firm. Aggregate production planning links operation with strategy, but do more for the organizational integration by linking operations with other areas; it also drives inter organizational coordination by linking the organization outside its frontiers including in OM the concepts of SCM.

After WWII OM immersed into an identity crisis. The applications of OR as the core of OM affected the natural evolution of the field losing considerable interest (J. Meredith, 1998). Buffa, (1980) showed three main phases. First, a period comprising the 1950s decade where OM was called "Industrial Management" or "Factory Management" this period is characterized by a descriptive approach; second, a period of two decades (60's and 70's) known as Management Science/Operations Research or "MS/OR" studies that provided the scientific methodology where scholars were far from

managers; finally a third period “Operations Management” where OM begun to be a functional field of study within management disciplines.

The model for OM had to be changed; several researchers claimed for a necessary change in the orientation of the field. At the beginnings of 80’s the work of Buffa, (1980) and Miller et al., (1981) positioned OM in what it was and what it had to be. Like others, Buffa situated the beginnings of OM in the works of Smith and Babbage first and Taylor later, centered basically on production. The difficult in that decade for OM to establish definitively its identity was a broken bridge between the descriptive phase that held sway in the 50’s decade and the almost exclusively OM/OR established (Buffa, 1980). OM/OR gave to OM the scientific methodology; from 60’s to 80’ the flourishing of OM as a scientific field supported by OR put the field on the top of the management disciplines but losing identity; it was difficult to differentiate between OM and MS/OR. Chase, (1980), in the same line, claim for more case study and less laboratory techniques. During this period a great advance in inventory, scheduling, aggregate planning, quality control, capacity planning and so on has been produced - mostly as isolated subsystems- which presented the field as a collection of seemingly unrelated subsystems rather than a whole system (Buffa, 1980)

Some studies noted that OM research was mostly micro-oriented and suggested system-wide studies and Miller called for improve communication between OM researchers and managers (Chase, 1980; Miller et al., 1981).

Buffa, (1980) called for an OM research agenda that related to the ‘practical world.’ He recommended that OM researchers make their research results understandable and acceptable to practitioners, Buffa’s and Chase’s articles appeared in the inauguration of the Journal of Operations management (JOM); Lee Krajewski, the editor of JOM, claimed for less OR and more empirical research. With the advance of computer systems MRP occupied a protagonist place since 70’s, then enhanced to MRP II. It is through the next stage of MRP when OM contributed to the management integration with the development of ERP, other important milestone for OM.

In the 70's, new approaches to OM came from Japan; the MRP conceived basically as a Push system was challenged by an opposite view. The JIT philosophy proposed a Pull system where the focus was put in quality. USA felt the invasion and quickly the adaptation of the Just In Time (JIT) philosophy to de USA's industry occupied the agenda of OM.

Voss, in a British view of the same crisis, attempted to enlighten on the difference between P/OM and OR explaining OR as a discipline in its own right, with applications in Marketing, Finance, Personnel, Accounting as well as P/OM. The Operations Researcher is concerned with modeling and optimizing while P/OM is concerned with procedure and process and may occasionally use OR based procedures when appropriate. (Voss, 1984). In the same article Voss write about Operations strategy and its relation with business strategy.

1980 was an important year for OM history. Indeed, both the Journal of Operations Management (JOM), voice of the Operations Management Association (OMA), and the International Journal of Operations & Production Management (IJOPM), voice of OMA-UK, were set up.

The concept of just-in-time (JIT) was approached. Work on the topics of process design/technology and manufacturing strategy had attracted more attention than in the earlier period (Filippini, 1997).

According to Heizer and Render, although efforts in OM mainly focused on cost reduction during early 1980s, the focus shifted to quality through collaboration of information systems and leanness, within the next decade (Bayraktar et al., 2007) .

The 90's, however, witnessed a significant and welcome change. The creation of POMS (Production and operations management society) in 1989 stated "Our objective in publishing this journal is to improve practice". The beginning of the 90's represented a critical period of research in OM when empirical research started to appear in substantial quantity. This period can be seen as the "growth" phase of empirical research in OM.

Another important change it can be seen in the evolution of research in the service field. In the period from 1992 to 1998 nearly 75% were production oriented whilst the 1998 to 2006 period was witnessed of an *equilibrium* between service and production focused articles. Until the middle of 90's the empirical research was focused on specific and stand-alone topics. The potential exists in the interfaces between OM and other areas such as accounting, finance, human resources management, information systems, and marketing.

With the growth in SCM networks, not only interdisciplinary but inter organizational research is necessary for analyzing real-world operations management problems (Gupta, Verma, & Victorino, 2006).

The Journal of the Operations Research Society of America was created in 1952 (then OR) called to a special issue in 1996; it had as objective to broaden the range of research articles published in Operations Research in the OM field. In the preface the authors recognize the new directions in OM's methodology toward a wide range of interdisciplinary and empirical approaches (Cohen, 1996).

Definitively the research in OM finally made a shift to those topics that were indicated since 80's and 90's as of substantial importance to the development of the field. Arriving to these days and based on the analysis of more than 300 articles from IJOPM the great focus is put on Supply Chain Management, Operations Strategy, Performance Management, Service operations, Lean management, Resource Planning Systems, Quality Management and Product Design/Development (Taylor & Taylor, 2009). We cannot deny the great importance and contribution of OR/OM to actual OM.

The 90's show a shift toward a more strategic focus vs. the micro-focus noted by Chase, (1980), cited in (Pannirselvam et al., 1999) . A study between 1980 and 2006 found that the intellectual structure of the field made statistically significant changes between the 1980s, the 1990s, and the 2000s and evolved from a pre-occupation with narrow, tactical topics toward more strategic macro topics (Pilkington & Fitzgerald, 2006).

As we can see in this journey along the OM evolution many have been the elements that, to the extent that appeared as new trends, were knitting the threads of what is known as SCM.

Figure 1 shows the journey across the OM history and as it had a reference view centered on topics, methods, journals, researchers, schools. Probably it is not the unique way to reconstruct the history but as an informative way it shows how researchers viewed and proposed OM was and what OM is.

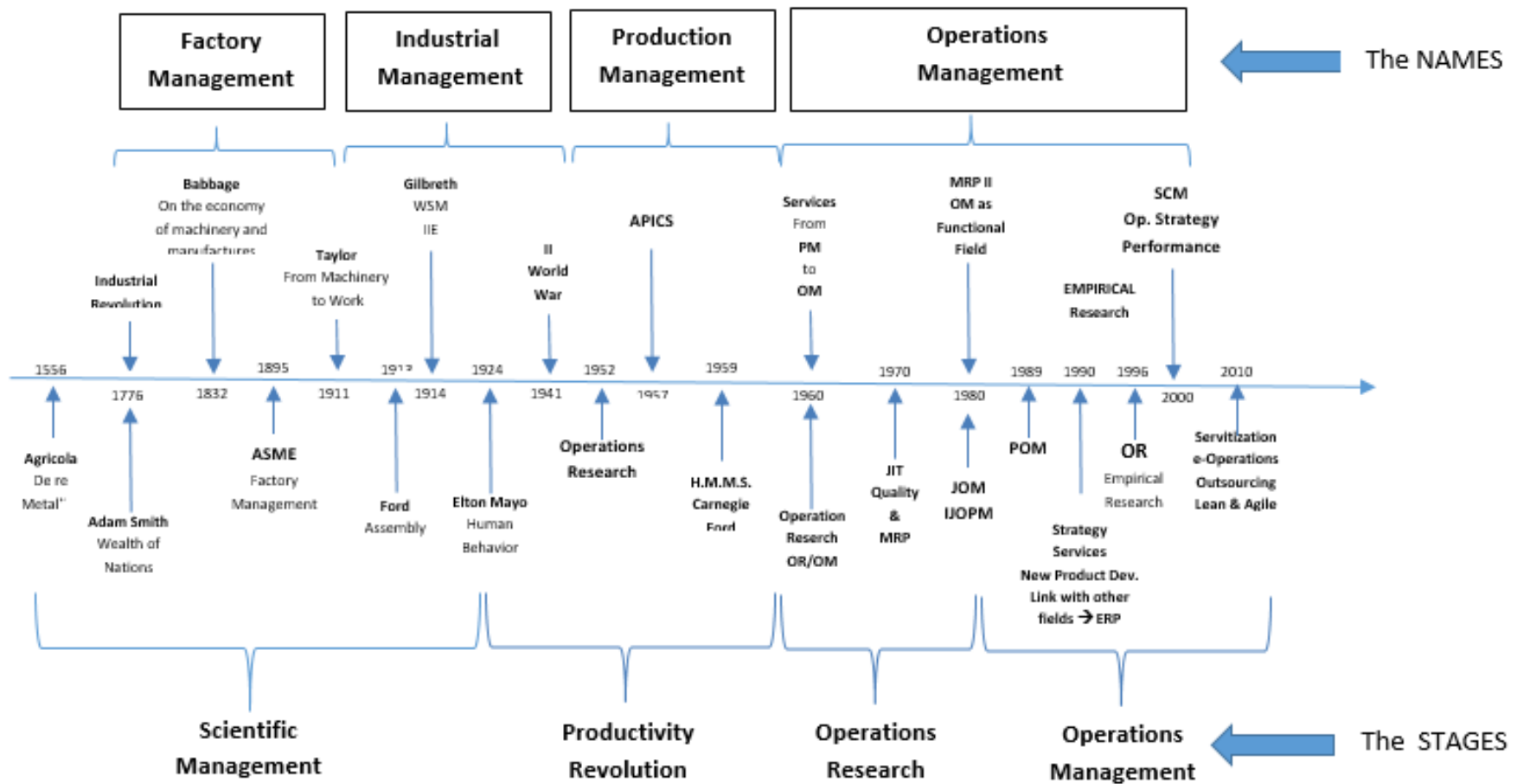


Figure 1 - Stages in the journey across the OM history

1.4.2 The appearance and development of SCM

Travelling across the literature of OM and specifically of SCM it seems to be difficult to find a connecting thread. I mentioned before that this new field it can be traced in the work of HMMS who brought as cited by (Singhal & Singhal, 2007) two paradigm changes:

- Unrelated and non- managerial individual functions emerging as part of an integrated systems of managing production.
- Aggregate production planning as the central role of operation management by linking it with Supply Chain and internal integration.

Another milestone in the development of the actual concepts of SCM is the systemic approach of the organization resulting in a more integrated view, "Systems Dynamics" give way to a more holistic comprehension of the factors involve and the interrelation inside and outside the frontiers of the organization (Forrester, 1958).

Pannirselvam et al., (1999) examine the status of operations management academic research in the 1990s, to compare current research trends with past research directions in terms of topics and methodologies applied.

Between 1982 and 1986 existed a great increase in areas of product design, strategy and Quality confirming in a way the predictions of Miller et al., (1981), though in the Amoako-Gyampa and Meredith in nearly the same period in the 80's decade shows a 70% of publications on Inventory control and scheduling.

Amoako-Gyampah & Meredith, (1989) signal new topics areas based on the 17 issues classification presented by Chase, (1980), where we can find SCM for the first time. This new areas are new product development, technological management, technology choice, environmental concerns and SCM; nevertheless in 1997 SCM is not in the OM agenda as we can observe in the work of Filippini, (1997) who used the term Supply Chain referring to an evolution of purchasing and mentioned the interaction with customers and suppliers.

A conclusion of the citations and co-citations from IJOPM between 1994 and 2003 is that emerging subjects within the field include SCM among others. The hot topic of the 1990s –Manufacturing Strategy – lost the most interest in the 2000s, while all the other topics that gained interest between the 1980s and 1990s continued to gain interest, especially SCM and Quality. Appears to be moving away from the more tactical interests of OM such as inventories, processes and measurements, and even cutting back its interest in strategy, in favor of more strategic and macro issues such as supply chains and research methodology (Pilkington & Fitzgerald, 2006).

The work of Taylor & Taylor, (2009, p.1320) from 2004 to 2009 indicate a strong presence of SCM in the researchers' agenda. As they cited "To summarize, the three prior studies suggest that several topics are at the forefront of the OM research agenda, especially SCM, operations strategy, performance measurement, and possibly lean systems".

Looking backwards to the evolution of the OM field we can appreciate the emergence of SCM at some time between 1980 and 1990 more or less.

What events in the evolution of OM may triggered the appearance of the SCM concept? A few were found, principally

1. The tendency claimed since 1980's of internal alignment, in other words, recognize the importance of coordinating the different functions inside the organization beyond better performance (Amoako-Gyampah & Meredith, 1989; Buffa, 1980; Chase, 1980; Filippini, 1997; Hax, 1981; Larson, Poist, & Halldórsson, 2007; Miller et al., 1981(Meredith et al., 1989) Not only interdisciplinary but inter organizational research is necessary for analyzing real-word operations management problems (Gupta et al., 2006).
2. The development of Logistics as an important matter for management. This logistics is a more integrated view of the typical OM's issues like Inventory, Supply and Distribution. We can notice that the internal alignment we referred before is a must if we see logistics under the integration paradigm (Larson et al., 2007).

3. Purchasing many times has been related to Supply, both, in the academia as in the professional world Supply Management and Supply Chain Management were, many times, treated as synonymous (van Weele & van Raaij, 2014; Zsidisin, Smith, McNally, & Kull, 2007).
4. Time compression (Beesley, 1996; Beesley, Manager, & Programme, 2007; La Londe & Masters, 1994; Mason-Jones & Towill, 1998) The strategic view of operations that shown the necessity of interact with other stakeholders, especially but not exclusive with customers and providers.

The origins of SCM are mostly supported on the logistics reality. This is how SCM is strongly identified with logistics although they are not the same. Strategic view, internal integration, relation beyond the enterprise frontier are the building blocks of SCM. Figure 2 represents the frame of evolution of SCM.

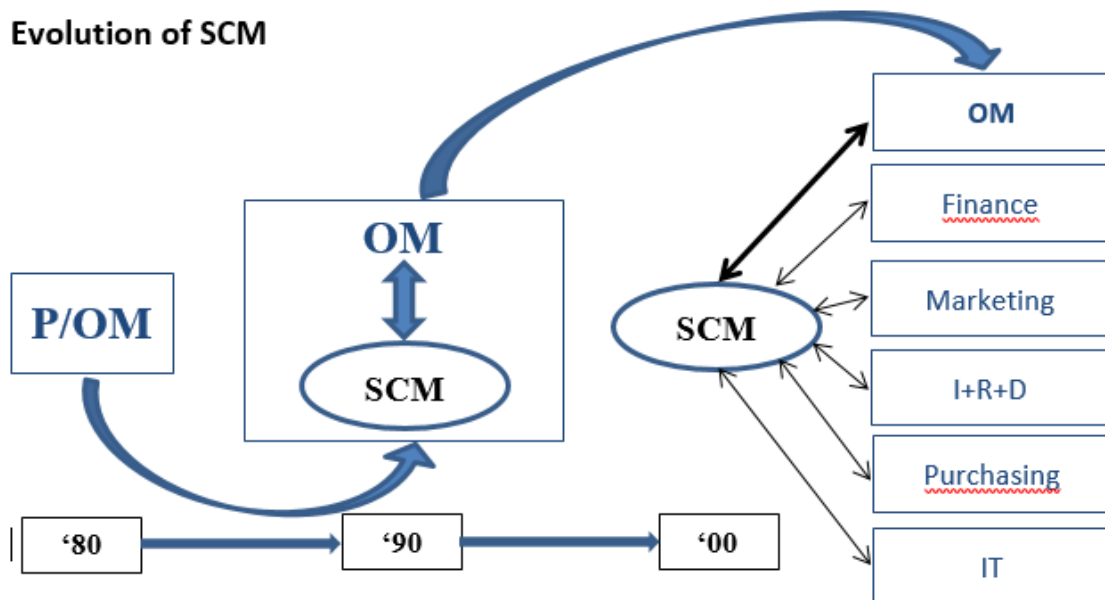


Figure 2 - Evolution of SCM

The proposed framework shows the evolution from the orbit of Operations Management. In my opinión, based on my previous experience as a consultant and

analyzing how SCM evolved, if today SCM is still considered within the area of operations is due to its origin, however, my vision is that it is an independent area that should be between the areas of operations and strategy, in fact, the existence of important journals centered in the SCM field is proof of that.

1.5 Conclusion

Supply Chain Management (SCM) is presented as a Philosophy of Management. Academics as well as practitioners have been presented different approaches around the SCM concept, many of them establishing a strong connection between logistics and SCM; this view of SCM affects negatively the internal and external integration of the firm. This SCM focus is a milestone in the correct development of SCM as a strategic concept as it has been emerging due to the evolution of OM.

Along the first part of this chapter I explored from the beginnings of SCM origin, the OM discipline, through its evolution, discovering those topics that have given path to the birth of SCM; **internal alignment**, the importance of coordinating the different functions inside the organization; **customer orientation** as a strategic consideration; the importance that integrated logistics provides to OM; time compression; the evolution of purchasing and finally the strategic view of operations that shown the necessity of interact with other stakeholders.

SCM evolved into a self-area of knowledge which, by the nature of what arises, is strongly related to other fields of research in management. SCM can be analyzed from different points of view. However, only a strategic approach to SCM resulting in subsequent tactical decisions and operational implementation can provide competitive advantages for the company.

In this scenario the role that plays the SC manager is crucial from his/her participation in the strategy of SC as part of the business strategy contributing to the correct design of the incentive programs to managers, aligning the organization through the SC strategy and managing the relation within the supply chain.

Finally, it was established the few developments of SCM in Latin America. Through a review of the most important journals we cannot find specific research in which has been treated SCM in Latin America, or at least its strategic orientation.

1.6 Outline of the study

This thesis is structured as follows.

Chapter 1 (this chapter) is introductory, its purpose is to frame the research and as a resume describe its content. In the previous section of this introduction was developed a brief chronological description of the evolution of the SCM from its origins in the management of operations to its current position as an independent area within the field of business. For this analysis of the evolution of the SCM, a literature review was carried out mainly in the area of operations management, although publications from other areas of knowledge such as strategy, marketing and information systems were taken into account in the literature review.

The decision to incorporate this review of the evolution of the SCM was to establish the bases from where SCM was developed, based on the need of understanding some features that are currently presented on the phenomenon of SCM, leaving established what is really understood by SCM.

Chapter 2 is devoted exclusively to defining the methodological framework of the research. This chapter aims to establish the methodological bases that support the development of research. This thesis consists of two field studies of qualitative type, the first based on the Delphi methodology and the second based on the case study. The methodological, design and development details of each of these methodologies are not developed in this chapter, but are specifically detailed in each of the corresponding chapters.

Chapter 3 is dedicated to defining the theoretical framework of research. Throughout this chapter, which is supported in an intensive review of literature, the academic

background that served as the basis for defining the associated constructs and giving a theoretical frame of reference to all the research has been documented.

Chapter 4 and 5 are the two field works of the research, Delphi and case study, respectively. In each case a profound methodological description and justification is developed and a set of propositions are presented as conclusion in each chapter.

Chapter 6 is dedicated to the conclusions and closing of the investigation. The discussions and partial conclusions of the two previous chapters are reviewed and the most solid propositions are presented, as well as those that generate differences between both works. Finally, as managerial implications, some recommendations for the application of the findings that have emerged from this research are presented. The next recommended steps to continue strengthening the theory in Supply Chain Management material are outlined as the closure of this thesis.

Chapter 7 and Chapter 8 have as objective to present a guide for managers so that the results of the present research can be applied in companies and in this way contribute to reduce the existing gap between theory and practice.

Finally, chapter 8 presents possible lines of research that allow continuity to this work.

2. CHAPTER 2 – METHODOLOGICAL FRAMEWORK

The objective of this research is to contribute to the enrichment of the theory of SCM. For this reason, two methodologies that can contribute to the generation of theory have been adopted.

Why this research has as main focus theory building is explained in more detail in the following chapters. SCM is a very new area in the field of business, we will see later that there is still no sufficiently solid theoretical development; that is why, in that context, the approach that this research gives to the SCM will serve to strengthen the body of theory in the matter.

2.1 Justification for the use of Qualitative methodologies

This thesis content two qualitative methodologies (though one of them, Delphi, can be considered a combination of quantitative and qualitative methodologies).

The decision to approach a study quantitatively or qualitatively depends on the research questions driving the study, prior work, the planned research design, and the desired contributions the researchers wish to make (Edmondson & Mcmanus, 2007).

So that an Interpretive qualitative approach to research is unique in its ability to address issues of description, interpretation, and explanation, whereas quantitative research is better suited to address questions of prevalence, generalizability, and calibration (T. W. Lee, 1999)

Considering the characteristics of both, qualitative and quantitative research, quantitative have been chosen for these investigation, essential for uncovering deeper processes in individuals, teams, and organizations, and understanding how those processes unfold over time. Additionally, qualitative research is critical for gaining an understanding both of what individual's experience and how they interpret them.

In-depth semi-structured interviews were chosen within a Case study research as the study's underlying theory is too complex to quantify with traditional methods (T. W.

Lee, 1999), too insufficiently developed, or too narrowly interpreted (Miles & Huberman, 1994; Yin, 2009). In-depth interviews often better fit the study's theoretical question and analytical situation than do more traditional experimental or survey designs, which is the status of SCM in LATAM and, on the other hand, taking in account that SCM is a new discipline in management, yet.

In terms of theory advancement, qualitative research seeks to generate, elaborate, or test management theories; less common theoretical purpose in qualitative research is known as critical theory, which is an attempt at inducing radical change through an overt political agenda because there is a gap in existing theory that does not adequately explain the phenomenon under investigation (Benbasat, Goldstein, & Mead, 1987; Eisenhardt & Graebner, 2007; J. Meredith, 1998)

As qualitative research uncovers experience, processes, and causal mechanisms through its unconventional methods, quantitative research is appropriately poised to follow the qualitative beginnings by refining or calibrating the understanding of a phenomenon, uncovering the prevalence of an individual's experiences, and generalizing those experiences to a larger population (Bluhm, Lee, Mitchell, & Harman, 2011).

Qualitative researchers expand and sometimes retest empirically-supported theories with qualitative methods to establish causal mechanisms that are not well suited to quantitative testing and to uncover what has changed as well as what has remained the same (Bluhm et al., 2011).

T. W. Lee, (1999) lists four reason to use qualitative research in management

First, qualitative research occurs in the natural setting of the organization

Second, qualitative data originates from the participant's perceptions of his or her experiences, so qualitative research gives 'voice' to the participant, which may be individual workers experiencing a phenomenon or key informants.

Third, qualitative research is reflexive in that the design of the data gathering and analysis changes as the research situation unfolds. They allow the data to guide further

data collection and analysis rather than remaining committed to their initial plans and expectations

Fourth, methods of qualitative data collection and analysis are not standardized. Different from quantitative research, however, is the myriad different data collection possibilities and flexible analysis techniques.

Two additional characteristics common to qualitative research

- Generally accepted researcher bias and the reduction of data to produce meaning from the data.
- Qualitative researchers interpret data based on the totality of their own experiences, training, social position, etc., and although the concern for this bias exists (see Hammersley and Atkinson, 1983; Maxwell, 1992), there is a general acceptance of the nonobjectivity of these methods.

T. W. Lee, (1999) suggests that the qualitative data analysis process is analogous to an exploratory factor analysis in which large amounts of data are evaluated, simplified and reconstituted into major themes and categories that result in a greater understanding of the initial data, thus, turning large amounts of data into a few 'factors' that explain the phenomenon better than the original data could.

Suddaby, (2006) recently clarified that the constant comparison involved with reflexive data collection and analysis is one of the key concepts of grounded theory and can produce valuable insights when used appropriately.

Works such as 'Using Qualitative Methods in Organizational Research' (T. W. Lee, 1999), 'Qualitative data collection and analysis' (Bachiochi & Weiner, 2002), "Qualitative research analysis: A decade of progress" (Bluhm et al., 2011) and 'Qualitative data analysis' (Miles & Huberman, 1994) have identified and set norms of the best practices for qualitative data collection, analysis, and reporting.

2.2 Methodological approach

The methodological approach adopted is that proposed by Eisenhardt, (1989b) for theory building from case study and that, in the case of this research, is extended to the two methodologies that were applied in this research.

The referred approach is based on three elements, presented below, that will give methodological support to the present investigation.

- A research question that generates the conceptual framework of the research has been defined.
- No previous hypothesis to prove has been defined.
- A set of constructs were defined for supporting the theoretical framework which are in this case, the basis for theory building.

Later in this chapter we present the question of investigation and the constructs that will guide the theory building.

We will present the order in which the work is presented and the tools that were used to address the problems raised in the research.

At first, is considered of most importance to situate the object under investigation. No one can possibly represent all aspects and viewpoints of a problem's domain (Van de Ven, 2007 p.74), therefore we will define the scope based on the three elements proposed by Van de Ven, focus and timespan, level and scope. (Van de Ven, 2007)

- Focus and timespan

The focus of this investigation is put on the policy makers of a Company, the general manager and the first level of operative management as foreground while the background will be made up of the middle managers of the companies and other stakeholders, mainly suppliers and customers. Regarding the time period, it is specifically defined that the current situation of the presented problem will be analyzed; therefore, evolution is not analyzed over a certain period of time, beyond

which, previous and as an introduction, an analysis of the evolution of the SCM has been carried out in order to have a reference frame.

- Level

Probably the most important consideration about addressing this investigation was defining with total clarity so that there was no doubt, which level should be addressed for the investigation.

There is no single approach in the literature regarding the level at which the SCM should be studied. Three possible levels are presented. The first approach addresses the problem of SCM at the whole chain level, usually focused on the existence of a focus company that leads the chain; on the other hand, some researchers consider that the SCM can not, or is very difficult, to be analyzed beyond a dyad, that is to say the company-supplier and company-client relationship, or in a more general way it reduces the study of the SCM to the supplier-client relationship. Finally, another way to analyze the SCM phenomenon is to do it taking as a unit of analysis the company. The three levels of analysis are valid depending on what is specifically wanted to be investigated regarding such a complex phenomenon as the SCM is.

This research takes the company as a level of study, that is, *the company is the unit of analysis*. What is studied of the SCM phenomenon is directly related to the strategic level decisions that define the behavior of the company in its relationship with suppliers and customers, although it does not exclude any other stakeholder that may participate in the supply chain. This research is positioned within the company and analyzes the decisions that occur within it and that directly or indirectly affect the chain's results. Indirectly, this research is aligned with the fact that the relationship within the supply chain must be implemented at the dyad level.

- Scope

Real things are cognitive opaque, what means that is very difficult if not imposible to see the bottom of them, so is necessary to bring a scope to the investigation,

otherwise, it should be impossible to the researche to arrive to a conclusión that can add value to science.

As it ws expalined in detal in Chapter 1, this research has a clearly defined scope. The objective of this work is to understand the status of SCM in Latin America.

However, the specific scope of the research precludes intentionally Brasil and Mexico. Is assumed, although is not demonstrated, structural differences of these two countries compared with the rest of the countries in LATAM.

México's development (like Puerto Rico's) is very influenced by the USA. This fact can probably affect the situation of SCM development making it different from the rest of LATAM and therefore including Mexico might affect the conclusions of the investigation.

On the other hand, Brasil is the sixth economy of the world. The differences in infrastructure and size of economy between Brasil and the rest of the countries of LATAM could also affect the conclusions of the status of SCM in those countries.

Nevertheless, for this research two scopes where defined, one gegraphical scope and a second phenomenological one. The reasons why the geographic scope was defined have already been explained. The phenomenological scope is given by the analysis of the relationship between the business strategy and the strategy of SCM. It has avoided letting other phenomena, especially external phenomena, such as the influence of political decisions or legislation of the countries, so as not to lose focus.

As it has been expressed, this is research on Supply Chain Management, however, it is not an objective to do any type of analysis of the supply chain itself, but rather all the work is focused on analyzing the behavior that It should be present in a company that, like all companies, is operating within a supply chain, regardless of the link in which it is located. All companies, whether product or service, have suppliers and customers, hence this research, to a greater or lesser extent, should be applicable to any organization acting within a supply chain regardless of its size, nature, origin, item or activity.

In fact, if the paradigms with which state-owned companies are generally handled (for example, obsolete bidding systems) or the relationship with monopolies are changed, the results of this investigation should be applicable to companies in the state, such as case of some examples in which improvements in the supply chain have been achieved in the relationship between monopolistic companies in the defense area and the British government (A. Humphries & Wilding, 2003)(A. S. Humphries & Wilding, 2004).

Addressing this problem from the point of view of the company is of fundamental importance since all the relationship in the supply chain is carried out through independent economic units, that is, the companies that participate in it.

Any decision that contributes or not to the improvement in the operation of the chain, which in this investigation is proposed in a conceptual way as better efficiency of the chain, must mandatorily be generated in the company that, on the other hand, is the only unit that can reflect it.

The other element that has been taken into consideration is that management of the supply chain can only be carried out at the dyad level (which does not mean that in specific cases there may be some indirect influence in Supply Chain management beyond the first tier in the chain), The dyadic management gained popularity as it can be achieved without total central coordination and control which is less complex and less intensive resource (Cooper, Lambert, et al., 1997) and, under the point of view of this research, almost imposible of implementing.

In summary, we start from the basis that the relationship that allows to generate a better efficiency of the chain and that is the objective of the SCM is produced by exclusive decisions of the company and is carried out at the first level of the chain (dyad) in the relationship, basically with suppliers and customers, although other stakeholders may intervene. The following graph in Figure 3 extracted from (Chen & Paulraj, 2004) represents it.

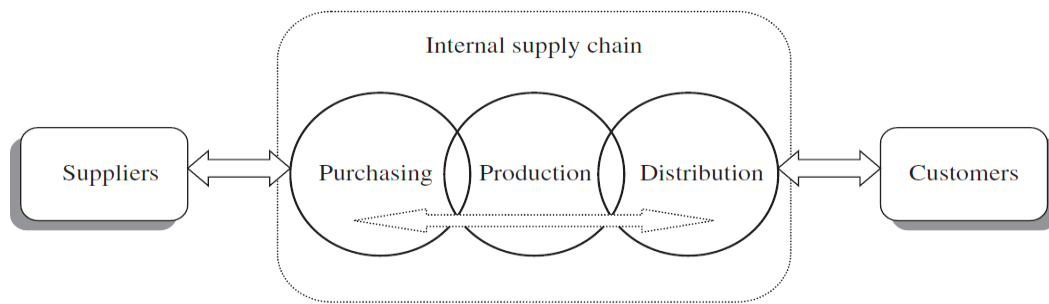


Figure 3 - Company's Supply Chain (I. Chen & Paulraj, 2004)

For the development of this dissertation a Research question is presented from which different factors that influence operationalization are analyzed. Due to the exploratory nature of this research, a series of constructs have been defined that guide the two field works carried out. The development of constructs will be the basis for establishing a series of theoretical concepts that contribute to enrich the development of supply chain management theory.

Next chapter presents the theoretical framework from where the constructs were developed. They have been carefully selected after an exhaustive analysis that arises from a combination between the literature review in Supply Chain Management and the prior knowledge acquired by the researcher over almost 20 years performing in operational areas and in consulting in various companies in several countries of Latin America.

It is expected to confront these constructs with what arises from the present research. If the constructs have been correctly chosen and if other constructs not previously selected should be considered for future research that may complement this work.

As result new propositions should appear to be used for the enrichment of SCM theory building.

2.3 Research question

In the introductory chapter of this dissertation the objective of this thesis was presented, develop the strategic nature of SCM, its relation with the business strategy and its further operationalization. Therefore, to be able to carry out this task, as methodologically corresponds, since there is no possible research without a question to answer, we pose the question for this research that will guide us throughout all this research.

How, if it happens, SCM strategy participates in business strategy and how this strategy is operationalized.

2.4 Necessity of grounded theory of SCM

Several authors have presented empiricall evidence through thier investigations showing a positive relation between SCM and supply chain performance (Bagchi, Ha, Skjoett-Larsen, & Soerensen, 2005; Kannan & Tan, 2010; Rodrigues, Stank, & Lynch, 2004). Benefits, such as Chain efficiency, higher quality and enhanced service level, are mentioned as consequence of a correct SCM implementation.

However, on the other hand, many researchers express a more skeptical view of the results can be obtained through SCM (Fabbe-Costes & Jahre, 2007; T Schoenherr & Swink, 2012). Bagchi et al., 2005, p.288) considers SC Integration is *“more a rhetoric than reality in most industries...”*.

There are also several authors who consider that a total intetration of the whole chain is difficult to achieve in practice (Grubic, Bastl, Fan, Harrison, & Templar, 2010; Trkman, Stemberger, Jaklic, & Groznic, 2007).

SCM remains an area of great debate, doubt and discussion among researchers, and there is still relatively little knowledge and theoretical development available (Van Donk & Van der Vaart, 2005). Moreover, theory related to this subject is still underdeveloped (T Schoenherr & Swink, 2012). It can be said that after 30 years or

more of research and a vast body of literature there is still a considerable gap between the evidence and claims presented in SCM theory and the actual practice (Childerhouse et al., 2011).

2.5 Research development

The next chapters comprise the body of the research development. To achieve the objectives set for this research, first it was developed a theoretical framework to give theoretical support to research and serve as a conceptual basis for the definition of the constructs that will guide this research. Two field studies were carried out using a mixed methodology (qualitative and quantitative) for the first and a qualitative methodology for the second fieldwork.

Chapter 3 includes the establishment of the theoretical framework on which the current state of science is presented with respect to the topics addressed in this thesis. First, the problem of the strategy is addressed, its nature and how it is linked to the strategy of the operational areas; subsequently the SCM is addressed, the problem of its definition and scope, the different views of SCM and its connection with the business strategy; then the SCM is presented under the umbrella of the different theories of the company and there the position adopted regarding these theories is presented; finally is presented the theoretical framework that supports the constructs selected for the present investigation.

The following chapter is a field work applying the Delphi methodology. One of the most outstanding characteristics of this research methodology is that it is a mixed methodology in which qualitative and quantitative techniques are combined, although each researcher can give more or less weight to some of them. In the case of our research, the qualitative edge of the methodology is the one we have given the most weight to, although a quantitative analysis of the results is carried out to give them better visibility.

The objective of the Delphi is, through a panel of experts in the field, to understand the aspects of the SCM phenomenon under study from the point of view of the experts.

In accordance with the definition of focus, level and scope, a panel of experts was selected in the areas of research, consulting and operations with concrete experience in companies in Latin America. All the methodological details of the application of this methodology are developed within the corresponding chapter.

The next chapter is the second field work, the case study. This qualitative methodology was applied, again taking into account the focus, level and scope, selecting for it an Ecuadorian company.

As will be explained in detail in the chapter corresponding to the case study, this methodology was selected taking into account the status of the SCM in Latin America that requires further work on the definition of a broader theoretical framework.

Finally, the conclusion chapter aims to present in a comparative form the field works developed in the previous two chapters and from there to draw conclusions that will enrich the theory of SCM.

3. CHAPTER 3 – THEORETICAL FRAMEWORK

3.1 Introduction

In this chapter I describe the theoretical base considered for developing this thesis. First, the basic concepts of SCM are explored; second - taking into account that this work is about the strategic nature of SCM- basic concepts of strategy are presented to explain in the next subsection the strategic nature of SCM. The next subsection presents SCM in light of different business theories

Supply Chain Management has been studied in relation with different business academic fields: logistics (Ballou, Gilbert, & Mukherjee, 2000; I. J. Chen & Paulraj, 2004; M. C. Cooper, Ellram, Gardner, & Hanks, 1997; Ellram & Cooper, 1990; Lambert, Garcia-Dastugue, & Croxton, 2008; H. L. Lee et al., 1997; Lummus, Krumwiede, & Vokurka, 2001); marketing (Chan, He, & Wang, 2012; Jüttner, Christopher, & Baker, 2007; Madhani, 2012a, 2012b; Mentzer & Gundlach, 2010; Min, Mentzer, & Ladd, 2007); procurement (Presutti Jr, 2003; Trent & Monczka, 1998; van Weele & van Raaij, 2014); finance (Cloud, 2000; Jing & Seidmann, 2014; C. H. Lee & Rhee, 2011; Raghavan & Mishra, 2011; Wuttke, Blome, & Henke, 2013; Yang, 2013), among others. There is no doubt that the SCM's nature is cross-functional involving many functional areas of an organization, which is something to be taken into account in this study. Nevertheless, this is not necessary the most significant characteristic of SCM.

A simple definition of SC may be a network of actors (companies) that transforms raw material through various stages into products ; so, and considering that SCM embraces at least two different organizations -firms or hierarchies stages- (Giunipero & Ketchen, 2004; O. E. A. Williamson, 1973) this means that necessarily the SCM required functions occur both inside the firm and outside its borders.

The benefits of an integrated supply chain are well documented, but the concept remains difficult to operationalize (Näslund & Williamson, 2010). This study develops

two questions: what is integration and how can organizations achieve supply chain integration?

Beretta, (2004) defines three dimensions of integration: information integration, cognitive integration and managerial integration. The first one refers to the capability of transferring information efficiently throughout the whole organization (P K Bagchi & Skjoett-Larsen, 2003). Cognitive integration refers to understanding, and more specifically, to the fact that effective SCM integration requires that all the SC members understand the point of view of other partners in different functions and that they also understand the processes involved across the supply chain (Lummus & Vokurka, 1999; Mentzer, DeWitt, Keebler, & Min, 2001). Managerial integration refers to the personal managerial commitment to integration within organizations. In this sense, the implementation of a standard system is necessary in order to address all aspects of integration.

3.2 Grounding SCM within a Firm's theory

Although the first concepts around Strategic Management dates back to 60's and evolving till 80's, the Strategic Management field dramatically grew with the new theories that emerged in 80's and 90's like Industrial Organization (IO) (Grimm, 2008; Porter, 1981); Transaction Cost Economics (TCE) (Chiles & McMackin, 1996; O. E. Williamson, 2008); Resource Based View (RBV) (Barney, 1991; Wernerfelt, 1984) Knowledge Based View (KBV) (Grant, 1996) derived from the latter, Relational Based View (Dyer & Singh, 1998); Dynamic Capabilities (Makadok, 2001; Teece, Pisano, & Shuen, 1997); and Agency Theory (Eisenhardt, 1989a; Fayezi, Loughlin, & Zutshi, 2014; Shapiro, 2005; Zu & Kaynak, 2012).

However, these theories remain much focused on the benefits and positioning of the company and have not taken into account important advances in the business world; punctually the increasingly important linking of companies that together constitute the

supply chain in search of greater joint efficiency, in other words, the analysis at the supply chain level.

Because of its nature, the complex phenomenon of SCM needs to combine different theoretical approaches (Gonzalez-Loureiro, Dabic, & Kiessling, 2015). Key competitive requirements as flexibility, responsiveness, reliability and agility, are fundamental in SCM and should be linked with resources and capabilities, mandatory for success under the RBV approach; nonetheless the resource dependence theory and the resource-advantage theory derived from the RBV may fit to explain the external relations in the chain. (Hunt & Davis, 2012; Hunt & Davis, 2008)

Firm's theories as mentioned before but applied to supply chains competing to supply chains (Giunipero & Ketchen, 2004; Slone, 2004; van Weele & van Raaij, 2014), namely, supply chain organizations, have not taken the next leap and started to view supply chains as a tool to develop common cross-organizational strategies and (Giunipero & Ketchen, 2004).

SCM is not only the internal supply chain like, logistics, transportation or physical distribution but also strategic issues (La Londe & Masters, 1994; Mentzer et al., 2001; Tan, 2001). Strategic SCM in combination with other organizational elements can be a source of competitive advantage in an extremely complex way that requires combined approaches to build an integrative theory (Gonzalez-Loureiro et al., 2015)

To provide a pool of win-win strategic alternatives is of most importance for agents in the relationship within the supply chain to mutually share risks and rewards which leads to a change in the approach from being transactional to relational, from short term profitability to long term relationship. (Gonzalez-Loureiro et al., 2015)

The stakeholder theory has to do with how organizations perform at their best when they meet the diversity stakeholders' goals and expectations. If this principle is shifted to the field of strategic SCM, then it is expected that the supply chain as a whole gets an above normal performance when each organization fulfills the others' goals and expectations. A critical question here is how to delineate the internal organization of the supply chain; which organization must take the leading role and how to distribute

de coordination effort (Gonzalez-Loureiro et al., 2015) and hence how the business strategy leads to the supply chain strategy.

Under the view of theory agency (Eisenhardt, 1989a; Shapiro, 2005) some inconsistencies are presented when it is wanted to apply to the behavior of the SC; information asymmetry, goal conflict, risk aversion of suppliers, length of relationships and task characteristics among others. An additional effort has to be taken when linking principal-agent relationships between internal agents to the supply chain and external agents from the institutional theory. External agents are not included in contractual relationships and yet they can have an impact on the agents' behavior and this could shape the strategic model. (Gonzalez-Loureiro et al., 2015). This theory can also be applied to interpret how internal incentive systems, specifically applied to managers, should be present to internally align the strategic links related to the chain.

There are multiple, then, economic theories that could give a conceptual framework to the strategic vision of the Supply Chain Management; on the other hand, considering that the same company is part of multiple Supply Chains, could be understood that the company can have different strategic positions according to Supply Chain, that is, different strategies for relationships with different suppliers and customers.

3.3 Defining the constructs.

It remains, as was previously expressed in the previous chapters, to define the constructs that will guide the present investigation.

Construct is understood, first from a psychological view, therefore more global, any hypothetical entity difficult to define within a scientific theory. A construct is something that is known to exist, but whose definition is difficult or controversial. Examples of constructs are intelligence, personality, creativity, culture.

For the application of the concept of construct to research it can be said that construct is a theoretical construction to solve a determined scientific problem; In the philosophy

of science, a construct is an ideal object, that is, an object whose existence depends on the mind of a subject, unlike a real object, whose existence is independent of the mind of any subject (Bunge, 1974).

There are big differences between constructs and observable variables. In fact, it is possible to say that the constructs are unobservable while the variables are observable when they are defined operationally. The distinction is important because, if the researcher is not fully aware of the level of inference when talking about variables and / or constructs, it is difficult for him to have a clear idea of what he is doing.

3.4 Background

As it was previously explained, seven constructs have been defined to answer the research question. Below I detail the process that led to the selection of the constructs

As a first step I resorted to the origin of this thesis, that is, to the reason that led me to develop it. After an exhaustive journey through my years in contact with colleagues in the logistics area - who were assiduously thinking about SCM - but especially because of my interaction with multiple companies in Latin America, I came to the conclusion that probably the biggest problems for a correct implementation of the SCM were within the companies and not outside.

This is how my perception led me trying to identify which were the conditions that should be taken into account within an organization if it really wanted to carry out a correct management of the supply Chain.

Through my accumulated experience and several years of dealing with the issue I came to a first starting point, the biggest problem was focused on having an operational vision of the SCM, something like an attempt to achieve an integrated logistics between supplier and client ; from this arose my first great perception that I had to confirm and that is that SCM is strategic and if SCM policies are not defined at the strategic level, it is not possible to take them forward to operational levels. That was

how the need to dive into the literature about SCM strategy and determine whether this was a construct to define for my research arose.

But this was not enough, defined the strategic level remained to understand how and why companies should take into account the SCM at that level of decision.

When talking with managers and directors of different companies on the subject I had the clear impression that carrying out an SCM strategy had to do with the culture of the company, not only of the company's own culture but also of the possible cultural clashes that it could have because of the culture of suppliers and / or customers and that would determine the way of relating. Reviewing literature in the field of culture would lead me to determine if my perepción had some theoretical basis that allowed me to deepen the concept and thus define another construct.

From there, the journey through the different necessary conditions and always starting from my experience, complementing it with the revision of the literature, gave rise to new topics to analyze. This is how the rest of the issues that I considered fundamental for the development of this research arose. SCM is about managing the chain, an almost contradictory issue since no one can formally manage outside the borders of the company; hence, the company is obliged to work together with its customers and suppliers. From the strategy should be given the guidelines for that relationship.

I found as a challenge for the companies the way in which through their relationship they would contribute to the achievement of the objectives pursued by the Supply Chain management - a better efficiency of the chain and as a consequence of this a better service to the final client-. Could companies work together with their suppliers and customers to achieve the aforementioned objective without interfering with the company's results? I understood that if each and every one of the companies in the chain aims to maximize their profit, then it is not possible to maximize the profit of the chain as a whole. Aligning the company to achieve these chain objectives should be defined at a strategic level, there should be guidelines for managers to be willing to collaborate in cases that corresponded to achieve a benefit of the chain, although in the short term it would not be reflected in the results of the company itself.

Another problem that exists in companies that seek to achieve some kind of relationship with other members of the chain, is the lack of internal coordination. Hardly a company can work on issues of coordination and collaboration if it does not first achieve this coordination internally; hence, my experience told me that internal alignment - the internal SCM - as a precondition for a proper implementation of the SCM should be mandatory; In fact, some companies with which I have interacted consider that SCM is the internal coordination of its different operational areas.

But why should companies develop the SCM? Why should they need to coordinate or collaborate with other companies? Obtaining this answer is of the utmost importance since it should reflect the objective of the SCM, which on the other hand is established in the definition of SCM that I have adopted for this thesis. It is about looking at the final customer - the consumer - to achieve a better service or product, then the efficiency (I previously explained the use of the word efficiency in the framework of this thesis) should be the entire chain, not the company in isolation; therefore, the classic approach of a company that seeks to maximize its benefit can not be applied directly if it is intended to delineate an SCM strategy. Achieving efficiency includes customers and suppliers; we must achieve efficiency as a whole so it must be given in the chain, where it best suits. Consequently, it becomes of fundamental importance defining guidelines that give managers the necessary tools so that these efficiencies - usually translated into benefits- are distributed equally among the chain's components.

Suggested from the previous point and the aforementioned topic of culture, the need to understand how companies relate to their suppliers and customers. My experience and literature clearly indicated to me that the levels of relationship with different clients and suppliers are different, so it was of the utmost importance that at the strategic level guidelines were issued to define how the company should relate externally to different categories of clients/customers –segments-. In this aspect, the literature review confirmed my concern regarding the segmentation of clients and suppliers in relation to the relationship of the chain.

However, another element that I consider fundamental to carry out any strategic decision regarding SCM is related, again, with the traditional way in which companies reward their managers for the achievement of their objectives. How can an SCM strategy that seeks the efficiency of the chain be implemented if managers are rewarded for achieving efficiency goals of the company? I almost did not find in these years a company that considered SCM objectives when defining the objectives of its managers. Nor did the literature review contribute much to this point. However, being able to align the managers' incentive systems to the objectives in terms of SCM was essential if it is to obtain results and better efficiency of the entire chain, that is, beyond the borders of the organization.

Finally, in recent years in which the SCM began to occupy the agenda of managers in some companies I have seen that the complexity of the management of the SCM requires, especially in medium and large companies, a responsible to carry it forward. Many companies that faced the management of SCM have fallen into the error of "transforming" their logistics areas and in some cases their areas of purchasing in the SCM area, but my perception is that they have made the mistake of not clearly defining which should be the profile and the functions that this SCM manager should carry out. Being able to define both profile and functions is of the utmost importance to be able to channel the strategic decisions regarding SCM.

I will start with the theoretical revision of basic concepts of strategy to, from there, get into the strategy of SCM and then approach the topics that I have just presented as points of discussion of this research.

3.5 Literature review

Below I present for each of the mentioned aspects the review of corresponding literature that complements my vision on each of these topics.

I understand that there may be other issues that should be added to those that I have considered in this thesis since I do not intend to be the only ones, but they are about what I wanted to deepen in this thesis.

As it was expressed previously, the definition of the constructs that I have selected is supported by two elements, my personal vision of the problem and an extensive review of the literature in each of the aspects taken into consideration. In each of the following paragraphs the background based on the literature that supports the definition of the constructs are presented.

3.5.1 Strategy

Before getting into the strategic nature of SCM and its relationship with the business strategy, the focus of this research, it is helpful to review some basic concepts that will allow us to establish what we mean by strategy and also to find some common ground between Strategy and Supply Chain Management.

I try, as an objective of this dissertation, to stipulate the link between Strategy and SCM. In this chapter I review the basic business Strategy concepts introducing commonalities with SCM strategy and preparing the bridge that link both strategies at their respective levels.

There is no consensus in the definition of strategy so we will detach here the most important or common characteristics that can contribute to put in perspective the relation Business Strategy – SCM Strategy.

The problem of semantics affects not only strategic management but also is particularly severe in the field of management in general (Koontz, 1961). Semantics affects the field of SCM too, it is very difficult to achieve unanimity on the definition of SCM.

The level of consensus shown by a scientific community as regards the definition of a concept *denotes the degree of progress* of a discipline. Nevertheless, a certain lack of consensus also fosters the development of the field. This is especially important if the

concept we are referring to is the object of study of the field itself. (Ronda-Pupo & Guerras-Martin, 2012)

Thus, Leontiades (1982) considers that it is time to take a fresh look at the basic definitions before the language of strategic management and business policy becomes so rooted that it will become impossible to reverse.

However, some academics consider that science does not require consensus, moreover, it thrives on dissent. (Cannella & Paetzold, 1994; Pfeffer, 1993). The field of strategic management cannot afford to rely on a single definition of strategy, indeed the word has long been used implicitly in different ways even if it has traditionally been defined formally in only one. Explicit recognition of multiple definitions can help practitioners and researchers alike to maneuver through this difficult field. (Mintzberg, 1987 p.11) ‘

Every time we refer to strategy there exists “uncertainty”. It is obvious that, without this component, all decisions in the organization are to be operative and hence no strategy is needed; but this is never the case, therefore a strategy has to be delineated. Indeed, strategy is about the uncertainty tied to the future, the chosen path to address the objective (Mintzberg, 1987)

Based on the different definitions of Strategy, Mintzberg develops five different approaches to strategy; these approaches show how different could be the interpretation and indeed the implementation of the term “strategy”:

- Strategy as a plan is a guide for action, the strategy is prior to the action and developed consciously and deliberately. It is usually documented as the "plans" - what we normally know as strategic planning of an organization - although it is not necessary that it be so.
- Strategy as a ploy is tied to specific maneuvers aligned to a propose, it is generally linked with a plan, normally at a higher level of decision.

- As pattern strategy means consistency in behavior, a pattern of action that becomes the strategy, the unique and particular way an organization faces the future.
- Strategy as position mediates between the internal and external context, the stakeholders.
- Strategy as a perspective looks inside the organization (different from the other four perspectives that focus outside) as an ingrained way of perceiving the world, strategy defines as a seal the organization DNA, it is what Selznick refers as the character of an organization (Selznick, 1943).

Strategy as a concept exists in the mind of the interested parties, it is an abstraction conceived as intentions to regulate behaviors before things happen or as patterns to describe behavior that has already occurred. This concept can be seen as a perspective shared by the members of an organization oriented to specific intentions or actions.

Despite its wide diffusion and the application of central models and concepts, there are many definitions of the strategy concept and strategic management, most of which lack of an integrating nature. Although strategy is one of the most taught and studied concepts, it is paradoxically also one of the least understood. (Ketchen, Boyd, & Bergh, 2008).

For Evered, (1983), strategy is a favorite word in the field of management despite the ambiguity caused by the lack of a consensual definition of the term. (Hambrick & Fredrickson, (2005) point out that 'strategy' has become such a broad term that it is used to mean almost anything.

But the strategy has to be grounded somehow; else the strategy formation process is the tool that gives meaning to the abstract concept as it has already been indicated. It is in this process when the organization sets the long-term goals, courses of actions and the allocation of resources necessary to carry out these goals (Chandler, 1987; Schendel & Hatten, 1972). It is determined in the strategy what businesses the company is in or is to be in and the kind of company it is or is to be (Christensen,

Andrews, Bower, & Learned, 1973). In light of these concepts, the strategist must design a series of goals and plans to reveal the field of activity of the company and how this activity is focused.

Ansoff & Weston, (1962) consider strategy as a "thread" that run among the activities of the company and the products/markets. The strategy thus becomes a rule for decision making, a thread with four components: the scope of the product offered and the markets in which it operates; the growth vector (changes that company plans to apply at your products/markets); competitive advantage (the unique properties of individual product/market place the company in a strong position against its competitors); and synergy (the extent to which different parts of the company can work together properly to achieve more than what could be achieved if each operate on their own).

The resource based view approach of the firm emphasizes firm-specific capabilities and assets and the existence of isolating mechanisms as the fundamental determinants of firm performance; thus the sources of sustained competitive advantage are firm resources that are valuable, rare, imperfectly imitable, and non-substitutable (Barney, 1991; Teece, Pisano, & Shuen, 1997; Wernerfelt, 1984).

Based on these concepts of strategy, it is possible to determine the imperative need to align SCM strategy with business strategy as it can be seen in Figure 4. Strategy initiates at the corporate level and, from there, all the strategic decisions at lower levels in the organization should be aligned. Then, functional areas have to delineate their functional strategies guided by the high-level strategy's alignment directives. Thus, an alignment between business strategy and SCM strategy is explicitly cleared.

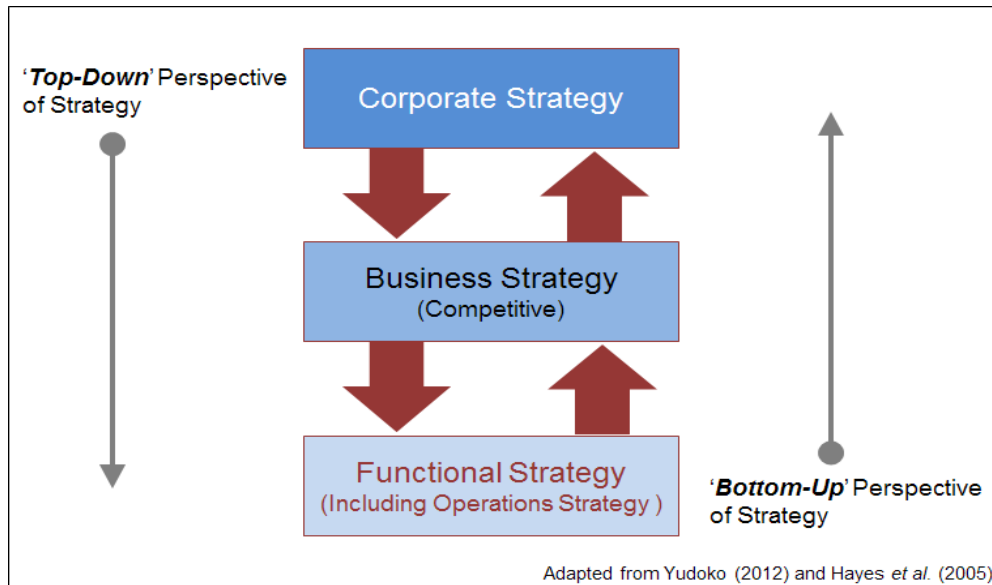


Figure 4 – Bottom-Up Perspective of strategy

3.5.2 Strategic view of SCM

Which is the correct approach to the SCM concept? During the last 20 years or more we could assist to a variety of definitions and concepts of SCM normally linked to logistics or purchasing. There is a tendency to relate SCM to the administration of the flow of products or services. This interpretation is not wrong, but it is not the essence of SCM.

It sounds interesting to look back to the moments in which the concepts of Supply Chain Management began. Forrester, who introduced a theory of distribution management, recognized the integrated nature of organizational relationships (Forrester, 1958). He is, probably, the first in analyzing the interaction among firms; it appears that Forrester identified key management issues and illustrated the dynamics of factors associated with the phenomenon referred to in contemporary business literature as Supply Chain Management (Mentzer et al., 2001).

It is not a minor issue the relation between SCM and Logistics. In fact, in many firms, there is a misunderstanding of both concepts and it is common that they are used as synonymous concepts. If we focus on a Logistics view of the SCM we can realize we are

in an operational field of the SCM, but if we try to confine SCM into the OM's world we leave out strategic relations with areas outside the OM, which are fundamental for a complete strategy of SCM. This misalignment around the relationship between Logistics and SCM is presented by Larson et al. (2007), who identifies four conceptual practitioners' perspective: a traditionalist where SCM is part of logistics; a re-labeling where SCM replaces logistics; a unionist where logistics is part of SCM and an intersectional where logistics and SCM are related and have commonalities. The intersectional approach of SCM is where the ultimate goals of SCM will be reached; in this perspective it is where the strategic focus is present.

Some essential areas of research, that could clarify managers when and how could be more suitable for their companies to align SCM strategy with business strategy are still fragmented and uncompleted. On the other hand, how to operationalize these strategies, such as SCM practices and success factors for their implementation, is sometimes disconnected from the strategy.

To obtain the results SCM promises we should consider SCM in three hierarchical dimensions: a SCM strategy linked with business strategy is SCM as a management philosophy, establishing the basis or strategy; SCM as a set of activities to implement this management philosophy is the tactical level of the SCM; at last SCM as a set of managing processes is the operationalization of this SCM philosophy (Mentzer et al., 2001).

As management philosophy SCM is directly associated with a system approach where:

- the focus is on the whole chain, not on an organization in particular,
- cooperation is the base of the relationship,
- all the chain has a strong customer orientation.

SCM strategy has to be oriented around these three fundamental topics; there is no doubt the business nature of these conditions; hence, there exists an absolute necessity both, business' and SCM's strategy, are strongly linked and; therefore, the latter's participation in the former's strategy is essential.

What identifies SCM is the coordination that the whole chain needs with the purpose of achieving the overall performance. Normally the whole chain involves more than one organization. The level of vertical integration in a chain can affect the implementation but not the SCM's concepts.

This efficiency has to be found or obtained through the different areas within the organization and through the chain. Consequently, reducing the SCM to a full coordinated logistic approach including vendors and customers is a narrow view, far from what SCM purport to be. SCM concentrates upon relational factors rather than transactional ones. SCM includes areas such as research and development, product design, plant location in all aspects (Ferdows, 1997; MacCormack, Newmann, Lawrence & Rosenfield, 1994; Mentzer, 2008) and any other areas that have to be coordinated with the objective of making the final product or service a lesser cost and / or giving a better service level to final customer.

There is definitely a need for the integration of business operations in the supply chain that goes beyond logistics. (Cooper, Lambert, et al., 1997)

Even it is obvious, by definition, Supply Chain Management is the management of the Supply Chain, not only its existence, a very big difference, most of all if we understand that we are trying to manage among organizations. This SCM mining is really about value chains or value networks, which is broader than supply chain because it involves more than supply. Thus, we draw a definite distinction between supply chains as phenomena that exist in business and the management of these supply chains. The former is simply something that exists, while the latter requires overt management efforts by the organizations within the supply chain (Mentzer et al., 2001).

The 1994's definition of "The International Center for Competitive Excellence" is the one adopted here because of the clearness and specificity that shows. "Supply chain management is the integration of business processes from end user through original suppliers that provides products, services and information that add value for customers." (Cooper et al., 1997). Hence, the participation of the SCM strategy in the business strategy is the core for a successful implementation.

These strategic SCM approach considers integrated (internal and external) behavior, sharing information among the members of the SC, sharing risk and rewards, integration of processes, same goals and partnership for long-term relations all under the cooperation and system approach umbrella.

To develop the correct strategy for SCM as it is seen in this paper is presented in the framework from (Mentzer et al., 2001) , that can be seen in Figure 5, where the two principal conditions to a correct SCM strategy are present, internal and external coordination (cooperation) through a systemic view.

A MODEL OF SUPPLY CHAIN MANAGEMENT

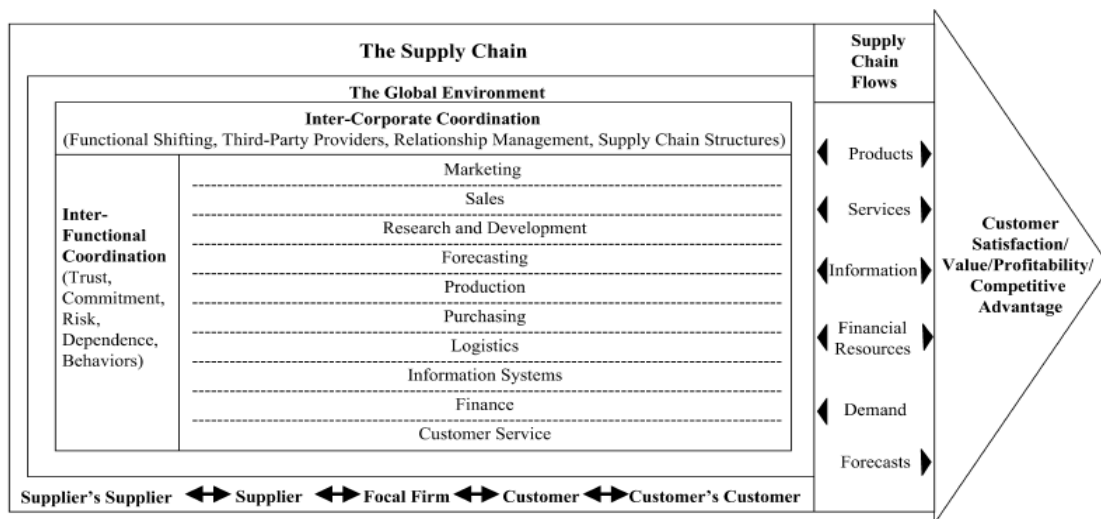


Figure 5 – A model of Supply Chain Management From (Mentzer et al., 2001)

Nevertheless, these conditions ought to be in a SCM aligned with the business strategy other factors derived from the cooperation paradigm play a fundamental role and should be considered. These factors derived of the SCM's nature are **trust and commitment; collaborative activities**, such as information sharing, joint relationship effort, and dedicated investments lead to trust and commitment (La Londe & Masters, 1994)(Mentzer et al., 2001)(Mentzer, Min, & Zacharia, 2000)(Maloni & Benton, 2000).

Trust and commitment, in turn, lead to improved satisfaction and performance (Nyaga, Whipple, & Lynch, 2010).

Like in marketing, mostly applied to customers and products, the widely used concept of **segmentation is relevant to SCM** and has to be considered with special care when configuring the SCM strategy. The Supply Chain is more than a chain, is a network; not all members of the network behave the same way, have the same needs or share the same business strategies; hence understand those characteristics will give rise to the construction of different segments; thus different modes of action will be applied in conceiving the SCM's strategy conceiving different supply chains strategies in a "dynamic alignment" (Gattorna, 2006).

Managing this SC requires different skills because of its particular characteristics which is that the phenomenon happens beyond the frontiers of the firm where formal power does not exist; manage this SC becomes very difficult and complex because there are adhocracies that lack formal hierarchy (Giunipero & Ketchen, 2004). The Supply chain has to be **considered as an informal organization** (Gonzalez-Loureiro et al., 2015).

Hence the strategic importance of the SCM, which, given these characteristics, can not find its way from tactical or operational analysis. In this situation, to understand how organizations "fit" each other is one of the most important challenges for this "strategic" field of research.

Research now suggests the Supply Chain Management (SCM) can be considered a key source for firms to obtain global superior performance (Hofmann, 2010). In fact, competition, in a global way, has increasingly changed from firm-to-firm to supply chain versus supply chain competition (Slone, 2004); more than this, strategic management research has begun to examine the strategic use of Supply Chains, not as a means to move products, but to enhance firm performance. "Although much attention has focused on understanding performance differences between firms, little is known about the intangibles associated with why some supply chains outperform others". "Today competition pits Supply Chains against each other in the competitive

arena“ (Hult, Ketchen, Cavusgil, & Calantone, 2006, p 458). “As in organizations, supply chain participants are brought together in the pursuit of goals” (Giunipero & Ketchen, 2004, p.54); internetwork competition is now one of the main characteristics of business (Lambert & Cooper, 2000; Lambert & Enz, 2017)

Nevertheless, the relation between SCM and Strategic Management has been ignored or less considered, so it is a clear need to consider how Strategic Management and Supply Chain Management notions can feet together. (Giunipero & Ketchen, 2004).

A profound study of the **SCM’s nature grounded in a theory that serves as sustenance** for the development of an investigation of its strategic nature should be considered. This characteristic is crucial since it leads us to study the SCM phenomenon beyond the boundaries of the company therein the undisputed strategic vision that SCM should have.

3.5.3 Culture

Culture can be defined as “the sum of learned beliefs, values and customs that create behavioral norms for a given society” (Yau 1994, p. 49). Culture can be viewed as the “collective programming of the mind” (Hofstede 1991, p.4), since it is everything that people have, think, and do as members of their society (Ferraro, 1990). Indeed, “culture has a profound influence on all aspects of behavior” (Craig, Greene, & Douglas, 2005, p.80). As Rokeach (1973) pointed out more than three decades ago, cultural values are considered the basic motivators in life and are the prescriptions for behavior.

Successful supplier relationships are characterized by high levels of trust, coordination and interdependence (Monczka, Petersen, Handfield, & Ragatz, 1998). Individual country or culture characteristics may influence the management of their supply chain (Tobias Schoenherr, 2009). In order to be able to define the correct SCM’s strategy, companies must consider what type of organization – suppliers and customers- to link to. Each company has its own culture; the conditions of relationship between

companies at the Dyadic level will be directly influenced by their cultural conditions; the presence or not of trust and commitment will model the kind and level of SCM's relationship. Trust is an intangible attribute which is widely recognized as a prerequisite to supply chain success, yet it is believed that trust and its importance may differ systematically depending on the culture (Ueltschy, Ueltschy, & Fachinelli, 2007). This behavior -affected by the company's culture- will impact directly on the chain results; "furthermore awareness of the impact of cultural differences can enable firms to negotiate more effectively, resulting in greater cost savings and profits". (Ribbink & Grimm, 2014, p.114)

Many papers discussing supply chain performance make fleeting or inferential references to the significance of cultural fit in achieving increased and sustained performance but most of them do not focus specifically on or develop the concept. For example, the relational view takes into account certain behaviors -that can be considered cultural ones-: an outcome focus; open exchange of ideas and information; (Cadden, Marshall, & Cao, 2013)

For Hedberg & Jönsson, (1977) strategy is more or less a well integrated set of ideas and constructions (perspectives) as the cause that shapes the flow of decisions in patterns. While plans and positions are dispensable, the perspectives are immutable; that is, once established, the perspectives are difficult to change. Once a perspective is rooted in the behavior of the organization, the associated beliefs become subconscious in the minds of its members.

The importance of cultural aspects of the companies related from a strategic vision of the SCM lies in the fact that not all relations are similar; considering the company as unit of analysis, it is clear its relationship to multiple suppliers as well as to multiple customers as part of different supply chains. Applying a single theory of the firm is not appropriate for the case of the study of the company in its relationship with suppliers and customers of multiple chains. There exists a juxtaposition between two overarching theories, (Dyer & Singh, 1998) Relational View (RV) and Transaction Cost Economics (TCE) (O. E. Williamson, 1979) (Wilding & Humphries, 2006), as a foundation

for development of hypotheses regarding cultural differences in buyer-supplier relationships.

Both theories have been used separately to explain and develop hypotheses linked to the behavior in the relationship between suppliers and customers. However, and because of what is exposed in the previous paragraph, these theories present limitations to explain so different behaviors in the supplier-customer relationship; therefore, both theories can explain complementary behaviors, that is to say, to explain the complex phenomenon of SCM we must reference to more than one theory of the firm; this is because RV and TCE each offer a different perspective and in combination are critical to positioning and understanding the impact of cultural differences in negotiations.

The Relational View as an extension of the Resource-Based View argues that a firm can best develop competitive resources through relationships with other firms; this RV considers the collaborative relationships between buyers and suppliers as key in the search of a sustainable competitive advantage while Transaction Costs Economics, considers supplier-customer relationships as adversarial with emphasis on the costs and problems market interactions. (Ueltschy et al., 2007)

A RV shows how in a supply chain setting, buyers and sellers need to engage in interactions in order to agree on the exchange of products, services and information. Negotiations refer to the interaction between two or more parties with the ultimate goal of achieving a mutually beneficial outcome through cooperation and resolving the often-contradictory elements of individual goals. A dyadic relationship allows researchers to measure the monetary outcome of an integrative deal. Joint profits, in this context, provide an objective performance measure and are an equivalent to supply chain profits within a dyad.

It follows that a strategic vision of the SCM necessarily leads to define how the company will relate to its suppliers - clients, which will be influenced mainly by culture; and as a consequence, the need for different forms of relationships depending on the

degree of affinity between the parties and therefore the strategic segmentation of both suppliers and customers.

3.5.4 Segmentation

The variables to be considered for a correct segmentation are multiple; it is not the objective of this work to analyze them in detail since what corresponds at the strategic level is to define the criteria to be applied to both suppliers and customers. Segmentation criteria at strategic level in relation to the SCM should take into account the degree of relationship that the company will have with its customers and suppliers. This segmentation, raised from the SCM strategy, does not deprive specific areas such as marketing, logistics or purchasing of defining specific segmentations that should be subordinate or at least not contradict the principles of segmentation defined by the strategy of SCM within the business' strategy.

It is for this reason that the segmentation criteria at the SCM's level of strategy are oriented to the way in which the companies will be related to each other and therefore influenced, as already said, by the culture of both companies (Dyad) and by the levels of trust and commitment that can be established between them.

The different forms of relationships between companies are one of the bases, probably the most important, to define the different SCM strategies. There are many works in the field of social psychology that refer to the forms of relationships between individuals, groups and even communities, such as the case of the theory of relational forms (Fiske, 1992); this work has three important characteristics, the four relational forms defined by Fiske are "fundamental", they are the most basic-level grammars for social science; are "general", they give order of most forms of social interactions; and "elementary", they are the basic constituents for all higher order social form. Additionally, Fiske's classification is independent of what units of analysis is chosen and hence can be applied to a wide range of social and organizational situations (Lejeune & Yakova, 2005), which includes relationship between organizations.

Complementing the forms of relationship is of much importance to introduce here the concept of interdependence –the way individuals or organizations in relationships influence each other and the nature of their relationship for obtaining the desired outcomes- hence, interdependence is the essence of SCM and it is a necessary condition for successfully capturing and leveraging inter-functional and inter-organizational integration among supply chain entities (Heide, 1994) ; and it is indispensable for achieving long-term and fruitful strategic partnership (Mentzer et al., 2000)

This interdependence is characterized by four attributes: trust, decision-making, information sharing and goal congruence (Lejeune & Yakova, 2005)

Fiske's forms of relationship combined with the concept of "interdependence" (Sheppard & Sherman, 1998) are the basis of the 4C's in supply Chain Management from which includes four forms of relationship are derived: communicative, coordinated, collaborative and co-opetitive (Lejeune & Yakova, 2005).

A partnership is an inter-organizational entity developed between two independent organizations in a vertical relationship within the supply chain. For this partnership intervening companies should be involved in a Supply Chain Orientation (Mentzer et al., 2001) or partnering orientation that can be strategic (for long-term relations) or operational (operational efficiency and effectiveness and not necessary a long-term relationship) (Mentzer et al., 2000).

Segmentation criteria seem to be a fundamental construct when delineating the SCM's strategy in the business strategy context and therefore it has been considered as a valid construct for this investigation.

3.5.5 Distribution of benefits along the chain

The objective of the SCM -based on the definition that we have adopted for this thesis- is directly related to an improvement in the chain as a whole. As we have just presented in the previous sections, the interrelation with customers and suppliers

would seem to be the key in the search for global efficiency, influenced by the culture of the companies. The distribution of benefits through the chain is an issue that has been studied from different points of view, especially from the perspective of operations research. There are several works in which mathematical models have been developed presenting different optimization models for the distribution of benefits under different circumstances (Cachon & Lariviere, 2005; Zhang, Yin, Zhang, & Nie, 2014). The distribution of benefits has also been modeled using game theory (Guardiola, Ana, & Timmer, 2007). Other studies have been based on operational optimization such as the case of Leng & Parlar, (2009) who propose a lead-time reduction model with the objective of improving efficiency in a dyadic relation; or based on lot sizes (Xu & Yang, 2009) The efficiency at the chain level has also been studied from the point of view of quality. Using a quality cost model, the relationship between quality costs and revenue sharing among partners is examined using a case study in a company which is part of a supply chain (Obied-Allah, 2015). In almost all of these cases the authors have worked on the basis of mathematical models with very good results. However, how to take the results of these investigations so that they contribute reliably to the achievement of the objectives that SCM proposes has not been sufficiently developed. From the point of view provided by the experience of the researcher and the existing literature on the subject, the need arises to consider -at the strategic level- how companies can carry out this distribution of benefits. From this arose the proposal to present a construct that allows us to explore in what way -from the business strategy- guidelines should be established that enable management to carry out the necessary actions to generate shared benefits on the basis that they would not necessarily maximize the benefit of the company itself, but of the chain as a whole.

3.5.6 Internal Alignment

SCM, as we have already mentioned, is directly linked to the management of the supply chain, emphasizing the relationship between the companies participating in the chain;

however, how should the company be externally aligned if it is not aligned internally? In fact, several authors put the weight of SCM on intra-company coordination even more than on the relationship with suppliers and clients.

Internal integration examines integration across various parts of a single organization; external integration examines integration that occurs between organizations (Pagell, 2004). Therefore, I understand by internal alignment the way in which the different departments of a company coordinate internally their activities to obtain altogether a performance superior to the one that could obtain if each department acted in an isolated form. This concept is directly related to the definition of integration: **Integration is a process of interdepartmental interaction and interdepartmental collaboration that brings departments together into a cohesive organization.** (Kahn & Mentzer, 1996) In other words, Integration refers to the extent to which separate areas within a firm work together in a cooperative manner to arrive at mutually acceptable outcomes.

The definition of Mentzer et al., (2001, p. 18) is clear when referring to the importance of internal alignment in their definition of SCM "... the systemic, strategic, coordination of the traditional business functions and the tactics across these business functions within a particular company"

This Supply chain management involves the coordination of a wide range of interrelated activities and flows that extend across functional and organizational boundaries (Mentzer et al., 2001). Internal alignment is an important antecedent to alignment between supply chain partners (Waller & Hoek, 2008).

(Handfield, Cousins, Lawson, & Petersen, (2015) propose a model based on the dynamic capabilities that allow improving the performance of the supply chain taking into account the internal alignment - strong internal communication lines - combined with external supply relationships based on defined metrics and processes.

On the other hand, there is a direct relationship between the results of the alignment (internal and external) and the incentive systems, a subject that we analyze in the light of the theory of the agency. Managers may well understand the importance of

integrating activities, but as a practical matter, integration is often quite difficult to achieve (H. Chen, Mattioda, & Daugherty, 2007) .

As a consequence of both, the resercer insights and the literature review, internal alignment is a necessary construct to be analyzed in the research context.

3.5.7 Incentive to managers

Incentive problems in supply chain should be seen from two different views. On the one hand, how the firm aligns its own managers to the goals of the company so that their decisions contribute to the performance of the company or the supply chain as a whole. Incentive schemes are a tool with which companies seek to align the interests of their employees with corporate goals; incentives influence priorities and behaviors because they do not rely on their effect on economic self-interest alone. Instead they tap a number of human motives, among them the need for approval, and the need to be recognized as making a valuable contribution (Maslen & Hopkins, 2014). Executives tackle intra-organizational problems but overlook cross-company problems because the latter are difficult to detect. Coordinating actions across firms is tough because organizations have different cultures and companies can't count on shared believes or loyalty to motivate their partners (Narayanan & Raman, 2004). It is known that Supply Chains extend across several functions and many companies, each of which has its own priorities and goals; yet all those functions and firms must pull in the same direction to ensure that supply chain deliver goods and services quickly and cost-effectively. A company can increase the busieness' size itself aligning partners' incentives; thus the fates of all Supply Chain members are interlinked; so the challenge is to get all the firms in the supply chain so that everybody wins; the only way to do that is aligning incentives. (Narayanan & Raman, 2004).

On the other hand, we refer to incentive alignment to the firms participating in the supply chain, in this case, two companies that work together in a Dyad should necessary define incentives that justify the effort in collaborating, especially if the

benefit obtained by the supply chain is not reflected on its own benefit. A supply chain works well if its company's incentives are aligned, that is, the risks, costs and rewards of doing business are distributed fairly across the network; if incentives aren't aligned, the companies' actions won't optimize the chain performance (Narayanan & Raman, 2004).

Both approaches are closely linked; incentive programs to managers should consider as goals the alignment at the different levels of relation strategically defined within the Supply Chain through incentives to these related firms. As consequence, when firms decide the supply chain strategy in the framework of business strategy, they should consider the alignment of their managers with this supply chain strategy taking into account these two complementary views, internal and external, of incentive alignment.

Managers act and make decisions based on how they will be measured by their management; so a very illustrative example is related to the Texas city disaster where managers did not act to prevent Texas City because every incentive and potential penalty they faced told them not to. (Bergin, 2011, pag.85) cited by (Maslen & Hopkins, 2014)

Performance measure is an essential part of the design of any incentive system. The strength and value of incentive in organizations are strongly affected by the performance measures available. (Baker, 2002).

In the SCM's scenario if there is no clear incentive system that pushes managers to external alignment members' loyalties may lie with their own organizations or adjoining nodes rather than with the overall chain (Giunipero & Ketchen, 2004)

Although, as can be seen, the existing literature has covered the proposed topics in depth, there is no direct connection with these problems and their effect on the definition of the SCM strategy.

Being able to define a correct business strategy entails defining the coherence between SCM's alignment and incentive programs for managers. I have detected the

need to explore this topic in greater depth -especially having found very little development of the subject in the literature- convinced of the strong influence that this can have on a correct operationalization of SCM strategies and therefore I consider the need to define its corresponding construct.

3.5.8 The role and profile of the Supply Chain Manager

This strategy concept has to be managed somehow. We need to create a body of knowledge that can be useful for practitioners. If we don't transmit a clear message to practitioners, we will be on the other side of the river without a bridge to connect scholar's theory with manager's necessities.

Are the functions or responsibilities of a Supply Chain manager clear? If, as we have established, SCM is strategic, how does the Supply Chain manager participate in the Business strategy?

For the SC manager to fulfill his/her mission is important to determinate the role he/she has to play in the organization. The SCM is the management of a whole chain or net therefore pretend the manager meets or enforce the strategic targets for SC has a special condiment, to manage the chain outside the organization.

Few can do an organization to align a chain if the same organization is not internally aligned. As it was discussed before, the necessity of a multidisciplinary approach was in the evolution of OM, a cornerstone for the development of SCM. It is well known nowadays the importance of the internal integration; different areas working together toward the company's objective, opening the water light compartments, or silos often caused by the organization itself in a search for overall efficiency as a sum of partial efficiencies, sometimes caused by the influence or power exercised by some managers for their own benefit or the benefit of the areas under their responsibility. To a correct implementation of SCM Jespersen, (2005) suggests changes in the traditional organization from a functional structure to a matrix-like structure, where functions become integrated. A process rather than a function approach direct the efforts on

meeting the customer's requirements, thus the overall organization is around these processes; the customer focus not always happen in companies where the silo mentality has prevailed (M. C. Cooper, Ellram, et al., 1997).

Under this paradigm the role of the SCM should be mandatory of coordination both internally and externally. Therefore, the Supply Chain Manager would occupy a staff position within the organization; as a consequence, he/she has to manage other skills very different as the principal mission is to coordinate and obtain the necessary collaboration (internal and external) of the different areas and organizations within the Supply Chain.

This SC Manager would manage soft skills and hard ones, but in what proportion? It is mandatory to have a holistic view of the business and the role strategically defined by the top management? He/she, by one side, has to be the nexus between the organization and the stakeholders? If the answer is yes, he/she has to do it directly or indirectly through the manager that has direct contact with those identified as partners in the coordination or cooperation (depending on the SCM engagement degree); on the other side, is his/her fundamental role to internally align the decision-making of the areas with the defined strategy? Hence it seems that the communication degree and its level of coordination inside and outside the organization plays a fundamental role for a successful strategy's implementation.

It would seem reasonable to think of the SC manager's role as that of an orchestra director who prepares the strategy in a previous stage, then defines the role of each member of the orchestra and finally coordinates the execution.

Once the organization is internally aligned ought to open their channel to the chain; managers in the chain need to be in touch each other helping the SC manager task in the coordination of the chain. Again the SC manager is the enabler to make things happen.

How the SC manager can achieve his/her objectives without a formal power over areas that must coordinate is the real challenge that is presented; hence, the importance of the SC manager profile. Clearly we mean not necessarily a logistics manager is the one

who is to be assigned to manage the SC, although the need for internal and external coordination that has always required logistics positions it favorably. However, the risk is in the counter-message that can reach the organization that related SCM directly with logistics; the same happens exists hierarchical dependence between the logistics manager and the SC manager.

Derived from this approach of how the SCM strategy has to be presented is necessary to pay special attention to the incentive or compensation systems applied to managers. The direct relation between the SCM's strategy and the business's strategy is underlined through this important issue. The alignment between goals, incentives and SCM initiates with the internal alignment; the incentive programs for manager ought to ensure that incentives for the different areas are not contradictory with respect to the particular objectives concretion. Ones achieved that incentive programs are in line with the business as a whole we will have reached a necessary but not sufficient condition toward the SC integration.

The role of the SC manager in these previous stages is to achieve the alignment of the incentive programs for managers in order to harmonizing the SCM strategy with the business strategy, otherwise, it will be impossible the cooperation since managers will give priority to their particular compliance objectives although this does not accompany the SC strategy.

Therefore, taking into account the previous considerations regarding the importance that the supply chain manager should have plus the little literature developed around the role that corresponds to him/her as coordinator of the actions that -both internally and externally- should be carried out by managers of the different areas, it is very important to analyze the role, as well as the profile that a SCM manager should have and, therefore, I consider here the justification of a construct that guides the research to accomplish this objective.

3.6 Presenting the constructs

At this point, all the necessary background information to begin the fieldwork have been developed and presented.

As it has already been said in the introduction to this thesis, the purpose of the constructs is to delineate and delimit the map of the investigation. They arise –as it was developed previously in this chapter- from a combination of two elements: on the one hand, the intuition of the researcher, who, a priori, had, through his experience as a practitioner, consultant and teacher, a clear idea of the most salient aspects that make the correct functioning of the SCM. However, this intuition and idea a priori could be understood as a bias in research, that is why the definition of constructs has had a second and fundamental component, the theoretical revision of the different components that should be present in the form of constructs arising from an intensive review of the SCM literature, which was previously developed in this chapter.

To guide the research, and based on the justification presented in the previous subsections of this chapter, seven constructs were identified to be considered (Figure 6), These constructs are the analyzed aspects to be evaluated in order to understand how the internal organization, through the defined strategy guidelines defined at a business strategy level, gives way to a correct SCM implementation.

#	Construct	Definition	Reference
1	Degree of participation of SCM strategy in the business strategy	Indicate if the SCM strategy take part of the business strategy. Is determinated by the existence of SCM strategic initiatives fromally included in the business strategy document. This construct has a directed relation to all the other constructs.	(P. K. Chen, 2011; Cheng & Grimm, 2006; Gonzalez-Loureiro et al., 2015)
2	Criterion to guide segmentation of providers and customers	Define, from the strategy, the guidelines related to SCM so that managers can define the segmentation criterion for the relationship with customers and suppliers. tries to capture the criterion with which managers group clients and suppliers according to the level of cooperation / collaboration, coordination or simply transactional.	(Ahmed, Kristal, Pagell, & Gattiker, 2017; Segura & Maroto, 2017)
3	Culture of the organization	It reflects how the cultural conditions of the company, its greater or lesser compatibility with the culture of customers and suppliers, influence the relationship with them.	(Cadden et al., 2013; Cannon, Doney, Mullen, & Petersen, 2010; Ueltschy et al., 2007)
4	Distribution of benefits along the chain's criterion	It shows the strategic guidelines that enable managers to work with some customers and suppliers to achieve greater chain efficiency regardless of the link where efficiency occurs. Indicates if from the business strategy managers are enabled to work collaboratively with clients and suppliers to make the chain more efficient even if the result does not occur in the company. This construct has a corelation with Constructs N° 2, N° 3 and N° 6	(Cachon & Lariviere, 2005; Leng & Parlar, 2009; Zhang et al., 2014)

5	Internal alignment of all the firm's areas that participate in the SCM strategy	Indicates the degree of coordination and internal collaboration between areas to contribute to a better chain efficiency. Analyzes in what degree the different areas of the company work collaboratively looking for the best efficiency of the company and the chain. This construct is directly related to Construct N° 6	(H. Chen et al., 2007; Kahn & Mentzer, 1996; Waller & Hoek, 2008)
6	Coherence between strategic SCM'S alignment and incentive program for managers	Determine if -according to what was established in the strategy- the incentive system for managers is coherent and seek to promote efficiency inside the company, coloboration among areas, and in the chain beyond the company itself. This construct has direct relation to Construct N° 5 and Construct N° 2.	(Dencker, 2009; Holmstrom & Milgrom, 1994; Prendergast, 2008)
7	SCM manager's role and profile	Show the pricipal funtions of the SCM manager, his/her position in the company structure (staff, opertaive function,) and his/her profile, the greater or lesser importance of soft and / or hard skills.	(Lambert et al., 2008b)

Figure 6 – List of constructs

4. CHAPTER 4 – FIRST FIELD WORK - DELPHI STUDY

4.1 Introduction

This chapter describes the first of the two field studies that comprise this thesis. The work is structured as follows:

It begins with a brief about the Delphi methodology and when is appropriate its use; the next step is a detailed explanation of all the methodological considerations applied in the previous stages, the field work and further analysis; then the rigor's and validity's justification in the application of the methodology is presented; it follows the field study where propositions are presented for each analyzed construct; finally, is presented a discussion and conclusions of the study.

As it was expressed in the previous chapters, we explore a **set of constructs at the firm level** that were identified as critical for the successful implementation of a SCM strategy. If the strategic level is not considered, any effort in the area of SCM will hardly get satisfactory medium and long term results.

As it was explained in Chapter 3, and in order to guide both field studies in Chapter 4 and Chapter 5, seven constructs were identified (see Figure 6 in pervious chapter). These are the aspects to be evaluated in order to understand how the internal organization, through the strategy guidelines defined at a business strategy level, gives way to a correct SCM implementation.

To address this stage of the investigation, the question to answer is:

RQ1 (Delphi Study): Which are the common ground and the thread that the analysed constructs lead us to understand how the SCM phenomenon develops within organizations in LATAM?

In this stage of the research a Delphi Methodology was applied in order to obtain findings based on consensus on the issues that concern directly to this research and, as stated above, are guided by the constructs as defined herein.

4.2 Delphi Methodology

4.2.1 Justification of the use of Delphi methodology

Delphi is a structured group communication methodology based on soliciting expert opinions about complex problems or novel ideas, through the use of a series of questionnaires and controlled feedback. It is founded upon the use of techniques that aim to develop from a group of informants an agreed view or shared interpretation of an emerging topic area or subject for which there is contradiction or indeed controversy (Day & Bobeva, 2005)

Delphi has proved consistency when the problem under study is complex and/or has not been grounded (Grisham, 2009); or with the aim of describing or delimitating when the evidence is insufficient, unpublished, excessive or controversial.

Delphi is also an effective, efficient and flexible research methodology when exploring new concepts where there is incomplete knowledge about a problem or a phenomenon.

Delphi is the desirable choice when the problem does not lend itself to precise analytical techniques but carries benefit from subjective judgments on a collective basis, and when the individuals needed to contribute to the examination of a broad or complex problem have no history of adequate communication and may represent diverse backgrounds with respect to experience or expertise (Linstone & Turoff, 2011).

It can be used when there is incomplete knowledge about a problem or phenomena (Skulmoski, Hartman, & Krahn, 2007). This method is used as a technique for prediction and consensus in contexts of uncertainty, and in situations where it is not possible to

have recourse to other techniques, which are based on objective information (Landeta, Barrutia, & Lertxundi, 2011)

The Delphi method is increasingly applied in social science research; it is widely used successfully when the problem under investigation does not lend itself to precise analytical techniques but it can benefit from collective judgments. (Melnyk, Lummus, Vokurka, Burns, & Sandor, 2009).

While the Delphi is typically carried out as a quantitative technique (Rowe & Wright, 1999), it can be well applied as a qualitative technique. Qualitative research is interpretative in the sense that the researcher is interested in how the social world is interpreted, understood and experienced. The researcher is flexible and sensitive to the social context within which the data was collected; and qualitative research is about producing holistic understandings of rich, contextual and detailed data. (Skulmoski et al., 2007). The qualitative researcher attempts to make sense of or interpret the phenomena in terms of the meaning the participants place on them (Creswell, 2007). It is much more than a merely form of data collection, its iterative feedback methodology develops an insight, which as a whole, is more than the sum of the parts (Day & Bobeva, 2005).

In the case of this doctoral thesis, it is expected, with the application of Delphi methodology, to find common ground and a common thread that will lead us to understand how the SCM phenomenon develops within organizations in LATAM.

Delphi methodology is a common one in SCM studies. Among others, Darkow, Foerster, & von der Gracht, (2015), in their research on the management of food supply chain they gather insights on emerging practices in European foodservice supply chains from two parallel Delphi surveys. In this case, the questions were designed to understand how managers perceive the emerging domain of sustainability in supply chains. Garcia Reyes & Giachetti, (2010) conduct a research that aimed to develop a supply chain maturity model so that Mexican firms could evaluate their current supply chain operations and develop an improvement road-map. In this case Delphi methodology was used with 80 experts in Mexico. Melnyk et al., (2009), in their Delphi,

bring together leading practitioners in supply chain management with leading supply chain management researchers. The findings show that while the focus of the current tactical supply chain view is relatively limited to issues of delivery, risk, and leadership, the SCM is more complex and demanding. The findings also show that there is generally no difference between researchers and practitioners in terms of how they view the issues. The particularity of this Delphi is that each of the two rounds were taken with different panels of experts. Ogden, Petersen, Carter, & Monczka, (2005) utilized the Delphi methodology with panels of professionals from fifteen Fortune 1000 firms around the world to analyze the uncertainty associated with potential supply chain management strategies. Wolf & Pickler, (2012) examine Supply Chain conflicts across domestic and international jurisdictions on a Delphi Study that comprises a panel of fourteen experts who participate in three rounds of successive surveys during a period of one year.

So, it is important to highlight the diversity of research carried out in the field of SCM using the Delphi methodology, but even more so the diversity in the way the methodology is applied, which shows that there is no strict procedure in its application. We also emphasize that none of these works have much to do with the scope associated with this research.

Reviewed the literature on SCM that has used this methodology it can be said that the use of the Delphi methodology for developing SCM strategy in the field of business strategy represents an original contribution

Another reason for the selection of the use of the Delphi methodology is related to being able to link outstanding professionals with outstanding researchers as it is the aforementioned case of the work of Melnyk et al., (2009).

If it is considered the nature of the research that is carried out, which highlights working with social sciences such as business organization and operations management, there is still, because of the novelty of the discipline of SCM and the little coincidence in terms of its scope and use, a theoretical framework to be developed

and, therefore, the use of the Delphi methodology, as part of the development of this doctoral thesis, is relevant.

As it can be seen, the status of SCM development meets the conditions mentioned above which make the application of the methodology Delphi be plausible for the purpose of this investigation.

4.2.2 Delphi Process

The nature of Delphi may be characterized as a methodology for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem; while a three round Delphi is the most common procedure, single and doubles round Delphi studies have also been completed.

- The stages of the Delphi process –which are detailed in this subsection- are:
- Research design
- Selection of experts for the panel - Interviews
- Previous test
- 1st. Round Delphi questionnaire – Send and receive
- Processing of information
- 2nd. Round Delphi questionnaire – Send and Receive
- Processing of information
- Analysis of convergence and congruence
- Discussion and conclusions

The complete Delphi process is schematized in Figure 7.

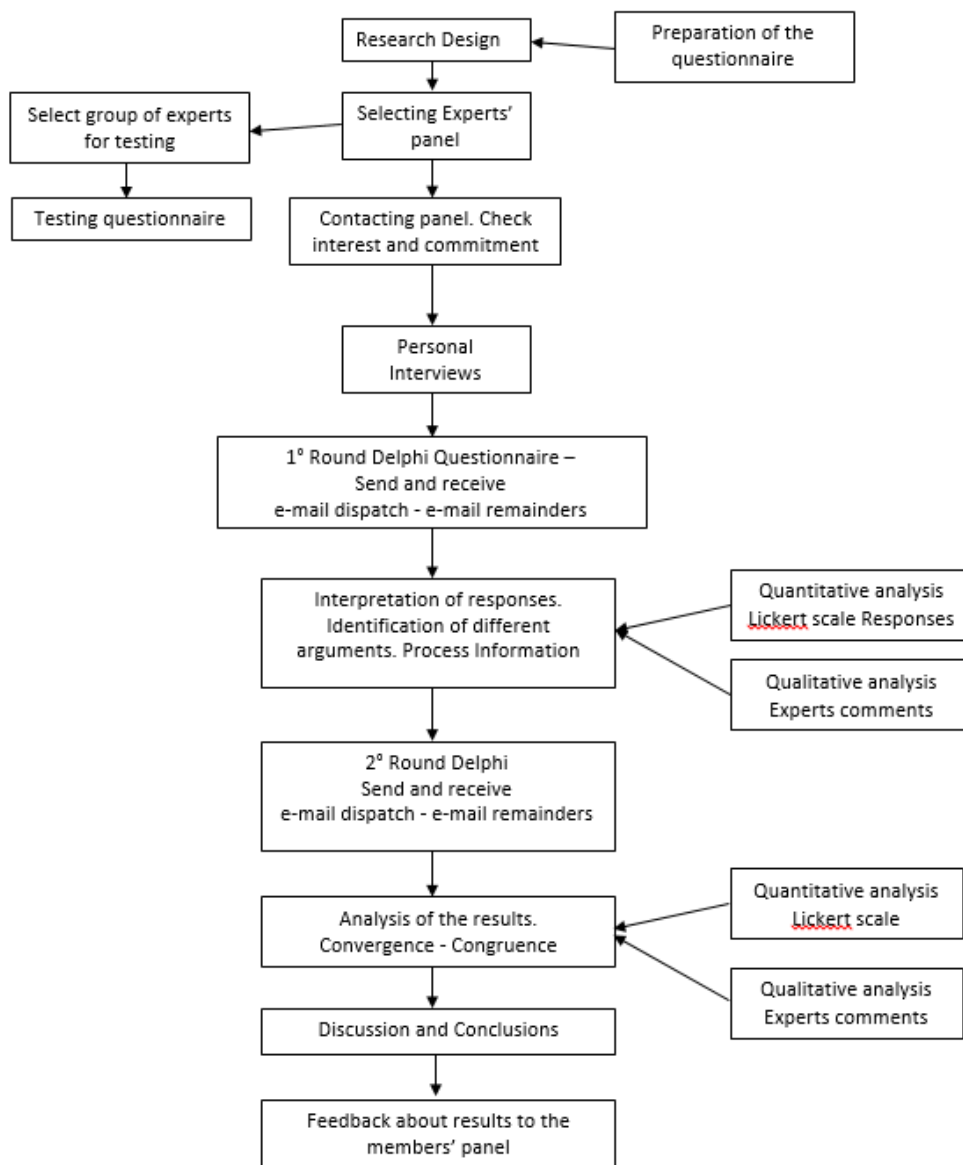


Figure 7 – Delphi process

In accordance with other works based on the application of the Delphi methodology for the evaluation of a conceptual framework, such as the case of this study, the list of topics presented to the experts reflects the perspectives and components of the proposed framework, discarding the initial "generation round" used in some Delphi processes (Day & Bobeva, 2005).

In the case of this Delphi application in particular, the replacement of this initial collection of opinions is replaced with the synthesis of the key issues identified in the literature, that is, with the proposal of the constructs that guide the present investigation.

However, a “preliminary round” was conducted with three of the panel's experts to have feedback on two aspects:

To ensure that experts from different countries, although all of them speak Spanish, understand the lexicon used in the questionnaire.

To have a feedback to ensure that the questions were clear in their wording and would be correctly understood by experts.

4.2.3 Methodological rigor and validity

As an example of the validity of the Delphi methodology as a research tool, it can be based on the number of dissertations and doctoral theses in which it has been used starting with 44 in the quinquennium 1970 -1974 and growing until reaching 335 in the 1985 - 1990 and 1989 - 1994 to stabilize already in 276 in 2000 - 2004; the scientific community has accepted this methodology as a research technique with validity and current use (Landeta, 2006)

The methodology offers reliability and generalization of outcomes, ensured through iteration guided by principles of democratic participation and anonymity; its iterative feedback methods develops an insight which, as a whole, is more than the sum of the parts (Day & Bobeva, 2005)

Rigor is crucial in any research, be this qualitative or quantitative. Rigor is improved when the researcher leaves an audit trail (Sandelowski, 1986) cited by Skulmoski et al., (2007). In the specific case of Delphi, the external validity doesn't apply as in other methods where replication of outcomes from another context is a necessary condition, especially in quantitative research. Because of its nature, Delphi doesn't produce

statistical meaningful results; the results represent the synthesis of opinions of the particular group, no more, no less (Gordon, 1994 p.1) cited by Day & Bobeva (2005)

To give methodological rigor to the Delphi process, strong emphasis was placed on three fundamental aspects

A meticulous selection of the panel so that, beyond the level of knowledge on the subject, it would have a strong commitment to the methodology, that is, the exchange of opinions with the rest of the panel in search of convergence.

A strict design of the questionnaire with focus on having a clear and homogeneous interpretation by the panel, avoiding ambiguities and oriented to strictly respond to what was planned in the constructs that served as the basis for the investigation.

Step-by-step documentation of the entire process that allows a strict audit of the entire methodological procedure carried out.

4.2.4 General feature of the implemented Delphi study

Listone & Turoff, (2002) present a set of features of Delphi studies that can be used as guide to characterize them; based on his study, Figure 8 resumes the taxonomy of the Delphi for the study developed in this chapter.

Taxonomy of Delphi

Criteria	Choice	Explanation
Purpose of the study	Exploration	Understand the status-quo of SCM in Latin-América through asking experts.
Number of rounds	Two	Convergence detected. Difficulty to obtain full responses in third round.
Participants	Homogeneous group	SCM's Latin-America experts
Mode of operation	Mix. Face-to-face and Remote	Previous personal interview explaining the method and objective of the research, then remote interaction
Anonymity of panel	Pseudo-anonymous	Each member was informed who formed the panel so that they knew the level of the rest of the members with whom they would exchange opinions. Nobody knew who each answer was.
Comunication media	e-mail	Interchange with the panel via personal e-mail in Excel format.
Concurrency of rounds	Sequential	Sequential set of round. 1° Round - Analysis - Feedback - 2° Round analysis - Conclusions

Figure 8 - Delphi design choices in the SCM status in Latin América research

There is no consensus about the optimal number of participants. So, there exists great variability in the number of participants; there studies with less than ten experts and other ones with hundreds (Landeta and Barrutia, 2011; Listone and Turoff, 2002; Landeta, 1999; Skulmoski et al., 2007). Turoff, (1970) recommend for the size of a Delphi panel of experts a range between ten and fifty ones.

The number of rounds is variable and dependent upon the purpose of the research. Two or three iterations are sufficient for most research (Delbecq, Van de Ven, & Gustafson, 1975; Listone & Turoff, 2002; Skulmoski et al., 2007).

In the case of this investigation, the problem of defining the sample laid in the fact that the maturity of SCM in Latin America is low, and it is scarce the number of "experts" to draw upon.

Next, it follows the definition of expert; taking into account that three kinds of expert can be considered (specialist, affected and facilitators), for this research the concept of specialist was that have been considered for the panel selection. Expert is that individual whose situation and personal resources enable him/her to contribute

positively to the achievement of the end that has motivated the initiation of the Delphi work (Landeta Rodriguez, 2002).

4.2.5 Selecting the experts

Selecting the panel was a difficult work. On one hand, there are few SCM experts, but on the other hand, it was very important selecting experts who committed themselves to research, not only in terms of compliance with the requirements of the Delphi, but also to generate a sincere debate with their colleagues. The commitment in this sense was achieved by trying to reach all the members of the panel based on personal contacts. In most cases, priority was given to experts who, having met the pre-established requirements to be selected, had previously had professional contact with the researcher (ten of the thirteen cases); this generated an additional commitment that, added to the constant communication during the development of the Delphi, produced 100% response from the whole panel throughout the entire process.

On the other hand, because of the extensive questionnaire and the need to analyze and comment on each expert, based on the comments of their colleagues, a very large sample would have jeopardized the success of the work (experts not responding in the second round). Therefore, respecting the minimum sample sizes suggested, a panel of thirteen experts was assembled.

Though for the selection of the panel it was decided a combination of experts from different fields and profiles, thereby scholars, consultants and practitioners were summoned. Nevertheless, this kind of selection is considered a homogeneous group.

The reason of resorting to this mixture was based on the need to acquire a complete view from the theoretical to the practical application, though all the results were analyzed as a whole.

Once the aforementioned conditions had been met, the final selection was made using a matrix (Figure 9) with selection criteria suggested by (Landeta Rodriguez, 2002). The "Level of knowledge" criterion was evaluated based on the experts' CV; the criteria

"Degrees of affectation", "Facilitating capacity and "Degree of commitment" were evaluated subjectively by the researcher after each personal interview. After evaluating in light of these criteria, added to the conditions already explained, it was found that the thirteen previously selected experts satisfactorily met the requirements to be part of the panel.

Annex 1 details the composition of the experts' panel.

EXPERT	QUALIFICATION												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Level of knowledge	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
Degree of affectation due to the consequences of the study	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
Predictive capacity	NOT APPLY												
Facilitating capacity	MEDIUM	HIGH	MEDIUM	MEDIUM	MEDIUM	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	MEDIUM	HIGH
Degree of commitment	ALTA	HIGH	MEDIUM	MEDIUM	MEDIUM	HIGH	HIGH	HIGH	MEDIUM	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Cost	NOT APPLY												
Proximity	NOT APPLY												
Organizational considerations	NOT APPLY												

Figure 9 – Experts' selection matrix based on Landeta and Rodriguez (2002).

Finally, based on the same arguments, it was decided a two round questionnaire with sixty-one questions covering the topics of the investigations that would guide the investigation regarding the proposed constructs in order to linking business strategy with SCM strategy and its further operationalization. Both decisions were taken pursuing the goal to get 100% of responses panel in the two rounds, which was achieved after a thorough monitoring.

Another factor contributing to success in this regard has been the constant interaction thanks to strong communication between researcher and experts. Before incorporating each of the experts, they were personally visited by the investigator with the aim of making them aware of the objectives pursued by the research, the details of the methodology, the importance of their participation and the expected results.

Interviews (13 in total) had durations from 1.5 hours to 4 hours. It was also an important contribution to the excellent response of the entire panel the researcher commitment to sharing the results of this research and future related research.

Annex 2 shows the agenda of each previous interviews.

in addition to the conditions shown in matrix of figure 9 and in order to understand the phenomenon under study in the Latin American region, a special care was taken to assure us that the panel had experience in this region. The countries on which the experts have worked and they know very well the bussines framework are Argentina, Chile, Uruguay, Ecuador, Colombia, Peru, even they know the idiosyncrasy of all the Latam countries and findings could be spread to all the Latam countries Ex-professo, Brazil and Mexico have been excluded from this work; in the case of Mexico due to the strong influence of their equipment of management because of its proximity to the US; in the case of Brazil due to the size of its economy that could bias the results.

In this way, it can be considered that this Delphi study allows obtaining conclusions about SCM status in LatAm.

Taking in account that the principal objective of this Delphi is knowing the personal opinion of the experts, emphasis was placed on each participant of the panel of experts that what is requested of them is their own opinion; they were asked not to reflect aspects of how things happen in practice, but only to put their personal opinion on the issues in question in their answers. Each of the experts was especially warned about the nature of their responses, which should reflect their own opinions. There was a strong emphasis on only expressing their views regardless of what goes on in practice.

Regarding the anonymity, essential in this methodology, we chose pseudo anonymity so that experts know with whom they were interacting during the process but none of them knew what each expert responded throughout the work. There was also a commitment by all experts not to interact between them. In fact, neither of them had professional links that could have implied personal interactions with each other. This

resulted in a greater degree of commitment between experts knowing they were interacting with colleagues with renowned professional career.

4.2.6 Defining the questionnaire

A form, in excel format, was sent to each of the experts. They were requested to answer all sixty-one questions for which a six-level Likert scale was used. The use of this scale is especially useful since it will allow us to adjust the nuances in the opinions of the experts.

Although for the valuation of the items Likert is usual to use five levels, for this questionnaire an even scale was considered the best choice, on the one hand, to avoid the central tendency that occurs in case of odd levels, considering experts have enough experience to adopt a specific position; on the other hand, to increase the range of alternatives and thus avoid the "central tendency bias". Central tendency bias occurs when raters or market research respondents avoid using extreme response categories. People may naturally tend to provide similar, "middle-of-the-road" responses or ratings for multiple items, unless they already hold very strong opinions one way or the other toward the question topics (Croasmun & Ostrom, 2011)

Acquiescence is related to habituation, and it occurs when respondents passively agree with an interviewer or survey questions. Agree-disagree scales are the most often-used response options in opinion surveys; it is important to take steps to avoid the chance that respondents will passively agree with your statements in order to quickly complete the questionnaire or provide what they think may be the "right" answers.

Since they have no neutral point, even-numbered Likert scales force the respondent to commit to a certain position (Tinsley & Brown, 2014), even if the respondent may not have a definite opinion. Odd-numbered Likert scales provide an option for indecision or neutrality. By giving responders a neutral response option, they are not required to decide one way or the other on an issue; this may reduce the chance of

response bias, which is the tendency to favor one response over others (Cloud, 2000). Respondents do not feel forced to have an opinion if they do not have one.

However, there is a debate among researchers concerning the optimum number of choices in a Likert-type scale. There are some researchers who prefer scales with seven items or with an even number of response items (L. Cohen, Manion, & Morrison, 2000). Symonds, (1924) implied that the optimal reliability is with a seven-point scale. If there are more, the increases in reliability would be so small that it would not be worth the effort to analyze the difference or develop the instrument.

Considering the nature of the questionnaire, of the research itself, and the vast experience of the experts summoned to the panel a six-points Likert scale was selected, and consequently, the options - using a Likert scale - were defined as:

- 1- Totally disagree
- 2- Very disagree
- 3- Disagree
- 4- Agree
- 5- Very agree
- 6- Totally agree

For the formulation of questions (in fact they were presented as affirmations to correspond with the Likert system of answers) it was sought that each question refers only to a specific topic and thus to avoid dispersion in the answers.

Because the length of the questions can influence the level of consensus and that short or too long questions can have a negative impact, according to an experimental study by Salancik, Wenger, & Helfer, (1971) quoted by Landeta Rodriguez, (2002, p.75), it was tried that the questions (affirmations) had an extension between 20 and 30 words.

In addition to the response according to the aforementioned scale was asked to make the explanations and/or comments they considered could enrich each answer although these were not mandatory. Experts were encouraged on this issue as that

would make more enriching the next stage in which experts could read the comments of their colleagues before returning to answer the questionnaire.

From the methodological point of view, receiving this complementary information is what gives the Delphi methodology its qualitative character. The explanations that each expert provide in the answers, it allows the researcher a better understanding of the vision that experts have about SCM. It also gives the possibility, in cases of rectification of answers in the second round, to understand how the anonymous interaction between experts contributed to the degree of consensus obtained.

The next step was the definition of a matrix relating the general topics, constructs and questions we wanted to be answered. Based on it, the questions were defined and located within the matrix to ensure that there were no questions out of context or missing questions as it can be seen in Figure 10.

#	Definition of constructs	Question related to the construct
1	Degree of participation of SCM strategy in the business strategy	1; 2; 3; 4; 5; 6; 9; 10; 11; 59; 60; 61
2	Parameters to guide segmentation of providers and customers' criteria	22; 23; 24; 25; 26; 27; 28; 29; 30; 31; 32; 33; 34
3	Culture of the organization	12; 16; 17; 27; 28
4	Distribution of Benefits along the chain	13; 14; 15; 18; 19; 20; 21
5	Internal alignment of multiple areas that participate in the SCM strategy	7; 8; 35; 36; 37; 38; 39; 40; 41
6	Incentive program for managers.	53; 54; 55; 56; 57; 58
7	Role of SCM manager	42; 43; 44; 45; 46; 47; 48; 49; 50; 51; 52

Figure 10 – Relation between questions and constructs defined in the Theoretical Framework.

The result was a set of sixty-one questions presented as statements that allowed respond according to the options set in the defined Likert scale.

Annex 3 lists the questions presented to experts.

With the already defined questionnaire we proceeded to make a preliminary round with a selection of the panel (three members) in order to ensure that the questions were properly understood, especially considering that there could be differences of interpretation by experts from different countries, though all of them have Spanish as mother tongue.

As result of this preliminary round, the questionnaire was adjusted taking into account the recommendations of these three experts.

It is important to highlight the rigorous work that was done, both in the process of information to the experts as well as in previous meetings with each of them. In addition to the above, monitoring and constant communication throughout the process allowed, as already mentioned, a 100% response in the two Delphi rounds conducted; we obtained the thirteen groups of responses in each of both rounds. Annexes 4 to 9 are examples of the e-mail communication and monitoring maintained with all the experts during the process while Annex 10 shows the track of the process.

A total of 332 e-mails between the researcher and the members of the panel were taken during the period of time that was part of the process of interaction with the panel from May to December 2015. A very fluid communication was generated.

Of the 332 mails, 162 were sent by the researcher while the other 170 were sent by the members of the panel.

4.3 Delphi 1° round

The results of the first round allowed to interpret a first, no biased, opinion since experts had not interacted yet, and therefore, a convergence analysis is not yet possible.

In the following subsections, the experts' answers are analyzed in the light of the constructs, taking in account that each question is oriented to a specific construct, into some cases to more than one.

4.3.1 Degree of participation of SCM strategy in the business strategy

To carry the experts to the relationship between strategy and SCM, the first group of questions aimed to understand their opinion regarding the business strategy. In this first round, consensus on the role of business strategy was obtained.

Experts agreed that companies regardless of their size or origin should have strategic planning. In small companies, this can be informal, but most important is its existence since, without strategic planning, there is no possibility of generating a uniform communication towards execution. They also agreed, for the same reason, that SCM strategy should be aligned with the business strategy

However, from some of the complementary comments, different interpretations arise regarding the role that the SCM strategy would play. I quote the comments of two experts, both agree on the importance of aligning the strategy of SCM with the business strategy, but with different views, one expert looks inside the company *“The SCM is a main actor when defining the business and contributes decisively to the cost structure and therefore to the results of the company”* while another one refers to SCM strategy in terms of the chain. *“It is about defining the scope of SCM for the company. In my vision, SCM includes the definition of customer relationship strategies, suppliers, manufacturing, customer service, so all these issues should receive business planning guidance”*.

Although I did not do an extensive development of the topic here, after the second round and the discussion this aspect is complemented. The explanation is based on the fact that there is a general agreement in this first round regarding the need for companies to define their business strategy and a SCM strategy and that the latter be aligned with the former.

4.3.2 Segmentation criteria

Asking the experts about segmentation, they all consider the importance of segmentation criteria for providers and customers. The criterion of segmentation had previously been considered by some experts when questioned by the relationship with customers and suppliers when addressing the issue of the scope of the SCM.

They agreed that there should be a concept of segmentation on both clients and suppliers, but the experts' opinions diverged somehow when asking if this segmentation criterion had to be defined at the strategic level or differ for different areas of the company. However, almost all the experts in this set of questions answered about segmentation criteria that are not necessarily related to the SCM, many referred to the need to provide different levels of service to clients, others simply pointed out that not all clients are equal while others related the segmentation of suppliers according to what products they provided. Very few experts referred to segmentation criteria with direct reference to the SCM; with whom to establish collaborative relationships of greater or less depth, with whom only to transact, etc. In the discussion chapter, we will return to this specific topic.

Is important to highlight that culture can be considering a criterion for segmentation for some experts, though, it does not seem to be an important issue for others. Therefore, it begins to be observed that the constructs are not independent of each other and in some cases they are structured hierarchically.

In this way, I show two examples of the aforementioned differences of opinion. An expert expresses "...should be more a reflection on the importance of the supplier in the portfolio or strategies of risk reduction of supply, rather than the cultural..." while another expert says "... Clients with greater affinity generate an environment with greater chances of success when looking for common benefits ..." he clarifies that the same also applies to suppliers

Also the segmentation criterion is present when asking about the degree of involvement that providers / clients can have in the definition of the SCM strategy; indirect involvement of some customer / suppliers in defining the SCM strategy would

be important by most experts; for many experts, the segmentation criteria can apply in this issue. This would indicate a degree of maturity about seeing the SCM beyond the borders of the organization.

4.3.3 Culture

There was a great consensus -11 of 13 are very agree o completely agree- in the panel regarding how the culture impacts the SCM strategy. In general, they believe that the way in which the SCM strategy is designed within the business strategy will be strongly conditioned by the company's culture. As an expert said "*there are companies with more SCM culture and others not, you can see directly in the definition of the strategies ...*" while another said about it "*... the culture of the company is key in how the strategy in SC ...* "

Another view of the influence of the culture in the SCM strategy is affinity within the chain (questions 27 and 28). Affinity, as part of the culture, seems not to be a clear issue in the opinion of several experts on the panel. As an example an expert explains "It may be the case that this 'cultural affinity' occurs, although it is usually about tougher business issues. 'Societies' based on a common history of joint investments and not so much cultural custions" while another considers "With those suppliers with which there are greater affinity cultural conditions, the possibility of integration success is greater".

At this point, in the first round, there was an evident dissent of opinions among those who believe that cultural conditions should not have influence on the relationship with clients and suppliers, while other experts, in opposition, consider that cultural conditions are fundamental for the relationship between the members of the chain and therefore influence in the decisions of relationship; nevertheless, they agreed that exist other conditions besides cultural one when segmenting. Again It is possible to appreciate a clear interrelation between both constructs.

4.3.4 Distribution of benefits along the chain

Consensus was maintained, although with some nuances, when experts are asked about internal integration and external integration. In the case of (question N° 13 (complemented with N° 14), the answers were not aligned with the comments, so in this case the comments were worthy to analyse because they allowed interpreting that the question was unclear, the panel did not take into account the most important word of the question 18 that is "exclusively". With this analysis in mind, it can be said that there is a fairly widespread consensus among experts that the strategy of SCM should include internal alignment and the relationship with suppliers and customers.

When referring to the scope of the SCM strategy, questions No. 7 and 8 explore the participation of both clients and suppliers as well as the internal involvement of other areas of the company; there seems to be no doubt about the importance of looking at the SCM beyond the borders of the company. Several experts agree that integration with suppliers and customers is a necessary condition while others express it by saying that internal alignment as well as integration with suppliers and clients makes the nature of the SCM.

The next set of questions (questions 16 to 21) included collaboration and overall efficiency in the short / long term. There exists consensus around the benefits of a long term relationship within some customers/providers although some experts differ regard the short term benefits (lower consensus); however, the panel does not seem to share their views on the distribution of the benefits that could be achieved from the SCM strategy. The divergence of views on this strategy aim of SCM is surprising; many experts believed that the goal is to achieve better performance of the company only, which would contradict one of the basic strategic concepts of SCM. There were also contradictions in the experts since when they were questioned about the benefits that the strategy should look for in the whole chain, there was a strong positive consensus, but, in this first round, experts did not agree on sharing the benefits that occur in the chain regardless of the company where they are generated, showing the contradiction. This last point is critical because the fact of not finding consensus shows a way of seeing

the SCM that directly contradicts the principle of collaboration that should be present in the SCM strategy.

The comments showed that the SCM experts were not even convinced that the companies look at the strategy through the efficiency of the chain. While this sounds reasonable in a classic view of business, by introducing it within a vision of SCM some experts insisted that the benefit should be reflected in the company. Some experts related the feasibility of redistribution of benefits with the maturity of the chain, others with the view that in Latin America there is still resistance regarding collaboration with clients and suppliers, while others agree with the distribution of benefits but consider that it is of very difficult implementation. In the discussion chapter we will return to this topic that we consider is key to all the research.

4.3.5 Internal alignment

Experts agreed that SCM strategy had to do with internal alignment, although there was a diversity of opinions regarding external integration. In relation to the “internal” SCM and its relation with different areas of the company, especially with logistics and procurement, the answers did not show a strong consensus. Experts coincided that different areas of the company had responsibilities in delineating the strategy of SCM, nevertheless they tended to limit the scope of SCM to areas strongly related with procurement, planning and logistics with scarce participation of other areas like finance, RRHH or marketing as examples. In several answers of the group of questions on internal alignment, some type of asymmetry was noted since several experts focused on the relationship with the client and much less on the provider and vice versa.

Taking into account the comments of most of the experts, there was a strong tendency to classify the SCM exclusively for processes that have to do with the flow of products. Comments from some experts show this generalized vision; as an expert says “There are mature companies in SCM that collect in their umbrella many topics (demand,

investables, transportation, shopping, customer service), some even manufacturing” or another opinion “But there is a lack of ‘planning’ if by ‘logistics’ we mean only physical logistics (that is, transport and storage). For example, production planning, demand planning, S & OP, etc., did not evolve from physical logistics but are part of SCM”. This could explain why SCM have got a lot of weight in areas like Commercial, Logistics, Purchasing, Planning, Production (in some cases) and little (or nothing) Human Resources, Finance, Information Technology, and product development.

4.3.6 Incentives for managers

Another issue related to the SCM considered is the incentive programs for managers. Experts agreed about the importance of aligning the incentive programs with the strategy of SCM trying to avoid incentives to focus on the objectives of the areas in an isolated form, thus contributing to the overall performance of the business. However, alignment with goals beyond the borders of the organization did not seem to have consensus among experts; while they agreed that the incentives must be aligned with the strategy of SCM, again, it does not seem that the overall efficiency of the chain was a priority for all the experts, though 9 of 13 agreed, 4 of them were in disagree. Few comments were posted in favor of or opposing the SC alignment of the incentive programs, here it is presented a comment where the position against the chain alignment is clear: “I disagree because the benefits for the chain should be reflected in the benefits for the company”.

4.3.7 Functions and profile of the Manger of SCM

Experts believed that companies, with some exceptions, should have a SCM manager, in some cases they make that responsibility fall to the Logistics manager and in other cases referred SMEs, some experts believed that this function could be assumed directly by the CEO.

With respect to whom should report the manager of SCM, there was consensus. The experts considered that he/she should report to the general management, however in their reports some differences arised; several experts considered that the logistics area should report to the SCM manager -11 experts-, while while there are 12 experts who think that the purchasing manager should report to the SCM manager Given the specific question whether a logistics manager and a SCM manager could co-exist, dissent was important.

There was consensus among experts that one of the main functions of the SCM manager should be the centralized coordination while showing an important disagreement as to whether the alignment, both internal and external, was its main function or not (questions 49 and 50).

Finally, although most experts agreed that the SCM manager is not directly in charge of the operations, not everyone agreed that their role is purely of staff, this is related to those experts who place the logistics manager reporting to the SCM manager.

Regarding the profile of the SCM, the experts were asked about their soft and hard capabilities (questions 51 and 52). All agreed to a greater or lesser degree that soft features such as communication or negotiation skills were imperative. On the other side, referred to technical characteristics, there was disagreement since some experts considered that SCM must have skills related to areas such as logistics or purchases, while other consider that it is not necessary for them to have any specific skills in those areas, even some experts consider that professionals from areas as finance or IT can have a good profile to be SCM manager. Some comments: "He/she can also come from areas as finance, inforamation systems or technical areas like production"; "It is not necessarily being a specialist in logistics or operations, moreover, if someone from the marketing area is responsible for SCM, it would be easier to break with the preconception that SCM = logistics".

4.4 Delphi 2° round

As it could be expected, the 2° round seeks convergence. The anonymous interactions among experts is the key of this methodology; each expert analyzes its own response, the rest of the panel responses and provides a new answer with the corresponding new justification.

Annex 11 show the detail of each response in both round. It can be seen -for each answer and for each round- the composition of the responses from where it is determined the media and variance.

The convergence of each answer was considered in order to understand how experts validated their own and the rest of the panel answers; the convergence and deviation of each answer is shown in Annex 12.

4.4.1 Degree of participation of SCM strategy in the business strategy

In the first group of questions, experts reinforce their answers due to a higher concentration (convergence) of their opinions. The consensus is almost unanimous, the companies must carry out a formal strategic planning and the SCM strategy must be present in that strategic planning. The size or origin of the company should have more influence on the degree of formalization, but it should exist. Some experts consider that the maturity of the process within each company and the culture of the company have more influence than the size or origin. Experts agree about the importance of the SCM strategy has, some exceptions were mentioned in the case for companies like internet companies of others were the SC is not core.

In the block of questions (questions n° 7 and 8) that refers to the scope of the SCM strategy - the internal focus and/or the external one-, the second round shows a convergence achieving a high degree of consensus on the importance of taking into account suppliers and customers in the design of the SCM strategy (external integration). In the same way, they agree on the importance that the SCM strategy takes internal integration into account.

While there was already, in the first round, a strong consensus on who should carry out the strategic planning of the SCM, the second round shows even more convergence and a high degree of consensus that the management of the company should carry out the SCM strategy with the participation of the areas that intervene in the chain.

Regarding the participation of suppliers / customers in strategic SCM, experts repeat the opinion of the first round: Strong consensus about both indirect participation and greater dispersion when direct participation in the SCM strategy arise. Cultural conditions, specifically affinity conditions between supplier and customer have a different view among experts; they have not generated convergence in the second round; instead they continue agreeing that SCM strategy should consider other criteria, but these criteria are not explained in any comment. The internal SCM, the relation among different areas holds, in this second stage, different criteria between experts. In general, they maintain their opinions with a consequent low convergence; experts largely agree that there are multiple areas to be part of the strategy of SCM. The relationship between SCM strategy and logistics efficiency is the goal for many experts while it is not for others, it cannot be observed convergence at this point because of a great variability in the responses.

4.4.2 Segmentation criteria

Experts maintain their opinion regarding the importance of applying segmentation criteria in both suppliers and clients. Although there was already consensus in the first round, in this second one a small convergence is observed towards a greater consensus. The experts consider that the relationship with customers and suppliers is fundamental, that this relationship must respond to a segmentation criterion and that it must be defined at a strategic level.

An important consensus has already been reached regarding how to relate to customers and suppliers, if the segmentation criterion could correspond with whom to collaborate, with whom to coordinate and with whom only to transact. In this round,

the consensus is a little greater since in this aspect there is also a convergence. There is a greater consensus in the conceptual division (the different types of clients and suppliers must be differentiated) while that consensus is slightly lower in terms of being a segmentation criterion.

Regarding whether cultural conditions should be taken into account to define segmentation (questions 27 and 28), dissent is maintained. Some experts consider, on the one hand, that it is a necessary but not sufficient condition and on the other hand that an affinity is of no use if an improvement for the chain will not arise from the relationship; while other experts believe that cultural conditions should not have weight, they clarify that it is desirable but it should not be a weighty criterion.

Curiously, the experts, although they maintain the consensus, which is very strong, there are other aspects to be considered apart from the cultural one at the time of segmenting, in this round, there was a slight divergence that can be considered non-significant.

Whether the segmentation criteria should respond to the SCM strategy or to other areas, there remains a matter of disagreement among the experts. There is a great dispersion in the answers; some experts consider that criteria from other areas should be taken into account; however, it would seem that they do not consider -when referring to other areas- finance, sales or marketing. Other experts consider that the segmentation must go hand in hand with what is defined in the strategy of SCM and can respond to other areas as long as they are not opposed to the latter.

With regards to whether clients and suppliers should participate in the SCM strategy (question N° 31 to 34), In this round, an improvement in the consensus is observed, although yet there is no clear definition on the subject. They share the vision of indirect participation. In this last point they do not agree with the direct participation in the strategy of SCM, there is convergence but at the same time there is still disagreement in the answers.

4.4.3 Culture

Culture influences the definition of the SCM strategy; the experts maintain their consensus on this issue with an improved convergence. Obtaining results based on the relationship with suppliers and customers continues to show dissent with divergence when it comes to the short term while maintaining a strong consensus when these relationships arise in the long term. As already mentioned in the segmentation criteria there is no consensus regarding affinity conditions to generate segmentation criteria.

4.4.4 Distribution of benefits along the chain

The next group of questions (questions 16 to 21) was focused on benefits distribution along the chain. Although the consensus is not absolute and there is dispersion in some specific issues, the situation of convergence is presented again in this round. Experts tended to agree on the redistribution of profits arising from the collaboration; the specific question (question N° 21) of defining the strategy willingness to cooperate but the benefit is not produced in our company experts have not been radical in their answers and while converged, did a major turnoff. In the specific case of the definition of segmentation criterion, no convergence was achieved; some experts do not believe that segmentation criterion should be defined at a strategic level rather according to specific needs of some areas while others do consider to a greater or lesser extent.

To a greater or lesser degree of agreement, experts do not believe that SCM's strategy should pursue the company's benefits exclusively, consensus is maintained but with divergence in the degree of agreement. The efficiency of the chain remains for experts an objective of the SCM strategy; there is a convergence towards a greater consensus on this issue. The panel maintains the agreement with a high degree of consensus by ensuring that indicators of the SCM strategy should emerge to measure the efficiency of the company and the chain.

About collaboration, again this round leads to consensus; specifically, there exists a slight convergence in favor of the concept of “chain efficiency” over the focus on the company efficiency exclusively.

4.4.5 Internal alignment

Although agreement is maintained regarding the importance of internal alignment in the strategic definition of the SCM, the dissent of the first round regarding the relationship of the SCM strategy with external alignment (suppliers and customers) does not show a substantial change; in the second round, there is no agreement in favor of this last topic and with a strong divergence.

The questions that refer to the relationship between logistics / purchases and SCM, which in the first round showed great divergences, have found some kind of approach among the experts in this round. In this round, the experts, with some degree of divergence, do not believe that logistics and purchases are functions similar to those of SCM, although we will see that when talking about chain efficiency, many translate it into logistics efficiency.

There is still much disparity in the answers regarding the origin of the SCM, however there is consensus, although with divergences in the degree of agreement, when affirming that the SCM is the evolution of logistics.

A strong consensus is maintained when asking about what areas should participate in the SCM strategy (questions 38 and 39); the experts think that neither purchases nor logistics are the only ones that should participate in the definition of the SCM strategy. However, the divergence of opinions (similar to the first round) is maintained when the experts are asked if those areas should be those of greatest importance in the design of the SCM strategy; the majority responds negatively but with different degrees of disagreement; it will also be returned to this point in the discussion section. Beyond the previous dissent, experts consider that multiple areas should participate in the SCM strategy.

SCM and logistical efficiency are still, after the second round, a matter of dissent. Some experts believe, to a greater or lesser extent, that the efficiency of SCM is achieved through logistical efficiency while another group, to a lesser degree, believe otherwise. This question, the dissent and the divergence of the answers, will also be part of the subsequent discussion since they show aspects of the SCM that strongly link it with logistics.

4.4.6 Incentives for managers

On the set of questions related to incentive systems it can be seen that experts generally maintain their original answers with a small convergence (less variability); they maintain the importance of aligning incentive systems with SCM strategy; they agree that incentives have to be geared towards achieving chain efficiency more than just the company's one; finally, in this round their different opinions regarded to the generation of incentive tied to area objectives maintains, showing a kind of contradiction (questions 53 and 54) with other answers (questions 57 and 58) where they express another view

4.4.7 Functions and profile of the Manger of SCM

The second round still indicates strong dissent among experts about what the profile and function of SCM managers is. They reject internal and external alignment within the main functions of the SCM manager. They consider that it should be a function of staff but simultaneously they think that areas such as logistics or purchases should report to them.

Experts say that soft skills are fundamental in the SCM manager but most of them insist that the profile must mandatorily contain hard skills in areas such as logistics or purchases.

Thus, the role of the manager of SCM is a non-convergence issue; experts maintain their initial opinion about the functions and profile of the manager of SCM.

4.5 Discussion and propositions

In the next step of this paper, the responses of the panel of experts from both rounds are taken and analyzed together. The coincidences and convergences of the panel are presented and, based on the results of the second round, propositions are proposed that contribute to give shape to the presented constructs.

These propositions are the result obtained after the entire Delphi process; in the conclusions chapter of this thesis they will be presented and opposed with the propositions obtained from the case study so that both groups of propositions, added to the contrast with the existing literature, will constitute the support of the final conclusions of the present thesis.

4.5.1 Business strategy and SCM

Based on the result of the Delphi process, it can be inferred that exists a strategic vision of SCM. Experts concur, though not with a high degree of convergence, on how important is SCM strategy as part of the business strategy.

After the Delphi process, the panel reached a convergence on the purpose of external integration (with suppliers and customers) as one of the objectives of SCM even though the internal alignment is considered, probably, more important than the latter. Up to this point, beyond any differences that do not point the focus of research, came to a first conclusion on the strategic nature of SCM and the necessity to be part of the overall business strategy.

Therefore, experts agree the strategic nature of SCM, then it can be provided an answer to our first construct "degree of participation of SCM strategy in the business strategy".

P1a *SCM is an area of a purely strategic nature*

P1b *There should be at least a degree of participation of SCM strategy in business strategy, but it has to be present.*

4.5.2 Segmentation criteria

Segmentation is not a clear issue for the experts; most of them do not consider segmentation as critical at a strategic level so it is difficult to define or perceive parameters for segmentation. Experts refer that it is important to segment, but in almost all cases have referenced the classical segmentation criterion on which the procurement area segments according to its own criterion and marketing area as mostly commercial basis. Several experts refer to the fact that SCM segmentation criterion should continue commercial segmentation; besides there are not clear parameters to guide SCM segmentation. This is a problem that should be analyzed in greater depth since the segmentation criterion at the strategic level should emerge guidelines (parameters) to be taken into account. Then, at the tactical and operational level, the different areas would define the conditions of interaction with suppliers and customers. Segmentation criteria are of importance for experts, although they view it from different edges. The situation, after analyzing the opinion of the experts, shows that is one of the most influential points in the delineation of SCM strategy as a critical parameter to guide SCM operationalization, though, at the same time probably the least developed.

Then, to answer the second construct “parameters to guide segmentation of providers and customers” experts didn’t give a clear explanation on this issue.

P2a *Segmentation criteria should be present in the SCM strategy*

P2b Parameters to guide segmentation at SCM strategy level in LATAM are not clearly defined

4.5.3 Culture

The following construct aims to understand the influence of the cultural aspects of the organization; companies manage an internal culture, which in many cases is part of their informal organization, and should influence decisions on SCM. The affinity that may exist between companies that interact with each other is given by the culture of these organizations and should be a high impact factor in the relationship. Greater affinity derived from sharing aspects of organizational culture should facilitate collaborative relationship between them. Experts do not believe that the cultural conditions have a high degree of importance or influence strategic decisions on SCM; however, many consider cultural affinity contributes to the relationship but is not determining. From this experts' point of view, it could be interpreted that there is still a strong conceptual bias towards a more operational SCM oriented closer to outcomes that to SCM strategic approach seeking collaborative relationship focused on long-term results for the chain and then, as a result, improved profitability for the company. The third construct "culture of the organization" indicates a light focus on a strategy vision despite experts don't dismiss the culture as a factor to be taken in account.

Then "the culture of the organization" is not seen by experts as a key element that influences the strategy alignments of SCM. The next proposition will be contrasted with the results found in the case study and with the literature. Here the proposition is posed as an important finding that contributes to understanding the state of the art of SCM in LATAM.

P3 Culture has low impact in the SCM strategy decision.

4.5.4 Distribution of benefits along the chain

The next construct, distribution of benefits, indicates on one side a low consensus though a slight convergence in favor of the concept of benefit of the chain while the majority of the panel believes that the exclusive benefit of the company would not be above achieving mutual benefit (questions number 13, 14 and 18, 19), confirming the proposition chain efficiency and not just the company although some experts still consider to some extent the concept of profitability for the company exclusively. In the same way there is convergence and low variability in reference to the concept of distribution of benefits regardless of which company they occur; this would indicate that experts agree on the concept of collaboration that should be aligned with the previous concept of benefit in the chain, however, the former shows less consensus than the latter. Therefore, the construct "benefit distribution along the chain" would indicate that SCM's strategy should be geared to the benefit of the chain as a whole even irrespective of the company in which it occurs on the basis of a redistribution of it.

P4 To generate chain efficiency in the long term is an objective of the SCM.

4.5.5 Internal alignment

Analyzing the answers related to internal alignment it can be observed a symmetrical view of the panel in the relation procurement/SCM and logistics/SCM; in the same way they agree that SCM emerges from an evolution of the procurement/logistics areas; this idea of linking SCM with supply and logistics, rooted in several of the experts, leads to a significant divergence of opinion when they were asked if SCM strategy should be approached from a perspective of logistics efficiency, the paradigm of logistics is always present when the theme is SCM, but on the other side practically all experts agree that multiple areas have to participate in the SCM strategy.

The impossibility of observing a convergence in the second round referred to external alignment is a matter to be considered in the SCM strategy delineation.

Most experts still have an important bias towards the logistics function of the SCM. There is disagreement on how to achieve efficiency, it still seems that the efficiency of the SCM has more to do with the logistical efficiency and hence, there is little clarity in the issues of internal alignment. Many experts consider for the internal alignment only the areas that have to do with the physical chain, that is to say, logistic of the chain. They do not consider a complete alignment of all areas of the company.

Then “internal alignment of all areas that participate in the SCM strategy” is a confusing construct that has to be studied deeper because of the contradictions revealed by analyzing different questions related.

P5a The scope of Internal alignment as SCM strategy objective is not well defined in LATAM.

P5b The efficiency of SCM is closely linked to logistics efficiency in LATAM.

P5c The efficiency of SCM is not directly linked with the business efficiency in LATAM.

4.5.6 Incentives for managers

The sixth construct “incentive programs for managers” again showed contradictions in the answers related to this issue. Clearly we found a strong consensus that incentive programs have to be aligned with business strategy and SCM strategy; nevertheless, experts are not completely agreeing with the concept of aligning incentive with internal alignment for better performance nor internal alignment for chain performance. Moreover, the question of whether incentive systems should align with the results of each area, the expected negative response did not occur. Understanding the difficulty of obtaining results when managers do not have a real incentive

(economic or otherwise) to carry out the guidelines issued by the business strategy or the strategy of SCM, it cannot be expected results according to them. In fact, some experts consider important an incentive program measured through the performance of a specific area. This difficult to produce an internal alignment aimed to obtain better performance of the organization as a whole, even more, results of efficiency in the chain is almost impossible. Then “incentive program for managers” incentive does not seem to be directly linked to obtaining a major performance of the company or the chain.

P6 Incentive programs for manager are not aligned to the objectives of the SCM strategy in LATAM.

4.5.7 Functions and profile of the Manager of SCM

At last, this seventh construct guides us to the role of the SCM manager. Experts coincided on the importance of a SCM manager but analyzing the SCM manager functions, it exists great consensus that logistics and/or procurement managers have to report to him/her showing the tendency to link SCM with operations and therefore putting it aside somehow from the strategic function. Again we find contradictions in the experts who on the one hand think almost unanimously that the functions of the SCM should be staff, not directly participating in the operations, but on the other hand many consider that the areas of logistics and purchases should report to the SCM manager.

Experts do not agree that the manager of SCM has to do with internal alignment or external coordination, nor that their role is supportive; low convergence and a high dispersion in this subject are observed. Experts agree that the manager of SCM must have soft qualities like negotiation, coordination and relationship, but also they consider indispensable to dominate hard areas such as logistics, purchasing and supply. About “the role of the SCM manager” we can assure that there is no consensus in which are de SCM manager nor how it has to be his/her profile.

P7 Both the role and the profile of SCM manager are not clearly specified among the LATAM experts

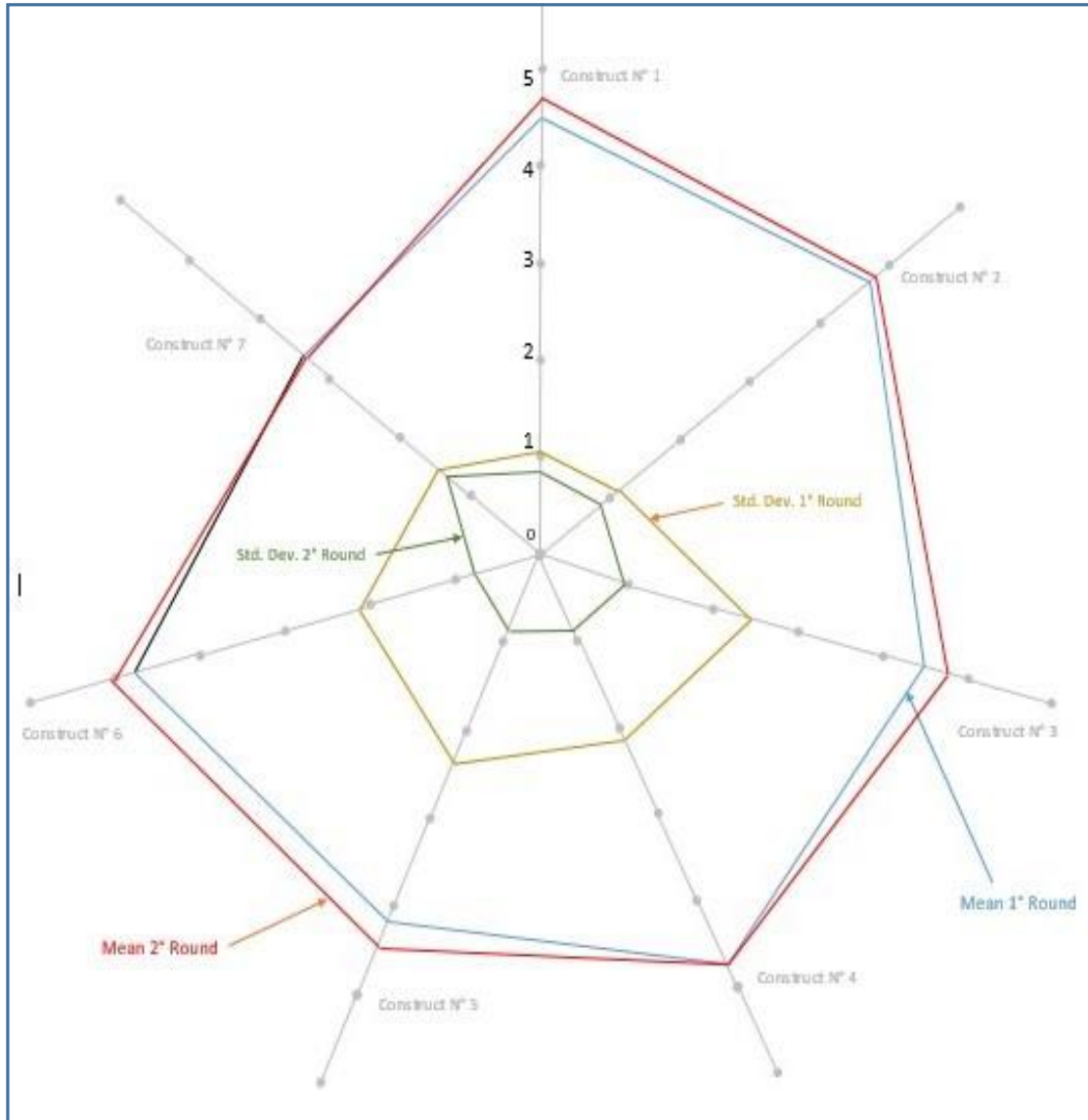
4.6 Convergence analysis

Analyzing 1st and 2nd round the results show a considerable grade of convergence in various issues as it can be seen in Chart N° 3.

Though Jamieson (2004) does not agree in using of mean and standard deviation when ordinal scales are present, as is the case of the Likert scale, these two characteristics were used in this research convinced that mean and standard deviation capture the essence and content of the information compiled in the question naire.

Exist two factors to be taken into account and that has to be analyzed; on the one hand the variability in the responses of the experts that can be seen through the deviation in each of the answers; on the other hand, the degree of convergence obtained after the second round. The first factor seeks to interpret the degree of maturity that has SCM; the second has two readings, on the one hand the permeability of experts to the views of their colleagues, suggesting indirectly the need for more theoretical development while on the other hand contributes to the convergence of opinion that underpin the interpretation of the constructs derived therefrom.

Though the grade of convergence was not strongly marked (Figure 11) we interpret convergence give us information about the phenomena; convergence shows the low maturity level while deviation indicates experts are not completely agreeing with basics concepts of SCM.



N°1	Degree of participation of SCM strategy in the business strategy.	1- Totally Disagree
N°2	Parameters to guide segmentation of providers' and customers' criteria.	2- Very Disagree
N° 3	Culture of the organization.	3- Disagree
N° 4	Distribution of benefits along the chain.	4- Agree
N° 5	Internal alignment of multiple areas that participate in the SCM strategy.	5- Very Agree
N° 6	Coherence between strategic SCM'S alignment and Incentive program for managers.	6- Totally Agree
N° 7	Role and Profile of the SCM manager.	

Figure 11 - Convergence and deviation of Constructs

Three conceptual definitions of SCM were presented to the experts, three completely different visions, a purely logistical orientation, a definition involving SCM within the scope of operations and a business-oriented definition; convergence was absolute in the third case, all the experts agreed that the business vision is the one that is consistent with SCM.

Figure 12 shows the evolution from round one to round two about the different visions of SCM.

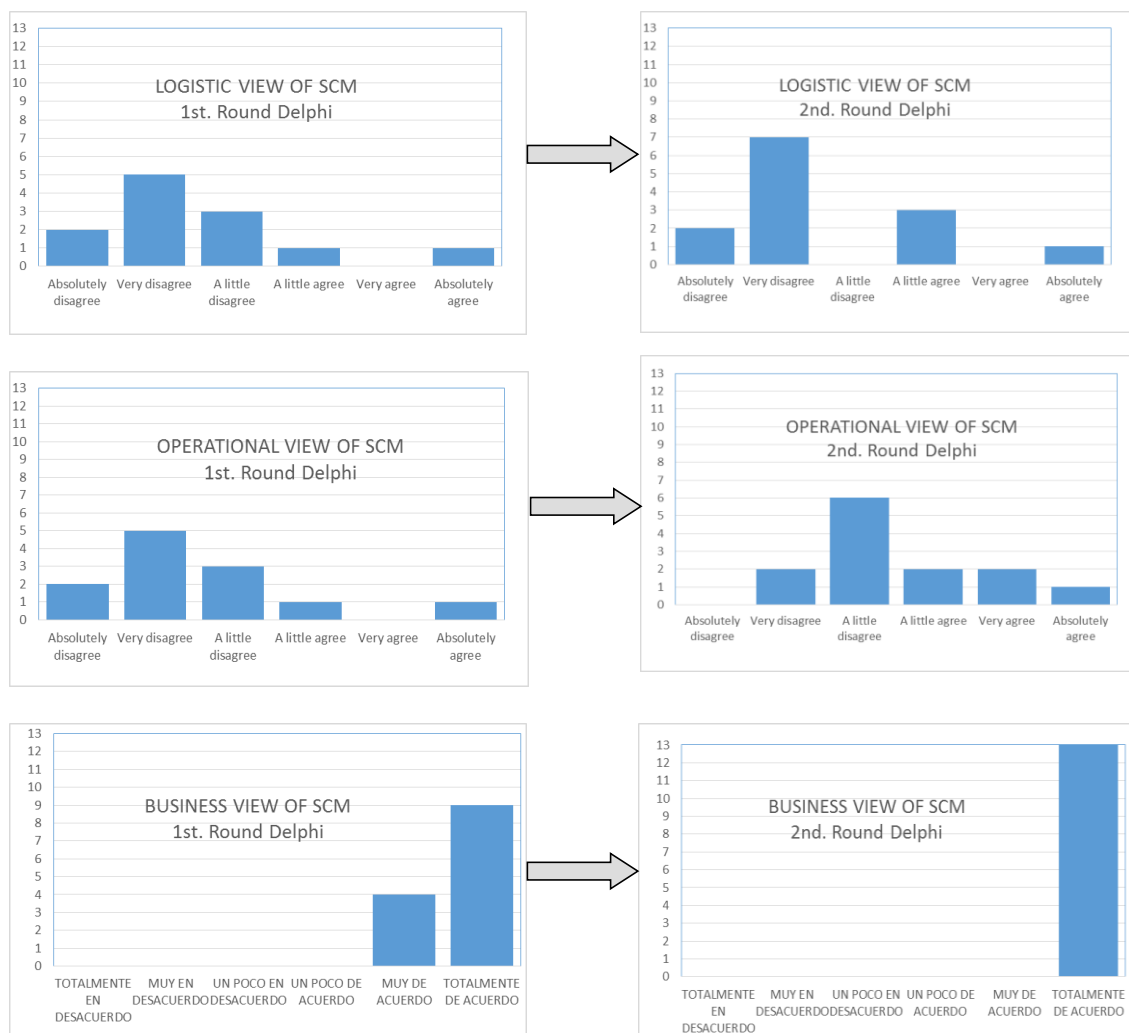


Figure 12 – Delphi panel evolution of SCM view

As a first consequence, it would seem SCM has to do with business more than with operation, not only within the organization, as indicated by the definition by consensus. However, when we try to shape the constructs to validate this business vision we found opinions that are not consistent with this vision of business. Analyzing the other two answers referred to the SCM vision it can be explained the partial contradictions; though the strategic/business appear to be indisputable, the results of the operational and logistics view show some experts with a bias to the operational and in a lesser extent to the logistics view of the SCM. This dichotomy would explain the contradictions that arise in some of the survey questions and in consequence would reinforce the low grade of maturity SCM has in Latin America.

4.7 Conclusions

To achieve its objectives, i.e. identification of SCM strategy key constructs', the research addressed key issues concerning the area of business strategy and SCM strategy.

The use of the Delphi methodology in the strategic analysis of SCM has allowed experts to interact with their knowledge and opinions and through the level of consensus and dissent obtained in some of the topics providing an important contribution to the objective of the research here addressed.

The methodology has also allowed to show **the maturity of SCM in Latin America**. As it is clear from the previous chapter, "Results" diversity of opinions from experts on some key issues and the low degree of consensus highlight the need for further work on the subject. In this sense, the use of the Delphi methodology is thus amply justified by the contribution provided when there is incomplete knowledge about a problem or phenomena (Skulmoski et al., 2007)

The set of questions that were formed as a guide to achieve the first approach in delineating of the seven constructs chosen to analyze the SCM, its relationship with

organizational strategy and how to carry it later implementation, allowed understanding how such constructs behave.

As conclusion, we can say:

- **First**, from a theoretical perspective, the research expanded knowledge in the area by bringing to the surface relevant aspects of the strategic dimension of SCM that was hitherto overlooked or not properly considered. It takes the initial steps towards the definition of a framework to present SCM in strategic terms in the field of business strategy. More specifically, on the basis of a recognized scientific method, this framework would provide significant indications of how SCM strategy should be presented in the definition of business strategy. The structured perspective of the framework would facilitate understanding and allows deconstruction of complex issues concerning the way SCM strategy has to do with business strategy into specific issues such as those comprising the constructs presented.
- **Second**, the applications of the framework would provide a guide for managers to align the SCM strategy with the business; managers would have a clear orientation on the segmentation criterion on which they would take different definitions in SCM; they would receive a clear message through correct systems of incentives to act on the overall efficiency of the company and the chain.
- **Third**, and probably most important, it will shed light on the strategic importance of SCM and on the importance of delineating a correct SCM strategy that guide managers to a correct operational implementation.

The differences in the experts' opinions regarding the proposed constructs clearly indicate that there is still much to be defined in terms of SCM and about the conditions that would allow companies to make the strategy of SCM defined at the level of business strategy and, thus, can clearly define guidelines to enable its proper operation.

5. CHAPTER 5 - SECOND FIELD WORK – CASE STUDY

PLASTICAUCHO INDUSTRIAL S.A.

5.1 Introduction

This chapter involves a case study. This methodology⁵ has been selected due to its specific characteristics. As it will be described later, this qualitative methodology has been selected to contribute to the development of theory on SCM. Defined the constructs (the same ones that were used in the field work in which the Delphi methodology was applied), this stage of the investigation sought to reveal the real behavior of the constructs in a Latin American company where the level and the scope for this research was set (Van de Ven, 2007)

Aligned with the conceptual frame of this investigation, the focus on the Delphi methodology was put on understanding the theoretical state of the art with the first objective to find a gap, if it existed, between what the theory says in relation to the strategic nature of SCM and its link with the business strategy and the opinion of a group of expert (academics, consultants and practitioners) about what SCM role should be within the business strategy.

In this case study the objective is -through an exhaustive and deep understanding of the operation of a company- to present in what way, if it happens, a SCM strategy is defined, if it is linked to the business strategy and how, based on these strategic

⁵ Though exist different opinions whether Case study is a method or a methodology (Hyett, Kenny, & Dickson-Swift, 2014), the conditions for considering it a methodology are well justified in this thesis, that's why I refer to the case study as a methodology

definitions, the guidelines that allow operationalizing the aforementioned strategy are generated.

5.2 Case study methodology and the reasons for its application in this thesis

A case study typically uses multiple methods and tools for data collection from a number of entities by direct observer(s) in a single, natural setting that considers temporal and contextual aspects of the contemporary phenomenon under study, but without experimental controls or manipulations (Eisenhardt, 1989b; Yin, 2009).

Case study is the preferred methodology when “how” and “why” questions are posed, the investigator has little control over events and / or when the focus of the investigation is a contemporary phenomenon within a real-time context (Yin, 2009); in fact, the advantage of case study approach is its ability to address “Why?” and “How?” questions in the research process (Meredith, 1998; Yin, 2009; Ellram, 1996). Yin (2009) indicates three conditions for determining when to use a particular methodology; for the case study these are (1) the “how” and/or “why” form of the research question, (2) the non-control of events; and (3) the focus is on the contemporaneity of events; in fact, it is preferred in examining contemporary events but when the relevant behaviors cannot be manipulated; this methodology adds two important sources of evidence, direct observation of the events being studied and interviews of the people involved in the events (Yin, 2009).

As a research methodology, the case study is used in many situations to contribute to our knowledge of individual, group and organizational related problems, as well as understand complex social phenomena. In brief, the case study methodology allows investigators to retain the holistic and meaningful characteristics of real-life events (Yin, 2009), which allows in-depth insights into emerging fields because the strength of the case study methodology rests on its ability to capture conceptual developments (J. Meredith, 1993, 1998); while a full range of research methodologies can be and it is applied in supply chain management, the use of case study research is an interesting

option (Seuring, 2005), thus, the analysis of supply chain issues exhibit highly unstructured problems which can be dealt with in an exploratory research design using case studies (Yin, 2009) such as the case of this dissertation.

As Schramm (1971) cited on (Yin, 2009) put forward, the central tendency of all types of case study is to try to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result. This is the essence of case study, the possibility for the researcher to interact in first person with the scenario under analysis, obtaining a lot of information which is very difficult -if not impossible- to obtain conducting a quantitative research.

Case study methodology typically combines data collection methods; quantitative, qualitative or both methods of evidence, which indicates that this research methodology should not necessarily be associated with qualitative techniques exclusively (Yin, 2009)(Eisenhardt, 1989b).

While a full range of research methodologies can be applied in SCM, the highly unstructured problems that are present in supply chain management -which can be dealt in an exploratory research design- suggest the use of a case study methodology as an appropriate research methodology to allow the identification and description of critical variables (Seuring, 2005; Stuart, Mccutcheon, Handfield, Mclachlin, & Samson, 2002) as well as case and field research can be used for related theory building

Both, in operations and more specifically in SCM it is necessary to focus on the customer so that the perception of practitioners should be taken into account in the research process. In this regard, they highlight that case study can be a powerful influential and useful contribution to both management practice and theory development (Stuart et al., 2002).

Because we were unable to find a well-developed set of theories regarding this particular branch of knowledge -as supply chain management is a rather young field of investigation- the need for further conceptual and theory building research is frequently highlighted (Croom, Romano, & Giannakis, 2000). Eisenhardt (1989b) and

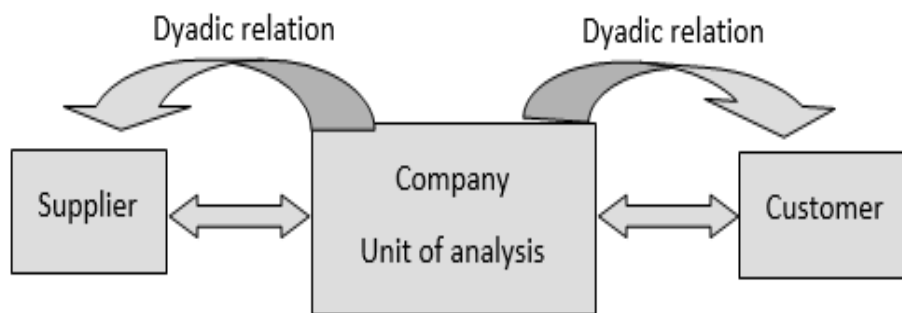
Meredith (1993) suggest that theory-building can best be done through case study research for building new operations management theories.

5.3 Case study – Research Design

The purpose of this research is to examine Supply Chain Management strategic decisions that have not previously addressed in the literature, namely, the strategy of supply chain management participation in business decisions and how it affects the supply chain internal structure, the relationships between supplier and customer through the analysis of seven constructs.

Considering that there is a common thread between the Delphi study and the case study, the two field works that are part of this thesis, the constructs analyzed in the case study are the same as those considered in the Delphi study. This is clearly the case because the research -although consisting of two different field studies- aims to answer the terms of the relationship between the SCM strategy and the business strategy and its further operationalization.

Again, it is of most importance to stand out which is the unit of analysis for this investigation. While it may seem -because of the nature of supply chain management- that the unit of analysis has to be all or part of the supply chain, the selected unit of analysis, is based on two premises that we believe are fundamental; first, the development of supply chain management is based on the decisions the company makes regarding the way it will relate to its customers and suppliers; second, as Cooper & Slagmulder (2004) and Seuring (2001) consider, the objectives in the matter of SCM has necessarily to be implemented at a dyadic level; hence, it is derived the importance of defining as a focus what the company's relationship with suppliers and customers is like. From the foregoing, the basic reason for analyzing the behavior of the company in its strategic definition is revealed and, therefore, **the company is the unit of analysis** of this investigation as it can be seen on the next graphic in figure 13.



The company - Unit of Analysis of the research.

Figure 13 – Unit of analysis

5.4 Validity and Reliability

Validity and reliability have to be present in any research. Regardless whether it is a quantitative or qualitative research -although the methods to ensure validity and credibility may be or should be different- both qualitative and quantitative researchers need to test and demonstrate that their studies are credible.

Although reliability and validity are treated separately in quantitative studies, these terms are not viewed separately in qualitative research. Instead, terminology that encompasses both -such as credibility, transferability, and trustworthiness- is used. (Golafshani, 2003)

Surely, the mechanisms to achieve credibility when using quantitative techniques - usually based on statistical data- differ substantially from those that should be used for qualitative research; this is basically due to the nature of the origin and processing of data in both types of research.

In the case of quantitative research the researcher relies on a series of pre-existing and normally standardized instruments -as are the different statistical tools developed to validate data- while in qualitative research, the "instrument" to ensure credibility is the researcher himself (Patton, 2002).

The applicability of these concepts is completely different in quantitative and qualitative research due to the fact that the paradigms of both types of research are based on different epistemological currents since quantitative research has a strong root in positivism (derived from rationalism) whereas qualitative research is rooted in constructivism.

In qualitative research -where the research occurs in natural settings and involves the response of humans in the process of change- results are often difficult to replicate (Burns, 2000). For that reason, according to Patton (2002), reliability is restricted by the number of observers involved in the study, the response of informants who provide data, and the natural response and bias of the researchers as they are involved in the study for a lengthy period of time. The fact that all the field work was done exclusively by a unique researcher contributes to solving the bias problem presented by Patton.

Engaging multiple methods - such as, observation, interviews and recordings- will lead to more valid, reliable and diverse construction of realities; so, the use of triangulation in the constructivism paradigm to record the construction of reality is appropriate. Triangulation is typically a strategy (test) for improving the validity and reliability of research or evaluation of findings (Golafshani, 2003). Constructivism values multiple realities that people have in their minds. Therefore, to acquire valid and reliable multiple and diverse realities, multiple methods of searching or gathering data are in order (Golafshani, 2003).

Yin (1994) helps us with these concerns and argues that there are three validity tests (excluding reliability) that are commonly used to establish the quality of any empirical social research:

- *Construct validity* - establishing correct operational measures for the concept being studied.
- *Internal validity* - establishing a causal relationship, whereby certain conditions are shown to lead to other conditions.

- *External validity* - establishing the domain to which a study's findings can be generalized.

To pass these tests of validity and reliability, explicit attention must be paid to the design of the research study and to the processes used in the collection and analysis of the data, as well as the reporting of the findings (Herling et al., 2000).

The constructs previously defined focused on the heart of the investigation -that are consistent along the two field work's research- guarantee, specifically, the first validation. The design and exhaustive process that include -well documented and detailed later in this chapter- the protocol designed for the interviews and the interview process were established and met with zeal to ensure the validity and credibility of the work. The detailed documentation of all the stages -which although not complete in this dissertation- is available

Based on Yin (1994) and Huber and Van de Ven (1990), figure 14 is a summary of the overall quality assessment of the case study conducted.

Test	Method	Research Phase	Action Taken by author
Construct validity	Triangulation – use multiple sources of evidence	Data collection - Research design	Interviews (Face-to-face, with company executives at three levels of decision. Bureau – Corporate – Company).
			Designing three levels of interviewees reinforce the validity of data documents (public; private)
	Establish a chain of evidence	Data collection	The research design has been developed for insuring a fit between the objectives of the research, the research question, and the consequent data gathered and analyzed. Traces from research questions to propositions and conclusions can also be followed in the reverse way from the conclusions to the research question.
			There exists a direct link, a thread, between the constructs previously defined and the content of the interviews.
Partial study report, every stage	Composition	The supervisor was informed of each step from the design of the investigation, selection of the company, interview process, review of the documentation to the data analysis.	
Internal validity	Do pattern-matching (empirical to test predictions)	Data Analysis – Research Design	The design of the interviews was centered on validating the expected predictions in the selected company and -if what is expected is fulfilled- build theory from the case.
	Do explanation building (doing X leads to Y)		Establishing and validating propositions derived from the guided steps of interviews and documents analysis. Triangulation of information from interviews and open questions helped to obtain internal validity ensuring the correct relation origin - consequence
	Address rival explanations	Data Analysis	Addressed in the Discussion section of the case study.
External validity	Use theory in single case studies	Research Design	Data gathering and analysis were focused on similar criteria
			Exhaustive process of company selection as an exploratory case to build theory and allow generalization
Reliability	Develop case study database (documentation, narratives, notes, etc.)	Data collection	All interviews conducted by the author were recorded (audio and video)
			All interviews have been totally transcribed for more in-depth analysis.
			Company documents have been received electronically and saved in individual files.
			All interviews were codified using Software Atlas.ti 6.2 as a tool to support and minimize errors in data manipulation.

Figure 14 – Quality of the cases study research

It should be noted that, part of the internal validity tactics has been taken into account. The internal validity is not relevant for the exploratory studies, but for the explanatory ones. Although the case originally had an exploratory profile, some aspects related to the explanation came to life during the development of the case. Additionally, the following aspects were taken into consideration while performing the research (data gathering and analysis):

- Multiple informants were utilized as much as possible so that reliability could be assessed.
- During interviews, questions about facts -and less about opinions- were made instead of having people trying to remember the opinions or beliefs they may have expressed or had at some time in the past. This is because events are subject to fewer cognitive bias or impression management than personal views.
- Informants were not asked to recall events from the distant past (that they were not present at), in order to reduce the time span bias.
- Informants assured the confidentiality of the interviews. They were explained about the investigation and what the purpose of the interview was. Although they were notified and asked for permission to record the interviews, in all cases they agreed without conditioning and with complete predisposition. At no time during the interview did situations of tension arise. These elements indicated a high reliability of the information that was generated during the interviews.
- The interviews were planned several weeks in advance in a coordinated schedule so that the informants counted with the necessary time for the interview to be carried out and were predisposed and attentive to contribute with the investigation.

The purpose of reliability is to minimize possible errors and bias of a study (Yin 2009). Reliability can be enhanced by providing the reader with the chance to follow up on research progress, from initial research questions to drawing conclusions. Hence, trustworthiness of qualitative research is generally commonly evaluated through the

documentation of the research process (Creswell 1998). The fact that an indicator is reliable does not mean it is valid. An instrument may be very reliable, i.e. it yields consistent results on repeated measurements, but the results may be incorrect all the time.

Reliability in qualitative cases is a delicate matter; the objective is to be sure that, if a later investigator follows the same procedure as described by an early investigator and conducted the same case study all over again, the later investigator should arrive at the same findings and conclusions (Yin, 2009, p. 45).

Therefore, we can partially guarantee the reliability based on a rigorous and detailed documentation of the whole process; however, due to the nature of the phenomenon under analysis, there is no guarantee that the same findings and conclusions will be obtained from a future replication of the case. As already said, the epistemological foundations of constructivism recognise to ensuring the credibility of the research despite this.

For this project a paper and digital database was created to allow the researcher to record, organize and retrieve research data relating to the study supported by the kindness provided by the software ATLAS.ti 6.2. The database is made up of all the information gathered as part of the research and contains explicit footnotes (and references) to the sources of evidence. Although the database is not intended for public presentation, it remains available for subsequent researchers.

The research design has been developed for insuring a fit between the objectives of the research, the research question, and the consequent data gathered and analyzed. Traces from research questions to propositions and conclusions can also be followed, in the reverse way, from the conclusions to the research question.

The case seeks to answer the question raised by exploring the status of the selected company with respect to the defined constructs.

Therefore, we can locate the design of this case study, based on the classification of Yin (2009) -exploratory, descriptive or explanatory- in the exploratory type because

we do not even know the results to which we are going to reach. We want to explore the behavior of the constructs defined and obtained from literature review and the researcher's insights and to determine the degree to which they are present. However, we do not rule out, depending on the results, that the case may change from an exploratory case to an explanatory one, which would provide a basis for theory building.

5.5 Atlas.ti 6.2 Software support for the qualitative analysis.

The decision to use world-class Atlas.ti 6.2 Qualitative Data Analysis software to support the case study was based primarily on two opportunities that this software provides.

The first is that it contributes to having all the information ordered and allows us all the relationships that arise from the analysis recorded, both codes and notes, memos, families among others, but mainly it permits us all the codification of the interviews that can be registered, letting subsequent relationships and ensuring that there are no errors. The software permits us to naturally collect, connect and analyze data.

The second is that the software allows us to build a large database where all the information is deposited.

It should be noted that the use of the software at no time has intended to replace the work of the researcher in terms of the investigation itself. As pointed out by Yin (2009), the words "assisted" and "tool" are key to understanding the use of these softwares. Atlas.ti may serve as an able assistant and reliable tool.

An exhausted list of benefits of the use of computer software on quality analysis can be found in (Miles & Huberman, 1994, pag. 44)

These characteristics strengthen the reliability of the research.

5.6 Research process

Guided by the suggested process presented by Eisenhardt (1989) -while not strictly following the steps defined by it, but the concept- this case study research was delineated based on the following phases documented in detail responding to the condition of reliability already mentioned.

- a. Getting started; defining the research question; possibly a priori constructs
- b. Selecting the case study; specified population
- c. Crafting instruments and protocols; multiple data collection methods
- d. Data gathering; overlap data collection and analysis; including field notes.
- e. Analyzing within-case data
- f. Discussion about findings. Shaping hypothesis. Making propositions
- g. Conclusions

5.6.1 Getting started

At a first step, a review of the existing literature on the field of SCM strategy has been conducted (Chapter 2) to ensure that there was sufficient and relevant information available to identify propositions supporting the research purpose. Based on this information and the formulated research question, it was decided to maintain the seven constructs previously defined. The prior specification of constructs also helped to shape the initial design of theory building research. If these constructs prove their importance as the study progresses, this would constitute a firmer empirical grounded for the emergent theory.

The general research question is

How do the defined constructs allow to operationalize the SCM strategy into the business strategy?

To answer this question, in this second stage (case study) we analyze within a real Latin American Company if and in what extent to which the derivative constructs constitute the SCM strategy, its relation with Business strategy and the condition that have to be present for its further implementation.

5.6.2 Selecting Case Study

Why was Plasticaucho Industrial S.A. selected for the case study?

In this stage of the investigation, the proposal was to verify in a company if the previously -defined and checked in the previous stages- constructs were actually present and if they have an influence in the decisions that the company made regarding SCM or not

Always keeping in mind that the level of analysis is the company, the proposal was - through a case study- imbued within an organization that met a certain number of requirements to check the behavior of previously defined constructs.

Selecting the company that would allow this analysis -avoiding methodological errors or some kind of deviations in the results- led to take special care in the selection process of the company.

Special aspects of the methodology, among them the fact of the importance when selecting a company for a case study have been considered.

Free access to the company and to all the information required - that obviously must have the least quantity of restrictions- so that the essence of the case study does not miss was one of the most important considerations.

The latter arise taking into account that it is not only about making interviews but to access documents and any other kind of information that would allow to go deep inside in the analysis of the behavior of the company in matters related to SCM.

On the other hand, it was considered of crucial importance the selection of a company where the principles of SCM were applied in order to observe the behavior of the constructs within that work environment.

As desirable it was explored, too, the fact that the company was interested in the research being done, which would allow a greater commitment and participation of the people who would be interviewed.

With all these considerations in mind, a first selection of possible companies was made and then ranked. What was not surprising was the fact that when making the selection under the predefined premises, the universe of companies that met the requirements was scarce. However, from that short list the conditions of an Ecuadorian company stood out, which was finally selected as the first alternative for the case study.

Below in figure 15 are the conditions considered in the selection of Plasticaucho Industrial S.A. to carry out this case study.









Evaluated Conditions	Fulfillment	PLASTICAUCHO INDUSTRIAL S.A.
Scope		It is an Ecuadorian company that is placed it within the scope of the research, which is Latin America.
Importance (sales - size)		It is a company of a very high size and sales volume, which shows its importance in the region and specifically in its sector, therefore, it is a company whose analysis will allow us to find relevant findings.
Market coverage		The company operates in several countries (Ecuador - Colombia - Perú) in the region and has industrial plants in Ecuador and Colombia
Decision's stability		It is a family company of Ecuadorian origin established in the market for 80 years (three generations) which makes strategic decisions have been settled in time and it is not influenced or less influenced by cultures outside Latin America.
Relative position in the chain		It is a productive company placed it outside the ends of the supply chain in order to understand the phenomenon in terms of its relationship with suppliers on the one hand and with customers on the other.
Importance of SCM at the strategic level		It has a Supply Chain manager in its management organization, which would signal the presence of decisions regarding SCM.
Accesibility		The directors (owners) of the company welcomed the proposal to be studied as a case for the investigation and committed to provide all the necessary information, as well as the time availability of their managers to conduct the interviews.
Relation with the researcher		Last but not least, the previous existence of a relationship of trust between some of the directors, the SCM manager and other managers of the company and the researcher due to previous contacts with the company for other reasons.

Figure 15 – Study case company selection’s matrix

It was very difficult to find a company, at least that we had access to, that fulfilled all the requirements that we had imposed so the evaluation for the selection of Plasticaucho Industrial S.A. was relatively easy to take.

It is of great importance to emphasize that the conditions sought for the selection of the company to be included in the case study were defined based on the background that would allow us to present a single case.

Based on the five rationales for single-case designs (Yin, 2009) the case was framed on the fourth rationale, the revelatory case. The previous contact with Plasticaucho Industrial S.A. permitted to observe and analyze a phenomenon which is difficult to see in companies in Latin America, so it was considered that this case could show the behavior of the previously defined constructs and, thus, the research could contribute to build theory about the preconditions for a correct development of the SCM strategy.

5.6.3 Crafting instruments and protocols

At this stage, taking into account, on the one hand, the different possibilities for collecting data and, on the other hand, the need of guarantee validity, a multiple information source was defined. First, it was explored to what extent the selected company was willing to make various sources of public or confidential information available. In response, the directors of the company made it known that all the necessary information -without restrictions- was available to the investigation.

From the information that was considered useful, it was decided to work with the following sources:

- semi-structured interviews at multiple levels of the organization,
- the final document of the last strategic planning of the company (September 2017),
- documents derived from the strategic planning that marks the guidelines and objectives for the different areas of the company.

With the definition of gathering information from multiple sources, the process of triangulation would be possible and, thus, the results obtained would have a greater degree of reliability. It was estimated that possible bias that could occur in the interviews would be detected and corrected or validated when comparing them with the formal documentation.

All the information gathered from the literature review was applied to define relevant interview question. Taking into account that the interviews would be of the semi-structured type, the preparation of the guiding questions was fundamental in order to obtain relevant information in reference to the constructs proposed. In addition, the fact of posing open questions would lead to the interviewees explaining themselves beyond the constructs proposed. It is methodologically very important to verify if other constructs are present and thus strengthen the construction of theory as well as generating internal validation

Therefore, all that gathered information was then analyzed and prepared to set up an open-ended questionnaire for in-depth interviews with people currently responsible from middle- and upper management concerning each part of the supply chain.

Semi-structured interviews for case study are used because, in applying this method to data collection, participants have the opportunity to respond using their own words, rather than being forced to choose from fixed responses, as quantitative methods require. In-depth, semi-structured interviews evoke responses that are unanticipated by the researcher and are rich and explanatory in nature. Finally, interviews are particularly useful for testing what people's responses might be to a particular issue, while revealing completely new issues that the interviewer might not have previously considered (Wimmer & Dominick, 1997).

Because the researcher had to travel from Argentina to Ecuador for the interviews, a schedule (Annex 11) was defined, which was validated by one of the directors of the company, coordinated by the SCM manager and confirmed by each of the interviewees.

The interviews were planned to have a duration that did not exceed two hours and would take place in the work building of each interviewee and in the physical place they would consider (own office, meeting room, etc.) to achieve a more relaxed atmosphere.

For each interview a document was generated (see model in Annex 12) in which all the data of each interview was recorded. In addition, the purpose of this document was to write down the notes that could arise during the interview, but its dynamics did not allow the interviewer to do so during the interviews. Because all the interviews were recorded in audio and video, these comments and notes -in the cases that were necessary- were recorded later when they were reviewed.

Two different questionnaires were designed.

The first, with an extension of eight questions, exclusively for the interview with the directors, with the main objective of understanding what kind of strategic decisions are made at the level of the Administrative Committee and which decisions at the level of the Business Unit. (Annex 16)

These interviews seek to understand how the interviewees see the SCM at the highest level and what is the importance they give it in the strategic decisions of the business unit.

The second one, with an extension of seventeen questions, seeks to introduce the strategic concepts defined in the constructs to understand if from the business strategy there are guidelines to carry out the SC strategy (Annex 16).

5.6.4 Data Gathering

As it was said, the exploratory nature of this case needs multiple qualitative methods to gather the relevant data needed in order to ensure its validity and reliability.

The field research consisted of interviews using a standard protocol. We used a semi-structured questionnaire in order to allow the managers the maximum freedom to

explain their views on various aspects related to the Supply Chain Management's concept, and to enable us to collect the data needed for the purpose of the research.

Through twelve face-to-face semi-structured interviews (Figure 16) to different levels of management, the grade of presence of the constructs under analysis in the definition of the SCM strategy and its relation to business strategy was provided.

A schedule (Annex 14) was prepared and validated by each of the interviewees 2 weeks in advance of the researcher's trip to Ecuador, to ensure that all interviews could be carried out within the established period of time (two weeks).

Interviews were conducted with hierarchical members of the organization who have been grouped into three hierarchical levels in terms of their decision-making capacity in topics related to strategy and strategy of SCM.

The administrative council is formed by the nine members of 3rd family generation and four members of the 2nd family generation. The original proposal was to interview three of those members, two of whom had very important executive functions. Finally, due to a problem of coordination of agendas, interviews were carried out with two executives of the administrative council who have executive functions in the operation.

Study Case - Plasticaucho Industrial S.A.

List of Interviewees

Interviewee	Position	Management's Level
Xavier Cuesta Vascones	Board member	Administrative Council
José Cuesta Vascones	Board member	Administrative Council
José Cuesta Vascones	Corporative General Manager	Corporative Management
Xavier Cuesta Vascones	Plasticaucho General Manager	Corporative Management
Andrés Cisneros	SCM Manager	Corporative Management
Federico Molinari	Commercial Corporative Manager	Corporative Management
Miguel Viniegra	General Manager Perú	Corporative Management
Xavier Cuesta Vascones	Plasticaucho General Manager	Company Management
Alex Quinde	Footwear Operation's Manager – Rubber and Canvas	Company Management
Patricio Toro	Financial Manager and National Sales Manager	Company Management
Andrés Calderón	Organizational Development Manager	Company Management
Juan Zevilla	Logistics and Purchasing Manager	Company Management
Francisco Loayza	International Business Manager	Company Management
Ivan Alvarez	Footwear Operation's Manager – Leather and Diverse Industries	Company Management
Luis Martinez	Marketing Manager	Company Management

Figure 16 – List of Interviewees

Annex 15 and 16 show the documents utilized for the interviews; the first one is a model of the document used to record each of the interviews, while the second is the detail of the guidelines used to carry out the semi-structured interviews.

The first interviews were directed to the top operational managers of the organization: Xavier Cuesta and José Cuesta, who are part of the Corporate Footwear Directory (business unit to be analyzed - Plasticaucho Industrial S.A.) and the Family Administrative Committee.

The main objective of these interviews was to understand what kind of strategic decisions are made at the administrative committee level and what decisions at the business unit level.

The interview sought to understand how the interviewees see the SCM at the highest level and the importance they give to it in the strategic decisions of the business unit.

The second part of the interview was aimed at understanding how the strategic concepts defined in the constructs influence are present and / or are taken into consideration in the business and SCM strategic definitions.

In addition to the interviews, an analysis of the internal documentation of Plasticaucho was made, with which cross-checks were made with what was recorded in the interviews. Of all the documentation that was accessed, the following was used to validate the information:

- documents generated in the strategic planning of the company,
- the objectives of the managers and their relation with the defined SCM strategy,
- Incentive systems and their linkage with the fulfillment of the SCM strategy and
- commercial information.

Both sources of information were defined to make a triangulation through the validation between the information obtained from the semi-structured interviews and the documentation's analysis. As a consequence, better reliability was assured.

5.6.5 Analyzing within-case data

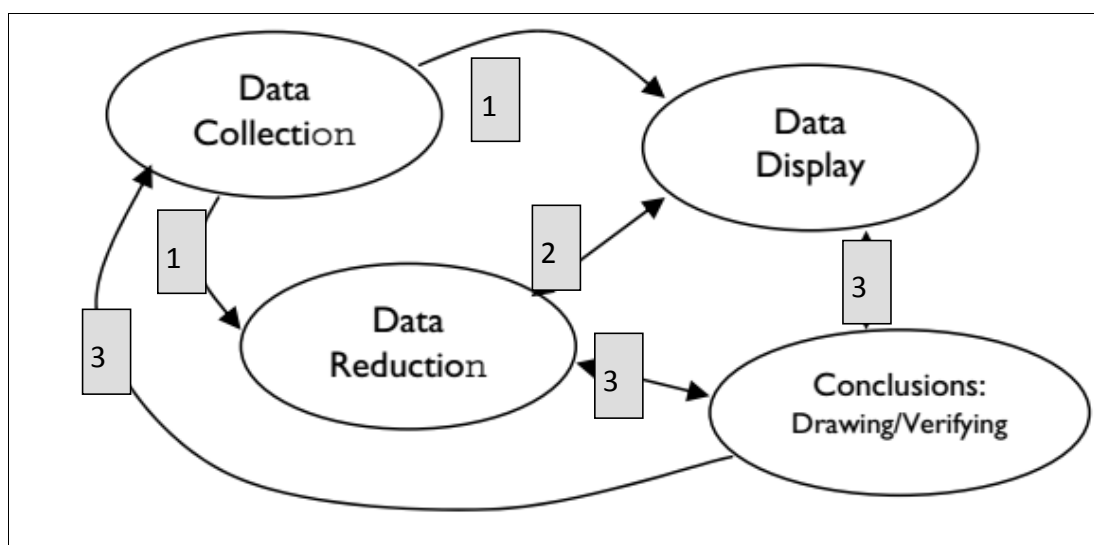
Detailed case analysis is essential to reduce volumes of data, to create insight and to become intimately familiar with the uniqueness of the case. When searching for patterns, it was found necessary to look at the data in divergent ways to avoid leaping to premature conclusions.

In qualitative research, the purpose of analysis is to provide an authentic understanding of the phenomenon. The aim of the data analysis is to generate empirical evidence to answer the research problem (Yin, 2009). However, the challenge of qualitative analysis lies in making sense of massive amounts of data, which involves reducing the volume of raw information, sifting trivia from significance, identifying significant patterns, and constructing a framework for communicating the

essence of what the data reveals, analysis is an integral part of the research process, as it transforms the collected data into findings (Patton, 2002, p.432).

An important amount of data from primary and secondary sources was collected trying to obtain as much information as possible to understand the SCM's phenomenon in the selected company. Secondary data on the selected case, was analysed as well. In addition, transcriptions from semi-structured in-depth interviews with upper management and directors were used to analyze their arguments and assumptions concerning SCM's strategy and its link with business strategy. All the information collected was analyzed to find common principles and activities, and to highlight learning and propositions that can be of help in formulating generic recommendations for managers about how the SCM strategy contributes to a better company performance.

The analysis of the collected data is an iterative process that begins during data collection and ends with the case reports later in this chapter. The other components of data analysis are data reduction and data displaying. Figure 17 represents the iterative process of case study research.



Source: (Miles & Huberman, 1994, pag.12) (numbers added by the researcher)

Figure 17 - Study case Iterative data Analysis Process

All gathered information from the literature review, documentation and transcribed interviews were analyzed separately. The challenge resulting from the various in-depth interviews was to make sense of the unstructured data, i.e. qualitative data in the form of interview transcripts. To identify common themes and principles or to highlight certain activities described by the interviewees, a codification system was created; codes and labels were used to assign relationships between the findings and the formulated research question. The criteria for coding was:

- A priori codification based on construct previously defined,
- Guiding the researcher through theories or concepts of the literature review, and
- New codes or modifications to those previously defined as the interviews were analyzed.

In addition, the codes were defined so that there were no doubts for the researcher as well as for future revisions of this work on the criteria used when applying them.

Annex 18 details the codes defined and used, while in Annex 19 the families of codes that -as mentioned above- respond to the analyzed constructs, are listed.

Through the coding process, it was possible to conceptualize underlying patterns and to make use of preconceived theories and concepts. Data reduction is possible by coding criteria.

The mentioned codes have been determined and redefined after a first analysis of the interviews; they were grouped and assigned to certain categories (families), which were chosen in close relation to the constructs under analysis. In a next step, the relation among codes and the occurrence of codes was analyzed according to their relevance for the research question and, furthermore, by considering the connection and relevance of the different categories to each other. Finally, the coded and labelled information was compared with supporting and conflicting literature to increase the generalizability and to support the findings with theoretical research and literature.

578 quotations were generated in the twelve interviews and associated with the 27 primary codes. An interrelated codifying structure was defined so that for a quotation, more than one code was defined, when necessary. This type of cross-coding, besides making the analysis more complex allows us to have a clear perspective of how different codes interrelate with each other; this contributes so that in the process of data reduction, patterns can be found to identify the greater or lesser degree of interrelation within each construct and even between constructs.

Annex 17 shows the interrelation and frequency between codes (co-occurrence).

5.7 Development of the Analysis

In this stage is explained in detail the full process mentioned in the previous section. The configuration of the interviews and the analysis of documentation was guided by the constructs previously defined. In the same way, the analysis of all the information obtained was carried out, for this reason the results -ordered by the constructs- are represented.

5.7.1 Business strategy and SCM

Data analysis begins by reviewing the business strategy of Plasticaucho and how a clear SCM strategy emerges from it.

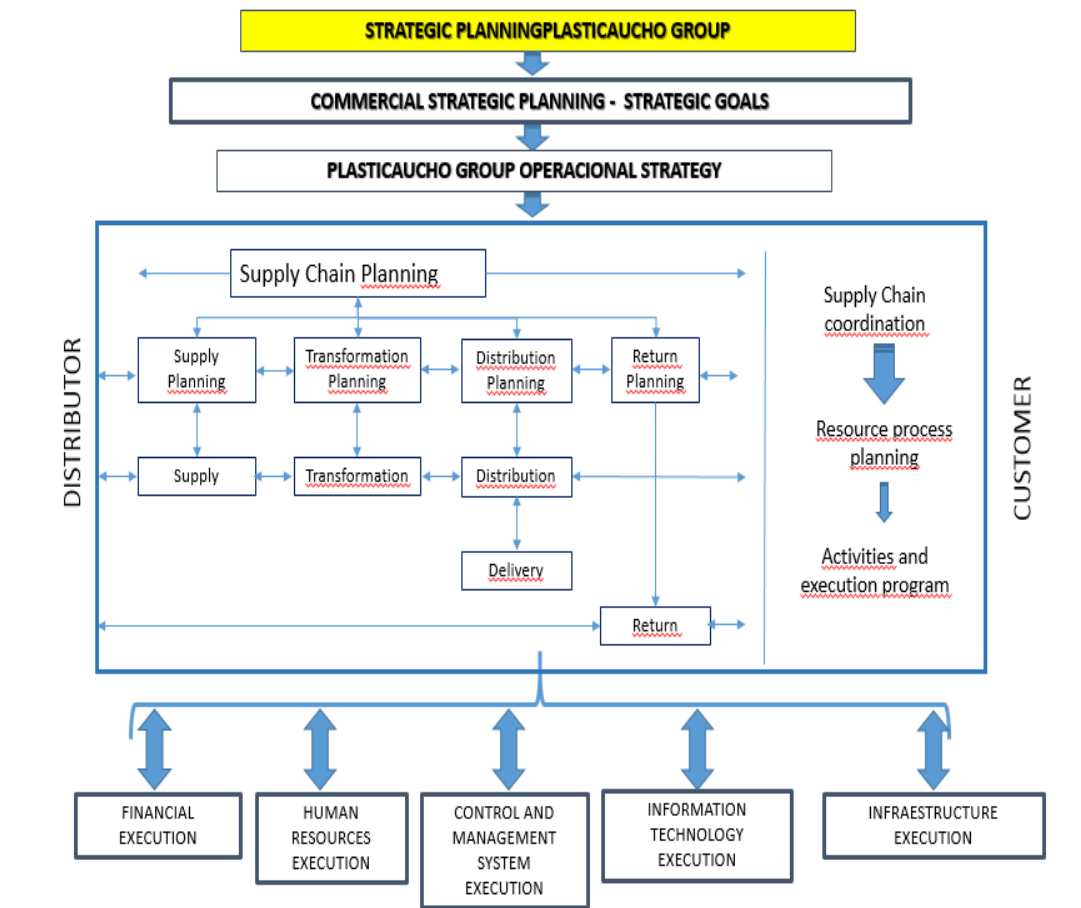
In this instance we tried to understand which are the strategic guidelines that guide or delineate the operationalization of the SCM strategy.

Plasticaucho has a very well defined formal process of strategic planning in which it defines the business objectives. At the highest level, the FAMILY - COMPANY strategy is defined every five years and revised annually. From there all decisions must be aligned with this strategy that can not be violated. At this level it is define kind of investments, kind of industries where to participate, level of incidence at the shareholders' level, at the management level and at the operational level in the

participating companies. On the other hand, it is clear that at this level of strategic planning no type of definition is made referenced to Supply Chain Management.

With the FAMILY-COMPANY strategy defined those responsible persons begin to work with the company-level strategy.

Figure 18 shows the strategic planning structure of Plasticaucho Group.



Source: Corporative presentation sep. 2017 (translated)

Figure 18 - Strategic planning structure of Plasticaucho Group

In this level of Planning, Plasticaucho has defined what they call "Strategic Assets" which is what differentiates them from the competition, which they can not copy; in

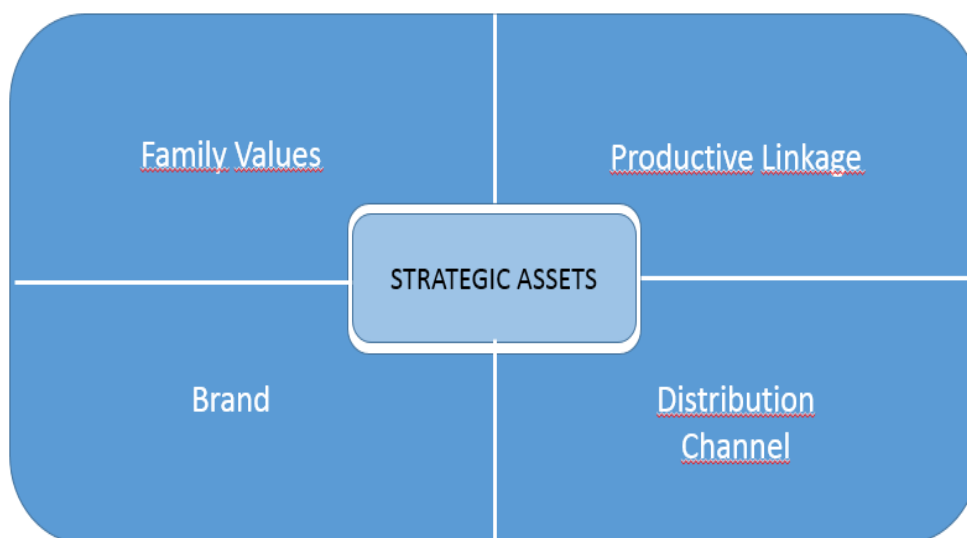
the words of José Cuesta *"the submerged part of the iceberg"* while Xavier Cuesta defines them as *"the foundations that are buried and therefore are not seen"*

Strategic assets guide -strategic, tactical and even operational- decisions of the company. *"...we did a whole process to identify and to be sure what our strategic assets are, so that those strategic assets can leverage the business..."* (interview with Andrés Cisneros).

As it is shown in Figure 19, the four strategic assets that guide the strategy in Plasticaucho are: principles and values; the Brand; distribution channel; and productive linkage.

At this level the strategic alignments are proposed to make way for the commercial strategy that is outlined along with the supply chain strategy. This is consistent with the organizational chart defined and in operation at the corporate level; the corporate is formed by the general corporate manager, general managers of the Plasticaucho group companies, the commercial corporate manager and the SCM manager (Annex 13).

Plasticaucho Footwear Industry



Source: Corporative Presentation sep.2017 (translated)

Figure 19 – Plasticaucho Industrial's Strategic Assets

Based and guided by these four “Pillars”, as these strategic assets were called by several managers, the company strategy seeks to have a strong control of investments, be financially healthy and maintain a sustainable profitability in the long term. To do this, it places a strong emphasis on the control of expenses and what they call “Operational excellence”, they already define at a strategic level that they are obsessed with efficiency. Taking into account what was released from both the interviews and the documents it is clear that the company has a clear philosophy of long-term management; this point is detailed later when the decisions regarding the supply chain and its long-term relationship with suppliers and customers is analyzed.

A formal analysis of the four strategic pillars of the company clearly shows the relationship between the business strategy and the strategy of SCM, in fact, two of the four pillars make clear reference to the supply chain.

Let's review what Plasticaucho means for each of its strategic assets

- Principles and values

This is without a doubt the most important strategic asset of the company. Plasticaucho after eighty years and three generations in the market enjoys a prestige in the market that translates into recognition, trust and commitment of its suppliers, customers, employees and other institutions with which it interacts.

The family has clearly defined its principles and values that are not negotiable; transparency in all aspects, compliance with laws in the countries where they operate even if they do not agree; not doing business with the state; not participate in companies that are linked to death.

José Cuesta -referring to planning at the family level- says *"...we are defining first a strategic document where we make clear what is the strategy that the organization has to follow, which are the principles and values that have to be respected..."*

Although no supporting documents are revealed, from the interviews it appears that throughout the existence of the company they never stopped paying salaries nor social security contributions to their employees.

Internally, this is clearly visible in internal climate surveys (indicators above 85%) Andrés Calderón tells us "*... the general measurement, the last one we had, was 81% satisfaction, when we make partial measurements that are every month to employee samples, because every month we monitor a random sample of employees, we are above 85% ...*"; in the very low turnover rate of its employees; and in the seniority of its managers.

Being consistent with these principles and values gives Plasticaucho a positive image in the market and gives the company an institutional leadership that allows it to carry out what they have defined at the highest strategic level and **what they call the long-term philosophy**; in the words of Xavier Cuesta "*... one of the elements that are relevant to us is the **long-term vision of business** and that is key ...*"

This strategic pillar is sustained in the culture of the company, a topic that will be specifically addressed later because it is one of the constructs under analysis.

- The brand

Plasticaucho is supported commercially in the brand "Venus", which is positioned as a product of very good quality with an excellent quality / price ratio.

The brand is the most recognized in Ecuador. The consumer seeks, first, to be a product that you trust when you buy the boots, the brand. About the brand Xavier Cuesta explains "*... we position a brand, we do not sell products ...*"

As a strategic asset, the positioning of the Venus brand is differential; according to José Cuesta, 99% of Ecuadorians know the brand, it is a brand that over time is monopolizing more segments.

Even though there is no supporting documentation of this brand awareness value, questions were asked to passers-by, outside a methodological framework, through the streets of the city of Ambato (2 questions were asked to 12 people chosen at random

from different ages and sex), if they knew the Venus brand and if they bought or would buy Venus products; all responded affirmatively to both questions.

- Distribution Channel

By channel of distribution as strategic asset Plasticaucho refers to the retailer channel; *"...the knowledge of the retail distribution channel that we have, nobody has it here in Ecuador."* (interview with José Cuesta).

This strategic asset is leveraged in what has already been said in reference to the long-term strategic vision, as expressed by Xavier Cuesta *"... my philosophy is long-term, I have to make sure that my client does business with me because if not, he will not be with me in the long term ... if the objective of the big company is to make money, what is the purpose of the small business? earn money too."*

For Plasticaucho, the availability of the product in the client is fundamental, basically because of two reasons that although seem obvious, they are not necessarily so; the customer needs -for the business functions- that the product be available and in that way it can have the necessary rotation that generates profitability; and on the other hand the consumer seeks the product that gives reliability (brand) be at your fingertips when you need it.

The ability to deliver to the customer is a competitive advantage over the competition. Plasticaucho has managed to transform it into a consolidated strength which means that they are several years ahead of the competition in this aspect; the customer and the consumer value it very much so the company works constantly on this strategic asset. Reaching the appropriate level of service is not achieved only with a good commercial or marketing strategy, but the business strategy which involves the whole company. To achieve a correct product availability, the general strategy is to maintain high availability of inventory; this does not mean that they should have high inventories since their obsession with efficiency leads them to be constantly working on reducing inventories in all the links of the chain, both internal and external.

In the footwear business, the sale is by "curves", this means that for a given model / color the client receives a certain number of pairs of each measure. Plasticaucho, as a strategic decision does not sell curves but sells exclusively what the customer needs. By doing this, what would seem to be a disadvantage becomes a competitive advantage as it helps the client to be more efficient by contributing to reduce working capital (less inventory immobilized by pairs that would not sell). The implicit reasoning is that if the client is doing well Plasticaucho is doing well. From the interview with Miguel Viniegra "*... I do not sell curves and that's an advantage; nobody who handles footwear anywhere in the world ask me what you want? ... that does not exist Plasticaucho lets you buy what you want. "*

It is during the strategic planning exercise when the company performs a SWOT that they call a relative commercial SWOT; it is basically focused on the needs of the clients and the consumer. Xavier Cuesta explains it "*...there is a very interesting exercise which we do, a relative commercial SWOT, I will explain; usually in the traditional SWOT exercises one says, let's see, what is PLASTICAUCHO good for? it has a very large infrastructure; it has very large financial capacities; but that, in what does it serve the client?, in what does it serve the consumer? Then what we do is to understand what the customer needs..."*

As well, referring to the strategic importance of the retail channel Andres Cisneros says "*... if the client wins, he has a sufficiently competitive margin, I think it is a constant concern, that is, because he remembers that the retail channel especially, that interests us, those customers must do business with our products, that is a premise. That is a strategic asset, if you do not pay attention to our strategic asset we are fried..."*

Therefore, the client and the consumer are a real concern for Plasticaucho, from the business strategy they see in the client and especially in the consumer the real source of benefits and consequently they make decisions to take care of that strategic asset.

- Productive linkage

Productive Linkage, as is defined by José Cuesta is, just to see the operations from a much more strategic point of view. How we handle all that business chain with us and

our suppliers to develop a proper supply chain and negotiation at a speed which is almost unique.

The productive linkage includes all the activities from the supplier, going through the entire Plasticaucho value chain until the final product is available to the customer. As it can be seen, it would seem that there is an area of overlap between the production chain and the distribution channel, however, looking in detail at both strategic assets, these are concatenated to achieve complete coordination from the supplier to the customer. In the case of productive linkage, an asymmetry can be observed since this strategic asset is more focused on coordination with the supplier than with the customer.

The mentioned asymmetry can be observed in a passage of the interview with Andrés Cisneros when referring to the productive linkage; he explains "*... then, among the strategic assets that we identify is the productive linkage as a whole; then, when you say that my strategic asset is the productive linkage, that includes the suppliers...*"

When referring to the productive linkage, Xavier Cuesta is broader in its scope and categorical in terms of its strategic value in saying "*...the fourth pillar that is closely related to the chain of prestige and the chain of business of the clients we have is what we call the PRODUCTIVE LINKAGE that is all the development of strategic suppliers that we have been developing over time, all the way of our operation and all the distribution of the merchandise...*"

The explanation of this supposed asymmetry is precisely the fact that the effort in the customer is developed in the previous strategic asset. Ultimately, strategic assets are coordinated and mutually leveraged to achieve operational efficiency defined as strategic guidelines.

Presented the four strategic assets or pillars on which the business strategy of Plasticaucho is based, we can anticipate that the combination of the pillars of distribution channels and productive chain show the strong relationship that exists between the business strategy and the Supply Chain Management strategy.

The four strategic assets do not work independently, on the contrary, together they are the structure of Plasticaucho's business strategy. This is how José Cuesta explains it *"...is a set of activities that are developed and that undoubtedly work as if they were an engine; because everytime I say, the distribution channel, I want to make an offer of value to the channel for a period of time, I am moving all the machinery that is interconnected; therefore, when I move with a strategic decision in any of these activities I am generating a change in the system; hence it is fundamental to understand the interconnection that all the strategic assets have for each other for the development of the company and the development of the strategy as such..."*

From the strategic assets, there is a strong orientation towards achieving the efficiency of the company, understanding that this efficiency can be improved to the extent that all the production linkage from suppliers to customers works in coordination.

It has already been mentioned that two of its pillars respond and present Plasticaucho as a company that works together with suppliers and customers to achieve their objectives. From the statements of the directors and several managers directly or indirectly related to this production linkage as well as the documentation that was accessed, there is a strong consistency with the reality that suppliers and customers play a very important role in achieving the strategic objectives of Plasticaucho.

There is a strategic decision of the company to try to generate a coordination Suppliers - Plasticaucho - Clients. At the moment we will not deepen into what kind of customers or suppliers would participate in this coordination, we will see that is more than that, in many cases it is a collaborative relationship.

The strategic importance of the SCM is expressed by José Cuesta *"... I could not develop the company's strategy if I am not clear about the supply chain, how it has to operate and I need to have that clarity at the level of that 4th pillar that we have for the execution of the strategy..."* (in reference to the productive chain).

The company defines its strategy and from there arise the "strategic guidelines" from which the commercial strategy of the company is derived, which is shared with the Supply Chain strategy. This strong relationship given by the strategic guidelines can be

seen in the graph in Annex 13 that shows the formal corporate structure from which the strategies are defined. The commercial area and the supply chain area are the only ones that, as a functional area, participate in the aforementioned structure.

Andrés Cisneros refers to the importance of the participation of his area in strategic planning when he explains *"...At that level, when the supply chain manager participates, I believe he generates an advantage for all operations because I am imbued with all first-hand, first-level decisions and that goes down quickly to operations..."*

Andrés Calderón, although his area is not directly aligned with the supply chain, defines the relationship between the business strategy and the strategy of SCM. *"...Absolutely (he emphasizes) and in a very, very important, very significant way, even sticking to the commercial model, that is, we know how we sell and the concept of the supply chain is behind us; in the plan and in the strategy we have some definitions and strategic guidelines that come from a structured supply chain scheme, so, I think that I have not met other organizations that manage such a model but it seems to me that this one is very deeply involved and close to the company's macro strategy..."* and he adds, showing the SCM as a way of doing business going beyond the vision of operations, *"...my perception is that it has marked much the way in which we do business..."* *"... I think that in Plasticaucho the chain model has filtered and has been part because it ends up impacting the way we do business..."*

By openly asking Xavier Cuesta if strategic planning defines SCM strategy issues, he responded, *"...Yes, of course ... and it is not an issue that our supply manager decides or that someone alone decides ..."* *"... Within the general strategy of the company is very clear the relative importance of the supply chain and in all commercial strategies the supply chain is a critical element..."*

Finally, to make clear the importance of the strategy of SCM in the business strategy Xavier Cuesta exposes it in the following way *"... the supply chain management is for us as the backbone, based on that all the rest of things are developed, obviously at the head is the strategy, the management team, but then comes the supply chain..."*. As

just mentioned, Annex 13 shows the corporate of Plasticaucho Industrial where it can be seen the participation of the SCM elements.

5.7.2 Segmentation criteria

We have already seen that the combination of strategic assets -productive chain and distribution channel- defines the need to interact with suppliers and customers beyond the transactional relationship.

This relationship must be understood on the basis of two premises that arise; one of them is that there is no symmetry between customers and suppliers, therefore the relationship criteria with the former is different than with the later, although in both cases the strategic guidelines regarding suppliers and customers imply the same objective that is achieve a better efficiency of the whole chain; the other premise is that there are segmentation criteria (different for suppliers and customers) that define the level of collaboration and relationship.

It is clear that at the strategic level only the segmentation criteria are defined; are the operational levels which, based on these criteria, define and decide what level of relationship they will have with each provider. In the case of customers, the segmentation criterion is the typical one that responds to commercial criteria, with which we will see that -although there is no defined segmentation criterion- there are clear guidelines on how to relate to customers based on criteria that -as we will see later on- have to do with the culture of the companies.

5.7.2.1 Customers

In the case of customer segmentation Plasticaucho makes a clear division between large customers -usually wholesalers or supermarkets- and retailers. From the point of view of the client typology they are currently working on different segmentation criteria. Today Plasticaucho sells all the products to all its customers, this affects the

efficiency of the chain; the idea is to segment with criteria that allow better reach each client with the most appropriate products according to the type, this will allow PLasticaucho to better direct the inventories in the customers in order to improve the product rotation and thus generate a better financial situation of the chain.

The actual segmentation criterion allows the operational level by defining the scope of the relationship with customers, as expressed by Juan Ignacio Sevilla "*... there are some that need more attention or less attention, involving logistics or sales only; when logistics and sales are needed to be more aligned, joint visits are made, as in the case of large surfaces or department stores; in the retail and wholesale the business is so dynamic and there is such a volume of clients that there exist macro, general policies, in which we have to meet a service level and an established road*".

However, these guidelines are not strict, when a client has a specific need or there is an opportunity for joint efficiency, managers have the freedom to advance collaborative practices regardless of the segment to which the client belongs. In the case of a chain of supermarkets they are working together, Plasticaucho takes charge of inventory levels in their stores, something similar to a VMI, (Vendor Inventory Management), Patricio Toro explains that moving in this direction is an advance towards the visibility of the chain as it would allow a better management of inventory levels with a higher level of service since it is not possible for the footwear buyer of the chains to have the necessary knowledge to make the most appropriate purchase, explains "*... there are 10 buyers who are assigned more than 1,000 SKUs each ... then we say: ... if you give us the information that is in some way our core , we put the best inventories and when you sell, we sell...*"

This relationship with the client is presented every time there is an opportunity. In the case of an export (client in Central America) the condition of payment was settled so that the business was convenient for both parties. Francisco Loayza explains that this client was given a 60 day credit for payment, but the client requested a better payment condition, the calculation presented by the client showed that it could grow in a joint cash flow but needed more days; this is how he details the result after the client

presented it to his boss "... he sat tatata tatata, result 98 days, my boss signed, approved; I like it and it shows technically that it needs that additional term to grow the business, approved..." In this example it is clear that if the company finds an opportunity for improvement it is willing to collaborate but at the same time shows the influence of the culture, there is an affinity component, when he said "... I like it ..." In another example, Francisco again poses a situation of exception to his boss who says "... let's see the data; sales 2014, 2015, approved; you have the credit ready for this time. So, you manage under a structure but there is flexibility to help the client to have that synchronicity in everything."

This relationship with the client looking for synergies that allow a more efficient chain is seen in the management of inventories. Plasticaucho has a constant concern to optimize inventories throughout the chain to the point where they have as a strategic guideline not to force the channel, namely, the commercial area can not do PUSH, explains José Cuesta "... our commercial advisor does a good management and does not do a sales PUSH because if that would happen automatically I would have a portfolio problem, the normal client starts to fall behind because has an over-stock; normally it is not because he does not want to pay, but because I have designed an erroneous PUSH strategy, I have generated more stock that the client can not pay ...", "... an over-stock in a client of leather footwear, which is sold once a year for 3 weeks, if he bought more then the customer has the shoe in stock for 39 additional weeks and the man, what he does? He also has a financial business called how much my inventory rotates, how many laps I give to my working capital. If I make an over-stock of leather shoes the next month he will not buy plastic boots or will not buy canvas shoes, why? Because he does not have the necessary working capital that is invested in the leather shoe; and we both lose..." This is also explained by Luis Martinez "... we relate to the customer to the point that we take precautions, for example, his financial health, when it comes to selling enough or necessary stock, we safeguard his financial health because, of course, there are many clients who -because of their effusiveness or ...- they may come to buy too much and then have a problem and that creates a problem for us..."

Plasticaucho emphasizes the good relationship with customers, especially the retailer, is one of its strategic pillars, Andrés Cisneros tells us *"... it is a concern of the company if the client wins; if the client wins, he has a sufficiently competitive margin, I think it is a constant concern ..."*

The company is very attentive to listening to the customer and through him to the consumer; but in addition, the relationship is influenced by the values that they have and that translate into behavior over the years. It is normal for a customer to give the seller a blank check so that when the day arrives Plasticaucho place the corresponding value, as explained by Federico Molinari *"... we have reached a level of trust with the customer, they are even able to turn a check or put certain values without the presence of the client and obviously has never missed a penny, then, that kind of thing is what the company projects... "*

The link with the client is through the commercial area, they are the ones that are prepared for the relationship. The area of supply chain, beyond that involved in the planning of the entire chain does not relate to customers and rarely to suppliers, explains Andrés Cisneros *"... No, with zero customer relationship, commercial and so it must be, it is almost a provision that planners do not have to interact with customers because we are opening an unnecessary communication channel that does not correspond, commercial is the one that has to negotiate, commercial will know how to take all the issues with the client and transfer them to us..."* He then clarifies that in the MTO (Make-to-order) orders, normally originated in department stores or supermarkets, the coordination and planning work is done jointly with the commercial area and the supply chain area with the client. The management of SCM does not ignore the client but leaves the relationship to the commercial area, Andrés tells us *"... I see it and I have very clear the consumer demand, but another thing is relationship, relationship is to be in contact ..."*

The concern for the client is also seen in areas such as production, Ivan Alvarez tells us that he personally goes out three or four times a year, along with the commercials to visit clients *"... I go out three or four times a year to review routes, accompanying to*

the sellers, to know how customers are doing with us, because one thing is what comes to you as a claim, but sometimes in the claims come a lot of things, many valuable, but it is preferable to know what do people think, who are doing wrong, who are doing well; there are many claims that come from marketing but they are quite filtered, that's why it's good to hear them..."

The relationship with the client leads Plasticaucho to be attentive to the commercial decisions that the client can make, if they consider that the client's decision can affect the market in some way they let him know and if the client does not respond they take measures to preserve the chain. As Francisco Toro explains, in the case of wholesalers or distributors who apply distortionary prices, they visit them and ask them to objectively show the rationales *"... we take out invoices, pro forma and we go and talk to the client. We have some form of protocol, we first talk, we call them attention, we let them know again that there is a price level and that we can not compete unfairly; second we sanctioned him, there was even a third step applied to a client to whom we removed the distribution ... "...when it reaches the end of removing the distribution they do not give it back..."*, *"... there is a cultural vision, this client does not have the same business vision ..."* Here again we see the cultural conditions that influence this type of decision.

Another way to see the relationship with customers is through something very common us are portfolio problems, in those cases Plasticaucho goes to the client and analyzes the situation, if they find a real problem they help, but if the problem is due to lack of willingness to pay, Plasticaucho does not respond. Patricio Toro gives a real example *"... the last season happened in the city of Milagros, the city was flooded, one night his inventory got wet, that is affecting him and it is easy to see, feel ..."*, *"... the same happen if someone of the commercial area made a PUSH, and generates a problem of liquidity to the client, ... "" ... those who have lack of willingness to pay, we put an X, we end up charging them, we put the other X and we do not sell them again , or we will sell a cash payment in advance. Why? They have another vision, ... "" ... we have to see the business in the long term "*

This is how Plasticaucho is related to its customers looking beyond the problems within the company, is committed to the entire chain and this relationship is long term as Xavier Cuesta says *"... my philosophy is long-term, I I have to make sure that my client does business with me because if not, he will not be with me in the long term..."*

The example that was cited by several of the managers and directors interviewed and that gathers several drivers of the relationship with suppliers is probably that of the earthquake that in 2016 affected some regions of Ecuador; in this example it is seen quite clearly how the relationship with customers has its base in multiple drivers but, at last, respond to the strategic vision of the company; the cultural aspects based on its principles and values, the long-term relationship, the financial health of the clients, committing to the client having profitability in their business are some of the indicators of how Plasticaucho relates to its clients; Xavier Cuesta explains, *"... there was an earthquake last year in our country, forced us to help those who suffered damage ...; ... some had physical losses, unfortunately some human losses included, but there we had to enter and renegotiate the payments. In this renegotiation of payments, it took a very long time, several years to pay us, but finally ended up paying before. And what was the concept? In those circumstances, if we forced them to pay us, they would not have had how to do it; if we broke the relationship with these customers we lost the tentacles of distribution and we had to start from scratch. What we did was, enter, we financed them, to many of them we returned to deliver product, because if they do not have product to sell; if they did not have a product to sell, how would they pay us? The result is that we have a much stronger, much closer relationship with that group of clients..."*

One of the business units of Plasticaucho is the so-called diverse industries with characteristics very different from their traditional business units; in fact, some clients in these business units are industries. Far from being a core activity of the company, the behavior in the relationship with the client clearly shows the strategic alignment that all areas and business units have in terms of the efficiency of the entire supply chain. This is the case of a customer who buys a "liner" that he uses for the inside of the screw caps of plastic bottles; there was a problem because Plasticaucho could not

keep the price; they visited de client and it was seen that Plasticaucho was sticking the sections to make the roll they were selling and then the client cut. In short, they worked together to deliver the product in a way that diminished internal processes in Plasticaucho and generated less waste in the client; as Ivan Alvarez expresses it "*... We did that, the man, happy. We raised the price and now the product is the more profitable of the plant, we won more money, they gained more money and we are both happy, we have increased sales.*"

5.7.2.2 Providers

The segmentation criteria in the case of suppliers are clearly defined at a strategic level. Plasticaucho formally recognizes three categories of suppliers and what is the degree of relationship in each of these segments, although later in this section we will refer to the relationship with another type of providers that will serve as a basis for interpreting a strategic alignment that It goes beyond the segmentation criteria and has more to do with what one of its directors described as a long-term philosophy and that is imbued in the culture of the company.

The segmentation criterion has to do with the importance that the supplier has in the supply chain, so they refer to the segments as

- strategic suppliers,
- critical suppliers and
- other suppliers.

When asked about the segmentation of suppliers Francisco Loayza explains "*... There are two, three, four strategic suppliers, there must be another group of suppliers that although they are not strategic are suppliers that in some way need Plasticaucho and Plasticaucho need them, a lot...*" However, beyond the criterion of "formal" segmentation, there is another criterion that is not mentioned openly and that has to do with a group of companies supplying strategic inputs belonging to the family corporation; they can be considered within the strategic segment, but because they

are Group companies we can think of a partial vertical integration in which the conditions of relationship and collaboration respond to other parameters. José Cuesta clarifies *"... there is another group company that is responsible for the production of the capelladas called DISTRISHOES; and there is another group company that produces the threads and the teas used by DISTRISHOES and then used by Plasticaucho..."* On the other hand, Patricio Toro refers to these suppliers and the type of relationship in the following way *"...there are providers that we have as related, they are part of the group, there is a closeness by affinity..."* These segmentation criteria are defined at a strategic level and are transformed into strategic guidelines for managers to generate the relationship supported by these guidelines; when asked about this topic, José Cuesta answered *"...Right, I definitely define it at the strategic level..."* And Xavier Cuesta reinforces it by saying *"... The criterion at the highest level and the definition is a managerial definition..."*

On the other hand Juan Ignacio Sevilla classifies them without hesitation *"... speaking from the purchasing area, I believe that the supplier part is key; we have critical and strategic suppliers ... "" ... there are strategic, critical suppliers and there may be another group there; there is a segmentation criterion..."* and he provides an example about the difference between a critical supplier and a strategic one can be understood *"... for example cardboard issues, covers, one will say, nothing happens if a sleeve is missing, however a whole production line is stopped, they can not pack 40,000 pairs of shoes that come off the line; It is not strategic but it is critical; that is why it is differentiated how it works with the different suppliers..."* the same example of a critical supplier is presented by Xavier Cuesta *"... there are other levels that can be packaging, for example, there are critical elements, not because of costs but because of complexity..."* These segmentation criteria lead managers to have different levels of relationship that, in the case of purchasing management, is very clear, as expressed by Juan Ignacio Sevilla *"... differentiating how one works with different suppliers. Depending on the provider segment is the type of treatment I have; with some suppliers I will meet once every two years, with others I will meet five or six times in a year and with others once in the year..."* But the criterion of segmentation, beyond the level of

criticality, is rooted in a matter of availability of resources, Xavier Cuesta refers to the segmentation from another perspective of the business "*...This can not be done with everyone, it is not must do with everyone, because it is an exercise that is going to be exhausting, one has to have the good criteria to define, either by availability, because there are scarce materials in the world, or by the relevance in manufacturing costs and in the profitability of the company, with whom it does merit direct relationship...*"

Based on the application of customer and supplier segmentation criteria, which, as we have seen, is defined at a strategic level and transformed into guidelines for management, the different types of relationships that contribute to achieving the efficiency of the entire chain generated by Plasticaucho has been proposed at the highest strategic level.

Up to this point we have seen the participation of SCM decisions within the framework of the business strategy. From now on, we will review how Plasticaucho executes with its managers at the operational level the strategic guidelines related to the relationship with suppliers and customers. We will analyze under the umbrella of previously defined constructs how the SCM strategy is taken to the operational field.

5.7.3 Distribution of benefits along the chain

The distribution criteria are associated with how the company, working together with providers and clients, obtains benefits through a collaborative association that generates a global efficiency to then apply those criteria for the distribution of benefits among the members of the chain.

Collaboration and chain efficiency are the two aspects observed through the analysis of the interviews that indicates how from the strategy the criteria are delineated.

What was developed in the previous section, the quotes we have exposed, clearly show how this relationship with customers and suppliers aims to achieve, through collaboration, the achievement of competitive advantages of the chain, including Plasticaucho. The business strategy for what was expressed by the interviewees is

consistent with a long-term vision in which the search for global efficiency comes hand in hand with a win-win relationship with both customers and suppliers. It could be repeated several quotes already mentioned that show in the relationship with customers and suppliers the willingness to collaborate with the goal of efficiency, in this sense José Cuesta says "*... we do not like to have a supplier to sell me a container of cartons at low price; I like a supplier with whom I can negotiate a development of five or ten years of productive development of the chain so that we can have a relationship where he wins and I also win... "*

What has been observed is that the relationship with customers and suppliers is a guideline and therefore not a list of what can or can not be done to achieve that efficiency, the list of opportunities will emerge as they arise. This chain efficiency can be achieved in any of the areas and this is of fundamental importance because it demonstrates, precisely, the problem of the SCM is not a problem that is solved logistically, exclusively, although this area also provides opportunities, but the realities in each supplier or client at every moment put forward the opportunities for the efficiency of the chain. From the information collected in Plasticaucho clearly the opportunities are presented in financial efficiency of the chain, investments in equipment, advice, help in special cases, generation of savings of operating costs as a whole, in simple communication, among others. José Cuesta explains how to achieve financial efficiency "*... for example with the tannery, of about 60 days in a local sales process, is that reasonable? totally reasonable; but if my tannery, which is a strategic supplier, sells a much smaller turnover volume than mine and does not have the same level and size of operation ..., ... what can I do? I can pay him at 24 hours and help him in his flow, he has not had a portfolio of 60 days and I have a lower financial cost, the chain works better, even, with that money, I can make many more investments that I am going to demand him ""... with capital that I am giving to him by paying much more up to day ..."* "*... so, he does not have to finance his operation and he can dedicate those money, those resources to overturn his industrial plant to look for efficiency, then, that kind of thing without doubts are fundamental ... "*. The same says Xavier Cuesta (in the case of the earthquake) "*... we financed them, to many of them we returned to*

deliver product, because if they do not have product to sell, how would they pay us? "...The result is that we have a much stronger, much closer relationship with that group of clients ... " " ... There are some of them to whom simply we eventually cut the payment terms that we had set, that is, we pay early; the other issue, the financial cost to me is lower..." "... by our model and seasonality we can support certain issues due to seasonality; a small business such as a maquila, no; we, in quotes, there are times when we can subsidize and guarantee a minimum level of income to that provider because we know that we later compensate in our process, even in financial matters..." From Peru Miguel Viniegra corroborates the search for efficiency in the chain through financial tools *"... I have to align my payment condition to the consumption demand because otherwise the client drowns because he does not have enough money..."* Fluent communication and information interchange among other links in the chain, that allow greater visibility, better planning, and as consequence, leads to improved efficiency, also José Cuesta says *"...for example, the tannery or companies of the same group, both the textile factory and the distribution, where I go every 3 months, I explain what will be the supply project and what will be the consumption project that we have so that they can define how many people need, how much effort of working capital they require, etc ... "* and summarizes it *"...this way we achieve that the productive chain is understood from that base, since we are not independent companies but we are all under the same schemes, under the same engine running, doing things the right way..."* The concept of productive linkage of Plasticaucho has much to do with achieving chain efficiency, Andrés Cisneros says *"... and the productive chain is, ¡hey supplier, strategic, you!. They have to know my operation, they have to be very aware, and they have to be sensitive to those peaks of demand, to those production changes, that they understand us, then, that helps us to speed up the chain..."*

The aforementioned case of the client of Diverse Industries, after visiting him, understanding his problem and generating a solution that allowed both to be won, shows how the interaction with the members of the chain and looking beyond the company, make the chain more efficient.

About the inventories, Ivan Alvarez recounts *"... It has happened to us that we have gone, the commercial team with the planning team, to review, because the two main clients, of the great ones, I refer, had problems in the handling of their inventories, had over-stocks of some things, and to us, as a company, that does not suit us, because they begin to have financial problems and stop buying. Then we went to check on how things were to help them to program that. Yes, that has happened to us with large clients, even some time we went to help in how to monitor, to professionalize in a little bit the inventory management..."* Returning to the case of the 2016 earthquake, already mentioned, you can see how Plasticaucho looks beyond his company. In these decisions of collaboration influence issues of business culture, long-term vision and efficiency of the chain, says Patricio Toro. *"... we had affected customers, but the level of impact that the customers had was not the same, that is, there are customers who next day after the earthquake, a client told me: "... the only thing I have today is what I have ...", "... there are clients who did not lose the sale's facility or the house but maybe some things were stolen, at that time what we did is, according to the degree of affectation, we entered into a strategy of recoveries, we gave, for example to the most affected customers, extended payment terms, we gave them a much more personalized attention than other clients to whom nothing happened to them..."*

The process of collaborative relationship arises from all the interviews held; there seems to be a common denominator in this relationship, although Plasticaucho is usually the company with the greatest weight or influence in the relationship, it has not been perceived in the interviews that this relationship has the purpose of "taking advantage of" the client or supplier with less power, on the contrary, although in all cases they refer to efficiency, because this relationship allows Plasticaucho to be more efficient, they always involve the counterpart in that efficiency so that it is shared in a win-win relationship. Juan Ignacio Sevilla expresses it this way *"... I believe that we live in a collaborative environment, both with customers and with suppliers, it is an open door company in which suppliers are called to help us develop our processes, sometimes we also help the suppliers to develop with your products etc. etc ... "* and then adds *"... that collaboration, and that they understand that impetus of efficiency*

within the organization and that they can also be efficient and understand the environment in which we are developing is key for us..."

Plasticaucho, as Xavier Cuesta already said, makes the **relationship and the long-term results, as he says, a work philosophy**, therefore his managers are attentive to the opportunities to improve efficiency although that efficiency is not directly seen in Plasticaucho. Contribute to achieve a better efficiency even if it does not occur in Plasticaucho clearly responds to this vision of long-term relationship. Xavier Cuesta and Alex Quinde make reference to the same example, Plasticaucho took charge of an investment in new technologies through an international organization based in England (SATRA) to improve efficiency in the factory of capelladas (in this example we have to take in account that is the case of a related company), which explains Xavier Cuesta allows us to understand the objective of this collaboration, which of course is not free but seeks a repayment for the future and an improvement in permanent efficiency over time *"...I invest in bringing technology, but for you. recover that investment in cost reduction I assure you that the current price is sustained for 2 years and the current price is considering the actual high costs, so that after 2 years I will see the investment we are making now, because if I do not facilitate the resources initially, they will not be able to advance and in the long run it will rebound me..."* We also see in the following passage of the interview with Juan Ignacio Sevilla, who shows it in some way *"... if we help the provider to better manage their inventories, their flow, their purchases, etc. etc., in the end we can translate this improvement in raw material costs. So, everything that is within our reach to help them and improve the suppliers, that extra cost that I have of people, of time that we are supporting from Plasticaucho to the suppliers we are going to see benefit; because that improvement will be reflected in the suppliers and that has to be transferred at some point from the supplier to Plasticaucho..."* Asked about the efficiency of the chain regardless of where it is produced Andrés Cisneros is categorical when he says *"... If it is for efficiency, yes, in this company, the doors open to analysis if efficiency is what you want..."* Miguel Viniegra generalizes from Peru when he says *"... it's like tacit, everybody knows that you have to work for that, maybe you do not have it written but yes, finally we all see*

it..." We had already commented that there is a strategic guideline that points managers, from a segmentation, the willingness to interact with customers and suppliers to achieve that the productive chain translates into greater efficiency under the proposition that if the client and the provider earn, then Plasticaucho wins. However, it is interesting to note that from some interviews it appears that this guideline is more rooted in the culture of the company than in a segmentation that in some cases could even be arbitrary. An example of a supplier that is neither strategic nor critical shows this cultural way of relating to other members of the chain. Explains Andrés Calderón "... I have a provider that gives me security monitoring services, installs camera equipment, video transmission networks and that; it's not a strategic service, there are a lot of them in the market, I have some that even offer me the service for less money, but with it we have been working for seven years because we know that it works orderly, that knows the company, what things to do and what should not do, then there has been an alignment there and we worked well..." In all cases what is sought is the efficiency but of the whole chain, then it is sought in Plasticaucho and outside too, as Ivan Alvarez expresses it "... we have to be more efficient, see where I can improve even if I have to go more there..." Andres Calderón confirms the need that also the client be efficient "... we are interested in selling to him so that he can keep his inventory and buy us permanently; that is an example where I see that our chain goes beyond the limit of our organization and we are also looking at the client, it is a strategic commercial guideline ..."

Plasticaucho, based on its relationship with suppliers and customers, which is based on its pillars or strategic assets, generates the conditions to operational areas for having a clear guideline that allow them to translate that strategy into specific actions in each place and time where they recognize the opportunity to make an improvement in the chain, (Customers - Plasticaucho - Supplier) regardless of where it occurs and the time it takes to reap the benefits of that optimization.

5.7.4 Internal Alignment

Internal alignment is an essential condition to achieve the correct implementation of SCM. In fact, it does not make sense to talk about an SCM strategy that should be based on the correct relationship with suppliers and customers if the company is not internally coordinated among its own areas.

Clearly we can say that the SCM consists of external links with which the companies of the chain are coordinated and another series of internal links in which the coordination of the different areas within a certain company are produced.

It is not possible for all areas of the same company to maximize the benefit or its efficiency simultaneously, hence the importance of internal coordination that allows, in agreement with the rest of the extra-company participants, to achieve the efficiency of the entire chain.

This internal alignment is clearly defined in Plasticaucho. Although we analyze it separately regarding the coordination with customers and suppliers, it is a key mechanism for compliance with the strategic guidelines. Specifically, the productive linkage involves coordination not only with suppliers and customers but also with all areas of the company; moreover, not only of those who directly participate in that "physical" chain but of the company as a whole. This is how Xavier Cuesta manifests *"...In this company nobody is unaware to participate in an adequate execution of the commercial strategy; in this sense, what is done is, within the commercial strategy, there are general elements, maintaining a high availability of inventory, everyone is concerned about that; purchases having their raw materials; production making factories efficient and with good reaction capacity; logistics preparing all its operation so that the delivery trucks have availability; sales being organized in its commercial process ... "and then adds" ... the time that we start to think about strategies, and within the culture of the company is that operational interrelation of all areas ... "and adds" ... You can see that the management of the managers is associated with a process that is sometimes transversal, you are in charge of a responsibility but you share with another manager the issue, ..."*

If we consider the delivery promise of Plasticaucho to its clients, it is important to highlight the relationship between the commercial and production areas and, more specifically, with the management of SCM to define the response to customers when orders are submitted outside of normal demands; the commercial area coordinates internally and negotiates to be able to give the client the terms that the productive system will then put into and through logistics available to the client. We previously cited José Cuesta when referring to the way in which the entire organization is aligned and coordinated "*... I am moving all the machinery that is interconnected ..., therefore it is fundamental to understand the interconnection that all strategic assets have with each other ...*" Juan Ignacio Sevilla refers to the need for an alignment of the different areas of the company to meet the strategic plans of the company "*... We have strategic planning and strategic business planning, there are defined practically certain areas of action of each of the areas and actions that intervene between areas or interdepartmental, then it is coordinated so that everything works properly with the different departments, the different actions or projects together are coordinated to do what needs to be done so that things flow and work properly ...*" Achieving this internal alignment is not always simple, the tendency of the managers is to make their sector efficient, therefore it costs them a greater effort when they have to see beyond their area of responsibility; this sometimes generates inertia to leave a comfort zone, as Francisco Loayza explains "*... somehow that need to be efficient means that one also gets involved in the rest to become more efficient all of them and sometimes leave those comfort zones of people...*" Ivan Alvarez also makes reference to this topic "*... obviously because if we were like islands, sometimes we function as islands, yes, yes, if many times, maybe it is the eagerness of each one to do better what they entrust to him; at some time it has cost us...*" On the other hand, Juan Ignacio Sevilla points out that the silos are opening up according to clear strategic guidelines "*... each area has its own world but I believe that the people here are very open to work to achieve those objectives and there is interdepartmental support and among managers to get to meet the strategic guidelines...*" To prevent different areas from focusing on particular efficiencies to the detriment of global efficiency Xavier Cuesta points to the SCM

manager as the aligning tool *"... the supply chain manager knows why every word, comma and number is in the strategy of the company and then what we need is proper coordination of the operation, yes? because often the positions are opposed, to the plants as well as in logistics they have certain objectives, in the plants they have objectives of efficiency..."* In the role of the SCM manager we will see one of the most important of its functions, which is to achieve the coordination of the entire chain. The planning process that heads the area is based precisely on achieving the internal coordination of the different areas that intervene in the productive chain. Federico Loayza says *"... the part that I work with Andrés is in this of the operations plan, how much I am going to sell, what country I am going to sell, what models, what sizes, what colors and in that way you are creating the need to that they can reserve an installed capacity..."* and adds *"... you are going to see that the managers' management is associated with a process that is sometimes transversal, you are in charge of a responsibility but you share with another manager the issue..."*

Plasticaucho is managed with a structure based on processes, this means that the ways to do things are written and defined through processes. These processes contribute to the natural interaction of the areas for the fulfillment of these processes, so integration is part of the daily activities of the different areas. Federico Molinari expresses it this way *"... we have a management structure of the company through processes, it is super important, in some way those processes are making you interact with the different areas and have a structured management scheme of both the supply chain and the commercial part that is the area of my competence ..."* and adds that his area works together with the planning area (SCM), with production and with finances to reach agreements but always working on consensus. Andrés Cisneros also highlights the process management in Plasticaucho *"... I think it is satisfying to see how we have integrated all this and it is through this ordering of processes; I believe that in the processes, ..., this company moves with processes, with its flaws, its weaknesses, moves with very well structured processes..."* and it is this structured planning process of the entire chain that is one of the most influential elements in the alignment of the areas, Andrés Cisneros continues: *"... more or less since June and the end of September we*

emptied the operational part because it already delivered to the other areas; I give to finance, I give to logistics operations, I give to human resources because it also expects human resources, eh, how many people are you going to occupy ?, then, it's like that funnel where everything comes in and we give it to all areas. The process, is what is in charge of the supply chain area, is a little the conclusion ... "" ... in this company, I can tell you, it is all unified, all that theme of thinking in silos has been broken ... " Andrés Calderon also agrees on this issue "... I think it has helped a lot the vision of processes, that we have, to break the issue of the Silos ... "" ... then it is a model that forces an important interaction ... " The areas have the need to work together to achieve the objectives that are set in. The design of shared objectives contributes to this internal alignment " ... each of the managers have a series of objectives that are part of the work plans that we have in the year and based on that, they promote interaction because those objectives make you just depend on one or another area ... "" ... that forces me to have interaction with operations, with the other subsidiary, with financial operations, etc, etc, is included in the objective..." (interview with Federico Molinari). In another interview Juan Ignacio Sevilla explains us in reference to the internal coordination "... there is a direct, permanent interaction between the commercial and logistics area to be able to react quickly if that is the way it is needed ..."

Returning to the aforementioned efficiency, the management has a clear understanding that this efficiency is not achieved by the sum of specific efficiencies but through achieving the coordination of the entire productive chain that includes, in addition to suppliers and customers, the company itself, This is how Federico Molinari rescues it "... maybe they have a healthy vision, to put it that way, which is efficiency in constant operations, that is something very important and when we say the efficiency in operations ranges from financial efficiency to efficiency in production, efficiency even in HR ... " El artífice de este alineamiento en Plasticaucho es el gerente de SCM.

As Alex Quinde tells us about SCM manager, "...it is that area through the planning process that determines all the needs of the areas involved and from there the consequent coordination arises..." On this subject, that for Plasticaucho was a change

of paradigm, Andrés Cisneros tells us "... One of the things that cost us the most, for example at startup, we do the planning; no, that is plant's job; we are breaking; human resources planning, no; again the plant, no, you do not have to deal with this topic, you have to be efficient..." Sometimes the management indicators of the different areas do not contribute to a full willingness to coordinate, however, Ivan Alvarez tells us that in those cases what is the priority is efficiency, that a necessary coordination task attempts against the indicator is not reason not to do it "... a need arose, the product could be commercialized with the condition that a label be added; 23 people were needed for two weeks to do that job, then Patricio told me, do what corresponds and then we fix, of course, at the moment I will affect the indicator, I write it down and then when I have to give the justification I say this cost me this and ready ... "

Achieving this global efficiency often requires leaving aside the particular efficiency regardless of the measurement system that, as Ivan Alvarez just said, is not an obstacle. In this issue Juan Ignacio Alvarez is categorical "... *What you have to see is global efficiency and you have to negotiate based on what you are looking for within this global efficiency, if global efficiency is to be less efficient in logistics and more efficient in production we accept it and it is done permanently ...* "" ... *are we going to be more efficient at the level of the organization? Yes, then there is no problem, we do it ...* " although Plasticaucho does not necessarily seem to have reached a point of maximum integration, the need for greater internal integration arises from the interview with Luis Martinez "... *in general, I think we need to work more integrally at the management level, that is, they exist, they are set objectives to force to have to work with the other area to achieve something, definitely ...* "

5.7.5 Incentive programs to managers

For Plasticaucho the incentive systems play a very important role to achieve that the strategic guidelines become concrete in the daily operation. The different managements receive a series of specific objectives that they must carry out and that, in principle, are aligned with the strategic objectives.

Gathering information with reference to the way in which Plasticaucho "measures" the management of its managers, we try to identify if the incentive systems respond totally or partially to Plasticaucho's strategy.

Specifically, how managers are encouraged to cooperate with other areas of the company, with suppliers and customers to achieve the overall efficiency of the chain that the company clearly intends.

Formally, the entire team of managers has a variable remuneration depending on the fulfillment of objectives. Explain José Cuesta "*... the management team has variable objectives with which there is a definition of a bonus that is paid at the level of October with an intermediate evaluation and one at the end of the year ...*"

For Andrés Cisneros, the performance evaluation mechanism that has been applied for some years is what has allowed the management teams to be aligned to achieve the company's general objectives, including achieving vertical alignment towards operational lines, comments "*...what we have applied is the evaluation of the performance of the objectives, so I believe that the only way we have achieved the alignment in recent years is through the methodology of performance evaluation ...*" "*...the guidelines downloaded towards each one of the areas; and those guidelines I cascade down to my people ...*" Regarding the evaluation of performance Xavier Cuesta is categorical when he says "*...Having that variable remuneration is impressive how the work team aligns ...*" and goes further to consider that these incentive systems, performance evaluation are fundamental to be able to carry out the strategy of the company "*... Because, look, if they are not given recognition for the action taken and if we do not follow this process that is relatively long and complex, you will never take the strategy to your daily activity, and that is a problem...*"

These objectives used for the evaluation of performance and as a consequence the incentive system are nourished by the strategic plan of the company that, as Miguel Viniegra explains, is the guide that managers have for their performance "*... This is my strategic planning book, is scratched, re-scratched, I have to reprint it every three months a new one, but here is everything, it is very common now in Plasticaucho, see*

it on the desks of the managers and also that is aligned with the evaluation of objectives, three years ago, it was not like that ... "

At the end of the year, the bonus has a component of global compliance and not specific compliance. In the words of José Cuesta *"... At the end of the year, two salaries are paid; the first based on whether the organization achieved its objectives as a whole ... "" ... the other is an objective where each of the areas has to meet the objectives that were defined as specific objectives of the area and personal of the executive ... "* But it also clarifies that many of the particular objectives are interrelated among areas such as inventories; in this sense, the organization tries to find shared fulfillment objectives that contribute to the fulfillment of the company's general objectives. *"... we are trying to locate the objectives where everyone participates in that objective so that we can go on fulfilling and we can go forcing, so that specific activities can be developed within the strategy of the areas that are fulfilling us with the general objectives that the organization has ... "* The same explains Federico Molinari with respect to the shared objectives *"... managers have a series of objectives that are part of the work plans we have in the year and, based on that, promote interaction because these objectives make you just depend in one or another area or an interconnection with one or another area; an example of shared objectives, inventory management, all managers have more or less a responsibility in the issue of inventory management ... "" ... that forces me to have interaction with operations, with the other subsidiary, with financial operations, etc, etc, is stuck in the objective ... "*

However, when trying to relate the strategic guidelines related to the global efficiency of the chain, those that imply the relationship beyond the borders of the company, including collaborating with suppliers and customers even if the benefit does not occur in the company itself, does not seem to be reflected directly in the performance evaluation system for managers.

Exploring this issue, we find two types of explanations that beyond being contradictory could be said to be complementary, the one is that there is no incentive system indicators that measure the level or degree of relationship with suppliers and

customers, as expressed Patricio Toro "... A goal directly to the supply chain linked to the entire management team of Plasticaucho, we do not have, now ..." which coincides with the statement by Luis Martinez "... There is no strategic definition that sticks to me particularly as marketing, in saying I force you to work with clients and suppliers, it does not exist, clearly defined, no ...". Xavier Cuesta makes an important clarification in this sense when referring to how culture leads managers to act in a certain way independently that there is a direct measurement of what they do "... people have already gotten into their subconscious so their form to act is the way we require them to act ... "; the other is that there are several indicators that point to the global efficiency of Plasticaucho, and in them the relationship with customers and suppliers is implicit, necessary to be able to comply with the strategic guidelines of global efficiency through the productive chain and the distribution channel, the latter is expressed by Andrés Calderón "... I'm not going to tell him that I'm going to reward him for fulfilling what the network says, but I'm doing it indirectly; in the other case, in the sales part, the incentive to the sales force is designed so that they will meet the monthly budget and the budget is designed under the supply model we have ...". Referring to the collaboration between areas that has to do with the internal alignment Juan Ignacio Sevilla tells us "... it is not that they pay us because we work well or that we have a good relationship and we do the project together, the production manager with the logistics, but the goal has to be met, how can it be done? There is no method to do it ... " and adds "... we have defined a budget management and we have defined certain objectives by area, in these cases management is more likely by silos, then, as long as there is an impact that is affecting you, you talk and negotiate, you negotiate between areas and with the manager, this is affecting me and will affect the budget ..."

On the other hand, Luis Martinez believes that the guidelines for collaboration between areas are poorly developed "... in general I think we need to work more integrally at the management level ..." and then he gives more clarity to his answer saying, yes there are "... the objectives are set to force to have to work with the other area to achieve something, definitely ..."

This possible contradiction is mitigated by the interventions of the management in each case in which a relationship with a supplier or client, even with other areas of Plasticaucho, generates results that go against some management indicator. The management takes into account each specific case when measuring performance. For example, Ivan Alvarez explains it in the case that we already mentioned of the additional labeling of pairs *"...at the moment I will affect the indicator, I write it down and then when it corresponds to give the justification I say, this cost me so much and ready ... "* also clarifies *"... in that sense there is a rationality in the evaluation of Xavier. But there are cases in which Xavier himself, although the number is not there, he tells you, I am aware that it was done, so the nominal value of an objective may not have been met, but if he knows what was done, how should it be done? then he assumes it as compliment ..."*

5.7.6 Culture

In this section we will try to find, if it exists, the link between the strategy of SCM and the cultural conditions of the company. We have previously defined the concept of culture.

We find two different areas in which the culture of Plasticaucho is applied; on the one hand the principles and values that Plasticaucho maintains and preserves as one of its four strategic pillars and that is absolutely imbued in its culture; on the other hand, the way in which all the personnel of Plasticaucho carry out their duties on a day-to-day basis. These two aspects of culture point to the consistency of Plasticaucho between saying and doing.

We will review below how Plasticaucho manifests these two aspects (which do not work separately) of the company's culture; It could be said that they are two sides of the same coin.

The values and principles of Plasticaucho, which beyond being established in the highest level strategy that is established in the family council, are incorporated at all

levels of the organization and have a very strong influence on the relationship with both clients as with suppliers; each time reference is made to the "strategic assets" in the first place is considered the pillar of Principles and Values; they also mark the limits of what they can and can not do as a company. Compliance with all laws, rules and regulations must be met regardless of whether Plasticaucho agrees with them or not, explains José Cuesta "*... The first is the principles and values of the family translated into the way of doing business, that is, for example, we have to always respect the laws of the countries where we are operating, we can not agree with any, but that is not disputed ...*". Aligned with this and with that way of doing business, they have made strategic decisions to define who to do business with. The most representative of this definition is that Plasticaucho does not do business with the state, explains Xavier Cuesta "*... we can not participate in businesses where the government is the only client of the operation; and when we have some relationship with the government we have to have certain limitations established so that the family is not involved in businesses that normally in Latin America can become a little complicated ...*" and then Federico Loayza, Andrés Cisneros and Xavier Cuesta corroborate it, for example Andrés Cisneros tells us "*... the only restriction or general premise that you have is that Plasticaucho does not do direct business with the state, that is a cultural consideration ...*" "*... in the special case of the government, the cultural incompatibility issue is applied ...*" while Xavier Cuesta is more categorical than his brother José when he says "*... we do not want to have a degree of dependence on the state, we want to do business between private ...*"

The conditions established by the family mandate regarding the principles and values of the family are not a declamation but are documented in the strategy. José Cuesta confirms it "*... we are defining a strategic document first, where we make clear what is the strategy that the organization has to follow, which are the principles and values that must be respected ...*"

These principles and values that seem to be non-negotiable are those that have allowed them to establish themselves in the market and remain for more than 80 years, three generations, and have allowed to build a brand a prestige that precedes

them in all their relationships, both outside and inside; the company, but the family goes further as they claim the same from their stakeholders, as expressed by Federico Molinari *"... something very characteristic of the Cuesta family have been its values, its values and its principles where, I tell you, the image we project as a serious company, as an honest company, a company that does what it says and that it fulfills what it offers, that has allowed us to, in some way, first have an image that we project to the market, that is what we ourselves expect from our clients and that is what we ourselves transfer to our suppliers ... "* and it is corroborated by his words Ivan Alvarez *"... we have a brand and we have a business that takes care of the day to day but we take more care of the long term, so, I believe that to maintain that, the values are key, key pillars and also if is that we join more companies, they have to have a minimum of affinity, maybe not exact but a minimum ... "*

Based on these definitions of behavior, guided by the principles and values, which for Plasticaucho are basic, a series of elements arise that give the operational framework for the relationship with the rest of the links in the chain. Derived from it arise aspects such as the way of relating. Plasticaucho is convinced that the principles and values are a guide that leads to the search for long-term relationships convinced that the long-term relationship with its suppliers and customers (we will also see that it also includes its internal collaborators) is that they will achieve global efficiency and, as we said, brand recognition.

Some interviewees, referring to the need to share values in order to carry out long-term relationships, talk about compatibility and affinity, which defines the degree of relationship. For example, José Cuesta says *"... When one is sitting at a table, negotiating something one can clearly realize that the principles and values of the people are the same as those of the organizations as well; and with those you feel comfortable ... "* and in another passage he says *"... the provider can not function in the way he wants, he has to share some principles that are fundamental ... "* while Luis Martinez, in the face of the question of whether the culture in the relationship with clients, he responds *"... Yes, very, very much, the company is really oriented and conscious, consistent, respectful that we are in a business environment under a very*

clear culture ..." It was already commented in the section referring to the relationship with customers and suppliers that Plasticaucho deals with and tends to do business with those who share culture, hence getting to know each other is important, says Francisco Loayza *"... I brought them to visit the plant, first and second generation; I made some lunches with the second and third generation from here and in the end hugs and is enjoying doing business with you ... "* or *" ... the issues -when they come- are, let's see if we're going to do business, not looking for ... I offer you ten ... no, no, it's more than that, it's getting to know yourself to project in the long term and from that point on, I make numbers*

According to Plasticaucho that relationship is the basis of the long-term relationship that is his vision of how to do business, Xavier Cuesta expresses it *"... as I said, we have a long-term business vision, for us to take care of the prestige and good name of the institutions, and within the institutions the family is one of them, it plays a supremely relevant role ..."* and so that there are no doubts about it, he adds *"... my long-term philosophy, I have to make sure that my client does business with me because if not, he will not be with me in the long term ..."* Juan Ignacio Sevilla confirms when saying about the long term *"... what we are looking for is a long-term relationship with suppliers, so when looking for that long-term relationship we have to be very meticulous with whom we have to work to make things work and flow in a good way ..."* and it is also a key element for Luis Martinez *"... to have an interaction with suppliers or clients in that sense, where the cultural part is transmitted, it is definitely to think in the long term and to think that it is more profitable, that it is better for the company ... "* José Cuesta also ratifies the importance of long-term relationships by saying *"... we do not only worry about specific buying and selling activities, but we also look for a long-term relationship..."* Finally, Andrés Cisneros adds, *"... we are looking for suppliers to relate long term and yes we look for long term client, yes, and if that is culture then the answer is yes; if there is a supplier of the main raw material, the DOP or the resin and he says I give it to you for \$ 200.00, no, we are not interested, because we want a long-term relationship. The same with customers, we want long-term customers ..."*

Two elements emerge from the long-term relationship, which several of the managers interviewed refer to as collaboration and trust. Plasticaucho does not relate to its suppliers and clients thinking about the advantage that the relationship may present to it; of course it's not about charity but about doing business and making money, as Xavier Cuesta expresses it the proof of them is given in the examples given by several managers regarding how Plasticaucho acted with its customers affected by the 2016 earthquake. It is clear that if they did nothing they would have an impact on their sales but they did much more than what could have been necessary, even protecting their clients from third-party actions, as was the case described by Patricio Toro, related to the earthquake; a customer of Plasticaucho, moved with a truck to the area of the earthquake to sell products affecting, even more, customers in that area who already had serious problems due to the earthquake, *"... we went directly and told him, you have the conditions to your zone, if you come here we do not say that you can not sell but the conditions here are different, and we controlled it, because if not it would break our own clients, we will protect the chain ... "*

Juan Ignacio Sevilla refers to collaboration in the following terms *"... I believe that a collaborative environment is experienced, both with customers and with suppliers, it is an open door company in which suppliers are called to help us to develop our processes, sometimes we also help suppliers to develop their products etc. etc ... "* and Patricio Toro refers to trust saying *"... if you have that openness and, say, that transparency, inclusive, it is going to be your clients or your suppliers also trust, because in the end many things are based on trust If you have a culture in which you show that trust, that transparency, will make you more secure .."* *I think that culture is a decisive factor for the general management of the chain, because based on what you project as a company, that security, that trust, will allow you to really relate to the outside ... "* Xavier Cuesta also refers to how trust is built from the culture *"... But the attitude with which they attend to our business makes us feel in such a way that there is mutual trust, and trust, it is not something that one believes, you can not say by decree, I will trust in such, it is something that is being built ... "* This construction of trust, which can only be achieved through a long-term relationship, contains several aspects to make that

relationship that allows Plasticaucho to achieve its strategic objectives, as expressed by Luis Martinez *"... we, from a commercial policy, form as we approach clients, or as we negotiate with suppliers, we incorporate the company's cultural themes, which govern everything that is respect, consideration, the theme of being consistent, the issue that our clients feel they have the possibility of a relationship, above all things open, sincere, honest and feel like a good business ... "* In short, the latter could well be considered as a summary of how the company's culture promotes a long-term relationship that opens the doors for both parties to add value to their business and as a result contribute to the generation of global efficiency of the chain.

Also from the negative experience the culture of Plasticaucho imposes its conditions, for example Luis Martinez also says *"... there have been cases that do not arise, they do not work, they do not mesh and in the long run they do not work or they do not finish developing internally, it has happened to me ... "* and Patricio Toro adds *"... there are others that are very important but in contrast to how the other company or that supplier is, we do not have such a direct relationship... "* Andrés Calderón also explains this situation when things do not happen as one would wish *"... as a validation of what we have just commented we have also had experiences where good suppliers, with important brands and others that have not managed to connect well with us, sometimes in the style, in the way of doing things, and we have not returned to repeat business with them, that is for me as a sign that is also talking about the same thing from the negative experience ... "*

But, as we said at the beginning of this section, cultural issues are not only present in the relationship with suppliers and customers, but also leave their mark on the day to day of the company, on how all the members of Plasticaucho live the company. While this cultural mantle influences all that happens within the company, here the issues that have to do with the SCM are highlighted, more specifically how the culture imposes the guidelines for a correct internal alignment.

This internal alignment that, as it was developed before, is fundamental for a correct implementation of the SCM strategy, is based on its development in how Plasticaucho works.

Iván Alverz talks about commitment and communication as key pieces in the achievement of productive chain within Plasticaucho *"... we make the effort that each employee understands that their work is part of a whole, and that chain; then each employee does the mental exercise of, to see, my position as it connects with all that; that has commitment value because when people understand that they are part of a whole, they are more committed and that helps to break silos, too ... "* and then regarding communication adds *"... We have been very consistent in the communication plan, this coming Monday Xavier Cuesta is going to stop with all the administrative employees of the company and makes us, we call him, a rendering of accounts, ¿ What does it say?: In the strategy we go like this, in sales we go like this, in profitability we go like this, we hope to end the year in this way and also announce the new and important news of the company and people have the option of asking; we do that twice a year ... "*

The way of working, also conditioned by the culture of the company has paid off in the results, as Andrés Cisneros expresses it *"... if you want to see results, the first time we implemented we did not have exactly what we wanted; we have been doing it for four years; today we are seeing the results, the discipline, the coordination, and the processes, which is not to fulfill a norm, it is because the company has decided this way and people are involved in that philosophy ... "*

Also rescued by Andrés Calderón when referring to the influence of culture on the chain's efficiency in these terms *"... I believe that a supply chain model, among other things, causes culture to be influenced by variables such as planning, order, systematization and that is also forming the culture ... "*. That philosophy is what we have already mentioned, expressed by Miguel Viniegra and we repeat here *"... if you review the corporate guidelines, it is written in a document: we are obsessed with*

efficiency and that is in all areas of the company, and finally we all end up doing it because it's part of the culture ... "

All these elements are those that lead to the internal alignment of Plasticaucho so they express it in some way; Ivan Alvarez says *"... the first issue is values that is undoubted, undoubted and with a company that has values it is easy to align ..."*. Patricio Toro expresses it this way *"... Plasticaucho is a company that is open, in Plasticaucho we have a much more open, collaborative culture, here the people, when we define we are going to go by A push all towards A, then the management of change is easier ... "* and Xavier Cuesta summarized it in these terms *"... the operative interrelation of all the areas is imbued within the culture of the company ..."*. Finally, we rescue the words of Xavier Cuesta when referring to how the culture in Plasticaucho is imbued in the people *".... The vision of the long-term business, one of the concrete applications is the stability of the management team; ... There are managers who work 20 years, I myself already 20 years in the company; the average time of permanence of the management team is more than 15 years, why do I mention this? Because those people, who even had a development within the company, know what the culture is, know what are the principles on which we are based, then when people are imbued with those habits, you do not have to be every day telling them... "*

5.7.7 Function and profile of the SCM manager

In Plasticaucho exists the figure of the SC manager. This SC manager not only has the function at the management level, but also is one of the few members of the corporative level as it was said before.

In this section is presented which are the functions, objectives and task Plasticaucho assigns to the SC manager as well as what considers Plasticaucho (or its interviewed managers) is or has to be his/her profile.

Unlike other aspects surveyed with reference to the SCM, the functions, objectives and tasks of the SCM do not seem to be perfectly understood by the different managers of the company, on this topic we will return in the discussion section.

Regarding the role played by the manager, most of the interviewees agree that their role is purely strategic while a few placed them within the framework of the tactical and operational tasks of the company.

Top management, when referring to the role of the SC manager, relates it directly to the strategy as they re-emphasize the strategic aspect of the SCM formed by two of the four strategic assets of the company, such as the productive chain and the channel distribution, although José Cuesta relates only to one, the productive chain, "*... for us is one of the four pillars of the strategy ...*" when asked specifically if the supply chain area is operative or strategic he answers categorically "*... For us it is, without any doubt, strategic ...*" This opinion is shared practically by all managers; in expressions such as Federico Molinari "*... I say that it is an area, it is an axis or a strategic pillar within the organization ...*", "*... for me the Supply Chain area is obviously very strategic and it has to go hand in hand with the commercial area ...*", Iván Alvarez says "*...for me it is strategic, that has some operative parts is obvious ...*" and Patricio Toro "*... It is strategic, that is, it has to be as a staff because it is strategic ...*" and this is how its manager Andrés Cisneros defines it "*... has taken on importance in the strategic scope because we go from the strategic part to visualize all the demand of the group, then to that demand or those commercial plans of the group we have to take them towards the operational plans of each of the lines, then, it has strategic importance ...*" and then adds "*... I do see that the issue is very strategic and unlike other companies, we have been able to incorporate concepts that are later adapted to the culture ...*" while Andrés Calderón says "*... I think it is a strategic area in the measure that if one made a vision, not of this year but of the time that the role has, it has been very important for the company because it has marked a lot the business model that we do...*" asked, Juan Ignacio Sevilla responds "*... It is a strategic area ...*" and Luis Martinez who also sees an operational profile "*... I see a little in the people who depend on Andrés, they introduced to that operativity, it is to be operative in that subject of ... But I also believe that it is a*

strategic area in the sense that in the same fact that we are all involved in safeguarding the part of the strategic guidelines from the management itself..."

Nevertheless, some managers assign tactical-operative functions, make the supply chain area responsible for the planning of the entire production chain and have a team of planners and programmers who define what things should be done, what each plant produces, how to redistribute HR and, in general terms, be responsible for the availability of all the necessary resources for the production chain to be fulfilled. This causes that in some moments these concepts, for some managers, are mixed.

When referring to the tasks, objectives, functions of the supply chain manager, a variety of activities arise that, many of which complement each other, show that there is no clarity about the exact scope of the area.

Some of the functions assigned to it are:

- Internal alignment of the different areas that make the productive chain, Andrés Cisneros "... we are responsible for lowering all that sales budget and transform it into a plan of execution of plant, production, but from our work there are a lot of people who execute, we give the general guidelines ... "...it is clearly between the hard skills and the soft skills of this position what is definitely that interaction with all areas ... " explains Xavier Cuesta"... the chain manager Supplying knows why every word, every comma and every number is in the company's strategy and then what we need is proper coordination of the operation ... "
- Planning of the chain, including the necessary resources for its correct operation, according to José Cuesta "... they (production) do not decide how much they produce, but our supply chain manager decides how much is produced in each plant in each period of time ...", same says Andres Cisneros "... the planner determines what to buy, when to buy and how much to buy; they do it as they do, but these three variables we do in the rest of the raw material through the operations plan ... "Andrés Calderón too "... in some way that has determined that the role of the production plants be ... have less capacity to decide what to produce when to produce, that is what supply chain does ... " Andres Cisneros

explains with respect to the resource planning that the HR that will be affected to this or that plant / operation is centralized and planned by the supply chain management "... the direct labor especially, and in this area is determined in what moment the staff moves and we took a little more step, we are delivering with name and surname, in a very strong job with human resources, name and surname of the person who moves, because human resources has to give me an inventory of the skills and abilities of labor, and from here it is determined, according to the needs of the demand, where I move the resource ... " and Iván Alvarez confirms it from the plant "... the topic of labor, which is a transcendent issue here because, as I was saying, we have a high labor demand process, here in this case Andrés also makes the harmonization of all the plants, which can be a few months with excess personnel and others with defect; we can make crosses, changes, in an orderly manner obviously ... "

- Execution of the commercial strategy, Andrés Cisneros explains "... it is called a commercial strategy and we are the ones who execute that commercial strategy ..." "... we are in charge of taking all this sales budget and transforming it into a plant execution plan, of production, it's our job, then there's a lot of people running, we give the general guidelines ... "
- Achieve operational and financial efficiency, according to Luis Martinez, "... what is defined in the strategic guidelines that is to safeguard the operational and financial convenience of the company; I think that is the objective of an area of supply chain management ... ",
- Alignment of the chain, explains Alex Quinde "... Mainly in the connection they have with us in the world of planning, the planning of operations from the long-term, medium-term to the own programming of the day-to-day plants ...", while Patricio Torres explains it like this "... then, the main functions are coordination, compliance with certain critical success factors that we have set to take care of the chain's efficiency and therefore the company's profitability ...", "... the main

objective is to ensure that we have the products in our channel when our customers require it ... "

- Planning of the three countries (Ecuador, Peru and Colombia). There are several managers who basically assign this function to the supply chain area. Juan Ignacio Sevilla "... *from my point of view is more focused on aligning certain things from the three countries Colombia Peru and Ecuador focused mainly on the management of inventories of both finished product and raw material in an approach based on strategic planning ...* " we will come back to this passage when we review the relationship between the SCM and logistics. Luis Martinez "... *is an extremely important position, as in that area we can see the different efforts that the company makes transversally for the three countries, because not only in Ecuador ...*" Alex Quinde "... *we have a chain manager Supply Chain that covers a little the decisions of this chain for Peru, Colombia and Ecuador...*" Andrés Cisneros "... *that was the goal of the birth of the supply chain manager, making a centralized operations planning for the three countries ...* " Ivan Alvarez "... *Regardless of what is right or wrong, I tell you how it works; Andrés's team has the transversal function of reviewing what happens in Ecuador, Colombia and Peru ...* "

Also from some interviews comes a logistical view of the supply chain manager, focusing on the optimization of the inventory of the chain, almost as the only one or the most important function of the area, as Alex Quinde sees it, probably because he has a training very strong in the logistics area (he spent many years in Logistics, becoming manager) "... *the objective of them is obviously to align the logistics operations in the three countries so that the resources available to them can be used ...*", Andrés Cisneros also awarded it as one of the most important objectives he has as manager supply chain "... *From taking the sales budget of the organization to calculate the optimal level of the organization's objective inventory to be able to determine the medium-term planning of each of the plants, ...*" in the case of Patricio Toro it is important to try to interpret the objective as it appears to be a clear logistic objective, however, if we analyze it from the point of view of its function of planning the

operations of the chain, this can be thought of as an objective that is not necessarily only logistic, this is what he says "... the main objective is to ensure that we have the products in our channel when our customers require it ...", similar to what was commented on Alex Quine, Juan Ignacio Sevilla, who has been in the logistics area for several years and today serves as manager of the area, tends to see logistics efficiency in the SCM as main issue, as he expressed *"... from my point of view, it is more focused on aligning certain things from the three countries of Colombia, Peru and Ecuador, focused mainly on the management of inventories of both finished products and raw materials in an approach based on strategic planning ..."* but also José Cuesta sees a logistical profile by saying *"... he is in charge of inventory issues, finished product, product in processes, semi-finished and raw material, all levels, then he has responsibility for the development of the whole part of the budget in units ..."*

It was also important to know what was the role of the area within the organization and basically asked if the area is an operational area or a staff area of advice and coordination external to the operations. In this case, there was no absolute consensus, however, in general terms, both senior management and operations managers concluded that it is a purely staff area.

Several managers have cataloged the supply chain manager as an "orchestra director" which, making the comparisons is quite accurate if we consider that a director not only directs the orchestra but also writes and corrects the scores of each musician while that the supply chain manager through planning defines what each area has to do and then coordinates its correct execution.

This is what José Cuesta describes *"... it is a staff, it is the orchestra director who defines how much is produced and then we verify that what he wanted to produce occurs, not what the plant would like to do ..."* while Juan Ignacio Sevilla says *"... I see it as a staff issue to support the general manager in which he is coordinating certain tasks and activities in other areas ..."* also for Xavier Cuesta is staff *"... he does not have an execution manager who depends on him. We already have that experience, the moment we mix the planning with the execution of the supply chain, there are too many*

collisions and they go to where the supply chain manager has more affinity ... " Alex Quinde se refiere en estos términos *"... I think the fundamental point of this is that there is a orchestra director who modulates what to produce, when to produce, how much to have, what we do with the inventories, where we put the inventories, where we put the machine according to our own needs ..."* while Patricio Toro assigns him a more operative function but coordinating the operations, he says *"...The main function, is the coordination of all the links of that chain, it has to be an orchestra director, ..."* and then adds *"... My criterion is that is more in the operation, the day to day burned the potatoes because that's where you have to go, because one of the main objectives is to coordinate, that is, the orchestra director ..."* and also Xavier Cuesta sees it in those terms saying *"... being an orchestra director you can not have a comfortable position, but he's the one who sees the operation a little bit higher, right?, the operation, the organization ... "*

Finally, it is important to know what the profile of the SCM manager should be, which must, in some way, responds to the fulfillment of the functions and objectives entrusted to the supply chain area. Basically, it was tried to know if the profile should be more operational and execution (hard skills) or the profile should be focused on soft skills such as coordination, alignment, communication, among others.

So, some managers focused on hard skills were essential while others gave more weight to soft skills whenever hard skills had to exist.

The same SCM manager, Andrés Cisneros said about this topic *"...my descriptive profile, my descriptive functions, is clearly between hard skills and soft skills. This charge is definitely that interaction with all the areas... "* although it mentions both abilities it gives a weight to its function of interaction with all the areas. Luis Martinez first mentions soft characteristics while giving importance to the hard, so he explains *"... Must have an important relationship ability because he has the need to interact with many areas and negotiate with many ..., ... has the need to negotiate, including with suppliers, interacting with suppliers or eventually interacting with clients, directly or indirectly; subject of communication, of negotiation, of empathy have to be ... "...*

The procedural part, the mathematical, analytical part, the hard part as well; but neither of them can be missing... " and then states that both are important "... he must have a very high mathematical ability, a clear understanding of last generation methodologies in regard to the supply chain part, planning, etc. He must have an important relationship ability because he has the need to interact with many areas and negotiate with many areas ..."

For Juan Ignacio Sevilla the hard skills seem to be the most important *"... it is assumed that they have at least the hard part of knowledge ..."* but then the weight falls on the soft skills *"... he should have a negotiation skill because he has to work with three countries in a different way, have the ability to handle different cultures ..."*

Patricio Toro considers that the soft skills are above the hard for this position *"... if I have a part, finally I support in the different technicians that help me building the script; without being important the hard part, I think it will weigh more soft parts ..."*

In short, it would seem that the specific functions of the supply chain manager are not perfectly clear and at times, they become diffuse or too comprehensive. With regard to the profile of the supply chain manager, everything would indicate that there should be a balance between hard and soft skills to achieve the objectives of the areas.

Up to this point we arrived with the collection and reduction of data, in the next section corresponds to advance on the in-depth analysis to reach the conclusions of the case.

5.8 Discussion and propositions

The main objective of this section is, based on the analysed data in the previous section, to link the findings with the proposed constructs in order to define a set of propositions.

Like in Chapter 4, as a result of this field study a set of propositions are presented. In Chapter 6 – Conclusions- these propositions will be compared with those presented in Chapter 4 and so that both groups of propositions, added to the contrast with the

existing literature, will constitute the support of the final conclusions of the present thesis.

Though the constructs that guide the aspects that influence the relation between business strategy and Supply Chain management strategy were considered at a unique hierarchical level, once the in-depth analysis of the information that emerged from the interviews was carried out, it can be said that the constructs have a hierarchical structure and have different degrees of association with each other. The following framework in Figure 20 shows the relationship structure and hierarchies proposed for the considered constructs.

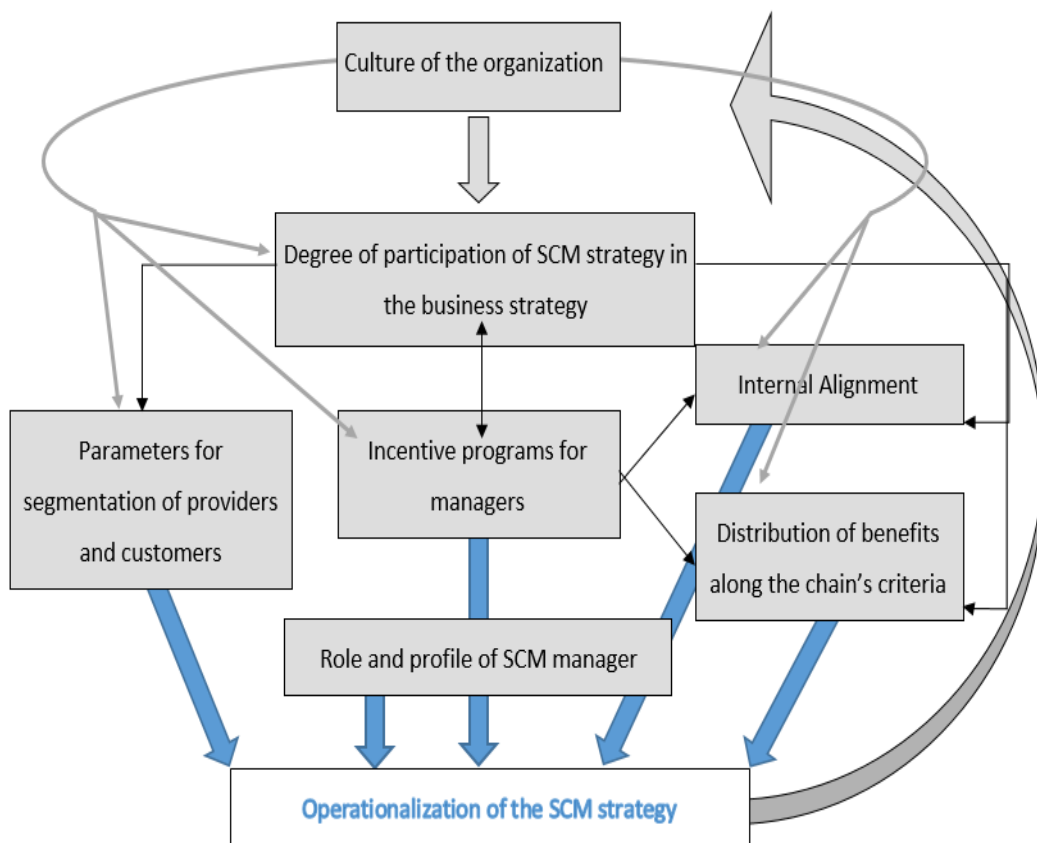


Figure 20 - Hierarchical structure of constructs framework

At first glance it is of most importance to highlight the hierarchical position of the construct "Culture of the organization" and how, understanding the culture of the

organization, the role played by the SCM within the strategy of the company as a whole emerges.

From there, the way in which the strategy is conditioning its execution is analyzed in terms of how the following four constructs are taken into account to generate the strategic guidelines for the management in Supply Chain Management.

The incentive system plays an extremely important role in the way the company delineates the Supply Chain strategy; the incentive system strongly conditions two of the analysed constructs, the internal alignment and the criteria of distribution of benefits along the Chain. Finally, the functions and profile of the Supply Chain manager plays a very important role both, in participating in the SCM strategy and then coordinating its implementation and operationalization, hence the presence of the corresponding construct that is somehow related or constructed from all the others.

The most important findings regarding the previously defined constructs are described below.

It is important to note that the order in which the findings are presented differs from the order in which the constructs were presented in the data collection and reduction stage due to the presence of a hierarchical structure in the constructs that emerges from the detailed analysis of the interviews.

We begin with the aspects related to the culture of the organization because the rest of the constructs show a relationship with this one, as expressed in Figure 20.

5.8.1 Culture

It has already been established in this investigation what is the adopting concept of SCM: "the integration of business processes from end user through original suppliers that provides products, services and information that add value for customers."(Cooper, Lambert, et al., 1997).

It also shares the interpretation of the SCM in three levels that are not different visions of the SCM but are complementary, that is; SCM as a management philosophy, establishing the basis or strategy; SCM as a set of activities to implement this management philosophy as the tactical level of the SCM; at last SCM as a set of managing processes is the operationalization of this SCM philosophy (Mentzer et al., 2001).

While most managers, including heads, tend to interpret the term culture and the terms values and principles in a direct association, the way of working and relating all the members of the company respond to a DNA that flows tacitly and conditions the way of acting, their behavior and even their commitment to the company. All the employees of the company understand that culture of work, of relationship and respect for people and institutions.

Therefore, the strategic vision of Plasticaucho is strongly conditioned by those Principles and Values that can not be violated and that define the strategic guidelines. Let's see then how this strategic asset is nothing other than the representation of the culture of the company.

We will take into consideration a broad vision of the concept of culture as the sum of learned beliefs, values and customs that create behavioral norms for a given society (Yau, 1994). It is important to clarify that from this definition we take the term "society" and reduce it in our case to a small micro-society that is nothing else than our unit of analysis, that is, Plasticaucho. We will be rescuing the behavior, in this sense, of Plasticaucho, from the interviews that give us clues of how culture shapes the internal and external relationship of the company.

The elements that have been recorded in the various interviews and that are directly related to the business strategy and its connection with SCM's status are the long-term vision, which encompasses a series of strategic decisions regarding SCM, the affinity in the relationship that allows Plasticaucho to generate relationships that, in addition to being long term, are produced in a collaborative environment. The possibility of working collaboratively with both suppliers and customers to achieve better efficiency

of the chain is based on these two fundamental concepts, which are cultural, from there is how Plasticaucho develops its SCM strategy.

Culture shapes SCM decisions; the negative experiences expressed by some managers clearly show that if suppliers or clients do not share certain cultural guidelines, Plasticaucho does not generate long-term relationships with them that will affect at some point the global efficiency of the chain.

We will see in the discussion on how segmentation influences strategic decisions regarding SCM is also related to cultural aspects. Plasticaucho tries to link with its suppliers in a collaborative way, which would be in line with the relational view of the firm; nevertheless, if they need or if they have no other alternatives, they try to ensure the Supply Chain in other ways more transactional responding to the TCE theory. We understand that these decisions also respond to cultural issues because although the relationship is not collaborative, they are not willing to relate if they do not meet a minimum of conditions as they clearly express, based on honesty.

But, as already mentioned, the strategy of SCM necessarily has two major components that are those that have to do with external alignment (basically suppliers and customers) and with internal alignment. This internal alignment is also strongly influenced by the culture of the company. The managers and all the personnel of Plasticaucho understands and shares that culture and that becomes evident in the decisions and the collaborative practices (as we will see in the section of internal alignment) that seek to break the silos to achieve the productive chain that is not another thing that an efficient supply chain.

How the company's culture affects the strategy of SCM is evident in the commitment that Plasticaucho has to all its employees, in the communication and in the way in which it acts consistently with its declamatory speech. This commitment is transferred to all staff and returns to Plasticaucho in the same way so that all strategic initiatives related to internal alignment occur naturally, including, as we will see later, even if the incentive system does not reach it, since It would seem that the whole company is imbued with that culture of collaboration.

Therefore, we enunciate the first proposition.

P1 The strategy of SCM and its link with the business strategy is conditioned by the culture of the company.

5.8.2 Degree of participation of SCM strategy in Business strategy

We will start by analyzing in detail what there is in relation to the SCM in the strategic definitions of Plasticaucho. From the analysis of all the information obtained from the interviews and from the documentation of the company, a clear understanding of how Plasticaucho plans its business strategy emerges. We have just said that the culture of the company behaves like an umbrella of all the decisions that are made and that we have corroborated with the total of the interviewees.

In the strategy of the company, this cultural imprint is defined on the basis of its first strategic assets, which are the Principles and Values.

From then on, practically the whole strategy of the company is in a whole aligned with a way of doing business that responds to the propositions that we have defined supported by the definitions of Mentzer and Cooper; for Plasticaucho the SCM is a way of aligning the whole business and its strategic nature follows from the very strategy of the company.

Plasticaucho raises the SCM strategy as a "business philosophy"; is convinced of the success of its management through a correct execution, on the one hand, of the productive chain that basically comprises the whole company, its strategic and critical suppliers (although it can be seen that any supplier that shares its culture can be part of that long-term global efficiency they constantly seek) and their affiliates in Peru and Colombia; on the other hand, from the sales channel to retailers (here also arises arguments to ensure that all customers, even from other channels, can be part of that overall efficiency although it is not expressly outlined in the strategy).

There is a consistency between strategy and execution and this is because SCM's strategy is included in the overall business strategy. This alignment that goes from the highest level and reaches the managers is seen in the strategic guidelines received by the managers of the different areas and that lead to fulfillment of the SCM strategy.

There is a clear harmony in the concatenation of the strategy. The examples and the answers taken from the directors and managers show the clarity of this statement.

In practice, this integration of the business strategy and the strategy of SCM is formalized in Plasticaucho. There are two areas that have the maximum participation in the business strategy and this is clearly reflected in the corporate organization chart of the company in which they participate together with the general managers of the three countries; the commercial corporate manager and the SCM manager.

The corporate general manager of Plasticaucho refers to the SCM as the backbone of Plasticaucho's strategy.

P2 The participation of the strategy of SCM in the business strategy allows a correct execution and operationalization of the former.

5.8.3 Segmentation criteria

The success or failure of the defined strategies of SCM becomes evident at the moment of operationalizing them. Until then, the strategy is nothing more than a definition of criteria and guidelines that will be used by managers to make day-to-day decisions, but which has not yet left the paper.

The next two aspects to discuss are precisely those that make the operationalization of the strategy, these are the relationship with suppliers and customers on the one hand and the internal alignment.

First, let us see how Plasticaucho defines the segmentation criteria to apply to suppliers and customers.

Figure 21 shows the segmentation criteria and the degree of collaboration of each segment.

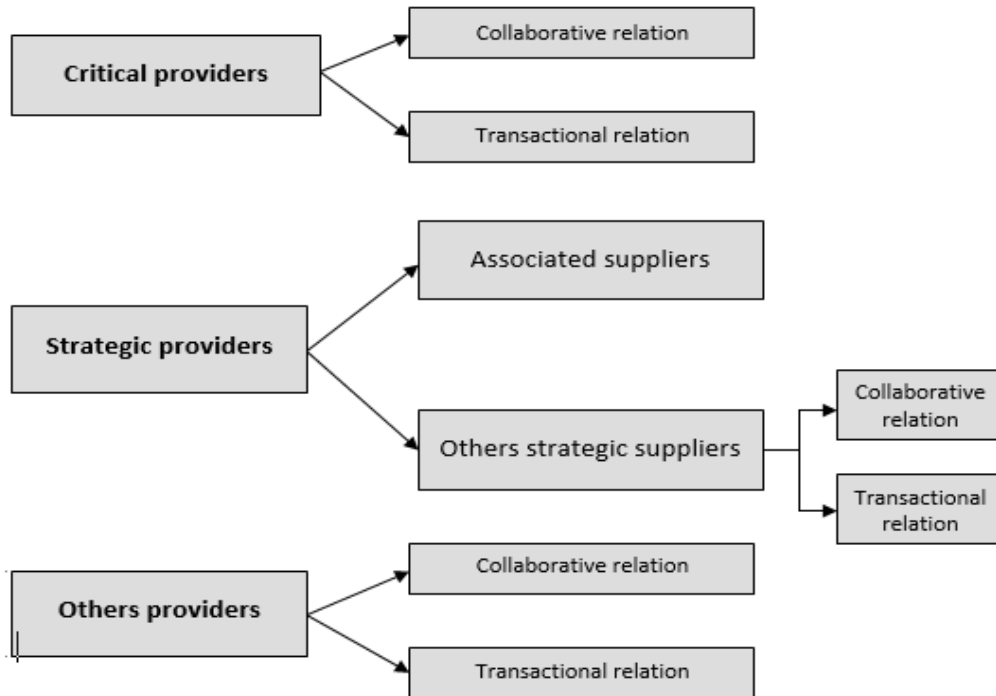


Figure 21 – Providers’ segmentation criteria

Analyzing in detail all the information related to the segmentation criteria and how they influence the relationship with suppliers and customers we find some unexpected news.

On the one hand, it would seem to be, and this arises from the analysis of the interviews, that there is an asymmetry regarding the relationship of Plasticaucho with its suppliers on the one hand and with its customers on the other. In addition, the segmentation criteria used, especially with suppliers, although it also applies to clients, are not used in practice to apply decisions regarding SCM.

The explanation of this phenomenon again leads us to the umbrella already defined, that is, culture. It would seem that independently of the segment to which the supplier belongs, the condition of affinity would be sufficient for Plasticaucho to establish a

long-term collaborative relationship with its supplier even if it is neither critical nor strategic.

Several examples obtained from various managers show this. If in search of chain efficiency in the long term the stable relationship and collaboration with any provider is presented, as is the case of any company that provides services, Plasticaucho is willing to join a process with the provider that gives them allow both to be more efficient, that is, better efficiency of the chain.

It is in these cases, where a direct relationship with the two strategic assets that would guide the SCM strategy is not openly seen, but from the strategic asset Principles and Values, the guidelines for this type of collaborative relationship emerge.

However, there is a greater degree of relationship guided by the segmentation criterion. In the case of strategic suppliers, Plasticaucho reaches a much deeper level at the level of participating in the planning of the supplier's plant and even makes investments either in training or equipment. Also in the special case of supplier companies belonging to the group, as is obvious, the treatment is preferential.

However, it also becomes known that Plasticaucho is nourished by the concept of Network rather than the concept of chain. Many suppliers are not directly integrated into the production chain; however, they are part of the SCM's decisions that Plasticaucho defines in its business strategy. Then it could be much more accurate to talk about network rather than chain.

Therefore, as it can be seen in Figure 22, we conclude that, in the case of SCM decisions, Plasticaucho applies a different segmentation criterion that is not explicitly documented.

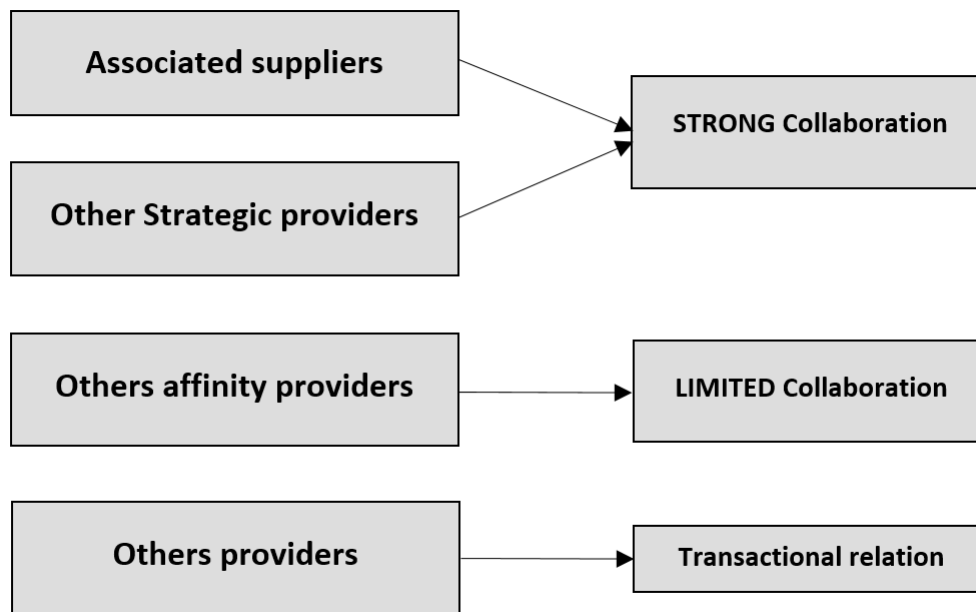


Figure 22 – Not documented segmentation criteria by affinity

As has been said, something similar happens on the customers' side. In Plasticaucho there is a criterion of customer segmentation that responds to the typical commercial segmentation system that companies usually apply in the fast Moving Consumer Goods (FMCG) business. In the case of Plasticaucho, those corresponding to diverse industries that imply products other than footwear are added to these segments.

- Retailers
- Wholesalers and Distributors
- Department Stores, Supermarkets and Malls
- Diverse Industries

Nevertheless, there no exists a SCM specific segmentation criterion, Plasticaucho, attending to its strategic channel, retailers, try to be very careful in the relationship with this sales channel. Normally the financial and economic situation of the customers of this channel is weaker than that of Plasticaucho. They are also companies with lower billing and size that often need technical advice. It is in these situations that

Plasticaucho works collaboratively on two elements that are fundamental for these clients to be efficient and therefore contribute to the overall efficiency of the chain. These are the financial conditions and inventory levels.

In addition, the clear dominant position of Plasticaucho over its retail channel clients puts them in a situation in which they can select with which clients they want to work, again, based on the affinity related to the degree in which they share the culture of the company. This facilitates the SCM processes since it allows them to work collaboratively with them.

However, this dominant position, at any moment seems to be exploited by Plasticaucho to take advantage of its smaller customers that would undermine the long-term vision of the company and its strategic asset Principles and Values.

In the other channels, Plasticaucho seeks to work collaboratively looking for opportunities beyond its borders trying to influence its clients that are sometimes larger than they are that together they improve overall efficiency.

P3a The segmentation criteria of suppliers related to SCM are based on cultural criteria of affinity.

P3b The customer segmentation criteria related to SCM are based on cultural criteria of affinity.

5.8.4 Distribution of benefits along the chain's criteria

If there is a collaborative relationship between companies in the chain, the condition of distribution of benefits must be present. We see that in Plasticaucho this distribution of benefits, and the way to implement it, although it is not explicitly defined, is culturally incorporated in the managers of the company.

For Plasticaucho it is evident in two aspects that are highlighted by both directors and managers; these are the long-term relationship and the win-win concept.

In a relationship, in which each decision is made in function that each side gets an immediate benefit, although it is disguised as collaborative, it is not.

It is for this reason that only in long-term relationships Plasticaucho sees the opportunity to "take advantage" and obtain an overall efficiency that allows all those who participate in this relationship to obtain benefits.

Plasticaucho is very clear in saying explicitly that in order to make money in the long term, its suppliers and clients must necessarily earn money. For Plasticaucho that is achieved through the efficiency of the entire chain and is achieved in the long term. The benefits in this process of global efficiency are distributed, even sometimes can not be measured, but to the extent that the cooperative relationship functions correctly, although in the short term it demands greater costs from one company to another, the benefit of global efficiency makes up for it.

These efficiencies that are distributed along the chain in financial topics, capital investments or training, inventory optimization, among others, are produced on the basis of a relationship of trust and long-term relationship between Plasticaucho and customers and suppliers with which they have affinity.

The greater the degree of affinity or cultural compatibility, the greater the degree of collaboration is.

In conclusion, the distribution of benefits along the chain cannot be thought of in transactional terms, there is not a current account in which each company takes exactly the benefit that corresponds to it based on the effort it made.

The benefits along the chain come back in a different way to the companies. The common denominator is the chain's global efficiency that translates not only into cost efficiency exclusively but also into quality, brand recognition, market share, which results benefit all the chain, but only achieved if the companies that collaborate with each other do so with in a long-term vision.

Therefore, the criteria for the distribution of benefits do not arise in specific terms, but arise in each case from the projection of benefits that each company and the chain in general will obtain in the long term and therefore these guidelines are of qualitative nature.

In the case of, exclusively, transactional relationships, the concepts of distribution of benefits along the chain do not apply.

P4a In a collaborative relationship, the distribution of benefits along the chain is not transactional.

P4b In a collaborative relationship, the criteria for the distribution of benefits along the chain are qualitative.

P4c In a collaborative relationship, the distribution of benefits along the chain occurs in the long term.

P4d In an exclusively transactional relationship there is no distribution of benefits along the chain.

5.8.5 Internal alignment

It is clearly defined, from the strategy, that the company must seek efficiency as a whole. The strategic guidelines and, as we will discuss in the next section, the incentive systems, guide the managers to collaborate internally between areas to obtain greater efficiency.

Achieving one of the strategic assets, productive linkage, is for Plasticaucho the key to the success of the business and its differential in the market.

The internal alignment of the different areas that participate in this chain is key in this sense, as a consequence all managers work, whenever necessary, jointly.

The incentive systems contribute to this internal alignment; however, when it is necessary for more than one area to work jointly even if the incentive system harms some of them, the culture of the company moves the managers to collaborate. Management prioritizes the global efficiency of incentive systems, which are not always completely aligned with this global efficiency, and takes into account each time a situation of collaboration between areas is adverse for an area from the point of view of its objectives.

P5 The internal alignment of the different areas of the company contributes to the achievement of a better global efficiency.

5.8.6 Incentive programs to managers

Plasticaucho with its Objective Compliance Measurement System has been able to align all of its managers with the company's strategy, which includes the SCM strategy. This success has been achieved, in the first place, by tying performance awards to the company's overall results; in this way, managers receive the incentives to seek synergies between areas based on a global performance.

On the other hand, many of the particular objectives for each manager are shared by several areas, which also lead to internal alignment. The most notable case is that of inventory optimization whose objective is shared by multiple areas of the company.

However, there are no explicit objectives whose compliance is directly related to any type of relationship with suppliers or customers. That the incentive system does not contemplate this situation contradicts the strategic propositions of the company in terms of achieving a global efficiency of the entire chain. Again, it would seem that there are cultural reasons that lead managers to look for long-term relationships, even if there is no incentive system to encourage them to do so.

Therefore, the alignment of the managers to the business strategy and SCM strategy, and the incentive system, which include global compliance objectives, generates the need to seek efficiency opportunities in collaboration with suppliers and customers.

In short, beyond what is seen in the interviews, there is no documentation that helps to verify the existence of a motivation or alignment, cultural or not, that invites managers to contribute with suppliers or clients to achieve an efficiency of all the chain.

P6a The incentive systems for objectives' fulfillment must be correctly aligned with the strategy.

P6b The incentive systems for objectives' fulfillment are a facilitator of the internal alignment of the chain.

5.8.7 Functions and profile of the SCM manager

Because the functions of the SCM manager are specific to the structure and particular conditions of each company, is not feasible, with the information collected, determine what should be the set of functions of the SCM.

However, what does emerge from this research is that beyond the technical characteristics related to planning we can conclude that the management of SCM is a staff area whose main function is to ensure that all areas of the company are aligned internally and externally to achieve the overall efficiency of the chain. The area must influence, like an orchestra director, so that the entire supply chain works in a coordinated manner aligned by the guidelines defined in the SCM strategy.

From here, other functions that may or may not be present according to each organization are defined.

Another issue regarding the functions of the SCM manager to take into account, and that should be analyzed in detail in each case, is the one that has to do with the relationship of the SCM manager outside the company's borders.

This research has started from the hypothesis that the manager of SCM is responsible for the coordination of the chain both internally and with suppliers and customers. Although the results of the investigation are not conclusive and do not contradict the initial hypothesis, the relationship of the SCM manager could occur indirectly. This means that the areas that naturally relate to customers and suppliers, that is, the commercial area and the purchasing area respectively, may be the ones that carry forward the process of external coordination of the chain, following clear guidelines of the SCM area. Achieving this external coordination in these terms has as an advantage the fact that there are no two channels of coordination and communication between the companies that make up the dyad, since the relationship of the specific areas (purchases and commercial) must exist due to the nature of the business.

This, in no way means that the functions of the SCM area are restricted to the internal chain. The SCM as such has to do with coordinating the whole chain, from the suppliers to the final client, which does not mean the SCM is the area that carries out all the coordination, but its guidelines and control at the daily level.

P7a The functions of the SCM manager are to coordinate the internal alignment of the company.

P7b The SCM manager coordinates the relationship with suppliers and customers through the managers who interact directly with them.

It is clear from the nature of the SCM manager's functions that soft skills are essential in its profile. These soft skills allow achieving the main objective of coordinating the entire chain. The most important are communication skills, negotiation skills and other

related capacities above all, because the nature of the functions to be performed are related to the coordination of areas that do not depend directly on him, since his position is staff, he has to generate an authority that is not formally granted.

The hard skills may be of a different nature depending on what other functions the organization gives to this area.

P7c The higher the soft skills domain the better the performance of the SCM manager

5.9 Concurrency of codes

Coding is the fundamental tool for the qualitative analysis of interviews. Analyzing the concurrence of codes within the analysis gives us additional information about the behavior of the constructs analyzed.

Two aspects of the concurrence of codes, direct concurrence (occurrence) and cross concurrency (correlation) were analyzed, both analysis, although based on numerical data (concurrency), do not aim to show any kind of quantitative results. The explanation of this derives from how the codes analyzed here were constituted. Due to the way in which the codes have been defined, there is no weighting of the weight that each code has in the interview scheme. Neither of the interviews were structured on the basis of the codes but they arose after the interviews, at the stage of data analysis. This is the reason why a linear relationship should not be made between the number of concurrent codes (direct or crossed) and kind of behavior.

It has been called direct concurrence or occurrence to the number of times that a certain code is repeated in the total of interviews. Cross-matching or correlation has been called the coincidence between two different codes in the same appointment throughout the total of interviews.

What has been taken into account is, through the concurrence of codes, a qualitative interpretation of the existence of degrees of importance of codes as well as relationship between codes.

Thus, direct (occurrences) and cross (correlations) concurrences have been divided qualitatively into three large groups, high, medium and low. This allowed to reflect on which issues, related to the codes -and therefore with the constructs- managers have more or less present in their agendas.

For direct participation is considered high concurrency between 50 and 120 times, medium concurrency between 20 and 50 and low for less than 20.

For cross-referrals or correlation, cross-referrals between 10 and 25 are considered high, between 4 and 7 are considered medium while correlations under 4 are considered low.

We return to clarify that this division is arbitrary, what it seeks is to find groups of characteristics that stand out from others in a qualitative way.

The interrelation among codes can be seen in Annex 14.

The most mentioned topics in the interviews are

- Relation with provider
- Chain efficiency
- Colaboration
- Business strategic guidelines for SCM
- Culture
- External chain coordination
- Internal chain coordination
- Relation between business strategy and SCM strategy
- Relation with customer

- Long term

The previous list indicates that the issues of relationship with both suppliers and customers are the issues that are more present in managers, although with a marked asymmetry. The same happens with collaboration, culture, the relationship between business strategy and SCM. The long term also appears as a repetitive issue.

On the side of cross-matching or correlation, very strong correlations have been found between collaboration and relationship with suppliers and chain efficiency (both present in the high level of occurrence), also the relationship with suppliers and chain efficiency and between external coordination and chain efficiency. Another very important correlation has been found between long term and culture. The functions of the SCM were very correlated with the internal coordination of the chain.

- Relation with providers \leftrightarrow Colaboration
- Chain efficiency \leftrightarrow Colaboration
- Chain efficiency \leftrightarrow Relation with provider
- Chain efficiency \leftrightarrow External chain coordination
- Relation with providers \leftrightarrow Culture
- Long term \leftrightarrow Culture
- SCM Functions \leftrightarrow Internal chain coordination
- Relation with provider \leftrightarrow External chain coordination
- External chain coordination \leftrightarrow Colaboration
- Segmentation of providers \leftrightarrow Relation with providers
- External chain coordination \leftrightarrow Relation with providers
- Long term \leftrightarrow Relation with providers
- External chain coordination \leftrightarrow Collaboration

This qualitative analysis of the codes shows us quite clearly the priorities that managers would have regarding the SCM, relationship with suppliers and customers, chain efficiency, internal and external alignment, culture and long-term relationships. But they also indicate that the relationship with customers and suppliers and the internal and external alignment is related to the efficiency of the chain; and that there is a strong relationship between long-term decisions and the company's culture. The functions of the SCM would have a strong link with the internal chain coordination.

It is very important to take into consideration that there is a marked asymmetry in terms of external relations; both indicators show a greater concern in the managers, in terms of the SCM, for the relationship with suppliers greater than with customers.

6. CHAPTER 6 - CONCLUSIONS

Throughout this dissertation we have tried to show and develop the strategic aspect of the SCM, supported by the strategic vision of the business, which is innate to it and that would not otherwise obtain the results it professes.

We return here to reiterate the concept that we consider is the correct one to apply for the SCM, that is, the way in which a company manages its relationship with the companies of the chain to achieve greater efficiency of the latter. When referring to efficiency we mean any improvement that allows the chain to reach the last link in better conditions, either cost or service.

From this conceptual definition arises the strategic nature of SCM since, as we have developed throughout this doctoral thesis, the decisions taken by companies in matters of SCM must be supported in strategic decisions at the highest level of the company, otherwise their implementation at operational levels is not possible.

We have also been able to verify throughout this investigation that this definition of SCM has to do with the way in which the company does business, far from decisions of operational areas related to physical linkage, logistics or purchases, and much more aligned to strategic decisions that involve all areas of the company.

To support the basis on which this thesis was developed we have made a review of the literature in this field that allowed us to see different positions on what is and what is not SCM and thus adopt and corroborate, through the two studies of field, the strategic vision of the concept, adding as a contribution the need for an alignment between this strategy of SCM and the business strategy as well as the aspects derived from them that allow its correct implementation.

Our research question, although it could seem generic, we understood, after reviewing the literature on SCM, that it is not. It is clear that the question would allow us to explore how the SCM is seen in Latin American companies since from previous experience it is clear too that there was no clarity about the strategic aspects of SCM and practically very little literature on the development of it in Latin America.

The results of the two field studies make clear that SCM should be viewed from a strategic perspective. At the same time, we have been able to understand that there is an important gap between the strategic conceptualization of the SCM and the elements that make its operationalization possible. This clearly shows the lack of maturity of the discipline in Latin America. The experts do not agree on many aspects that make the SCM and its operationalization possible. However, on the other hand, the case study has served to show that the way to carry out the SCM is directly related to the strategic vision of the company, modeled by its culture and directed through clear guidelines for a correct operationalization. In this sense, the analyzed constructs have allowed us to determine which are the aspects that, from the strategy viewpoint, should be carefully considered for a successful implementation of the strategic criteria defined in terms of SCM at the level of business strategy.

Coincidences and differences between both approaches -Delphi study and case study- were found, to understand the SCM phenomenon in Latin America through the selected constructs.

As presented in each of the discussions in the previous chapters about the detailed analysis of each of the two field studies, we arrived at a series of propositions that emerged from the analysis of the constructs that guided both studies. These propositions are summarized in Figure 23.

Construct	Propositions - Delphi	Propositions – Plasticaucho
Culture	P3. Culture has low impact in the SCM strategy decision in LATAM	P1. The strategy of SCM and its link with the business strategy is conditioned by the culture of the company
Degree of participation of SCM strategy in business strategy	<p>P1a. SCM is an area of a purely strategic nature.</p> <p>P1b. There should be at least a degree of participation of SCM strategy in business strategy, but it has to be present.</p>	P2. The participation of the strategy of SCM in the business strategy allows a correct execution and operationalization of the former
Segmentation	<p>P2a. Segmentation criteria should be present in the SCM strategy.</p> <p>P2b. Parameters to guide segmentation at SCM strategy level in LATAM are not clearly defined.</p>	<p>P3a. The segmentation criteria of suppliers related to SCM are based on cultural criteria of affinity.</p> <p>P3b. The customer segmentation criteria related to SCM are based on cultural criteria of affinity.</p>
Distribution of benefits along the chain	P4. To generate chain efficiency in the long term is an objective of the SCM.	<p>P4a. In a collaborative relationship, the distribution of benefits along the chain is not transactional.</p> <p>P4b. In a collaborative relationship, the criteria for the distribution of benefits along the chain are qualitative.</p> <p>P4c. In a collaborative relationship, the distribution of benefits along the chain occurs in the long term.</p> <p>P4d. In an exclusively transactional relationship there is no distribution of benefits along the chain.</p>

Internal alignment	<p>P5a. The scope of Internal alignment as SCM strategy objective is not well defined in LATAM.</p> <p>P5b. The efficiency of SCM is closely linked to logistics efficiency in LATAM</p> <p>P5c. The efficiency of SCM is not directly linked with the business efficiency in LATAM</p>	<p>P5. The internal alignment of the different areas of the company contributes to the achievement of a better global efficiency.</p>
Incentive systems	<p>P6. Incentive programs for manager in LATAM are not aligned to the objectives of the SCM strategy</p>	<p>P6a. The incentive systems for objectives' fulfillment must be correctly aligned with the strategy.</p> <p>P6b. The incentive systems for objectives' fulfillment are a facilitator of the internal alignment of the chain.</p>
SCM manager role and profile	<p>P7. Both the role and the profile of SCM manager are not clearly specified among the LATAM experts</p>	<p>P7a The functions of the SCM manager are to coordinate the internal alignment of the company.</p> <p>P7b. The SCM manager coordinates the relationship with suppliers and customers through the managers who interact directly with them.</p> <p>P7c. The higher the soft skills domain the better the performance of the SCM manager.</p>

Figure 23 – Delphi and Case Study propositions

This table allows to observe and compare the propositions arising from the Delphi study and the case study. This comparison is the basis on which the global contribution of both field works is presented since they treat the same phenomenon but from two different points of view; on one hand – Delphi- how the experts see the role of the

seven constructs in LATAM and on the other hand –Case study- how the application of the vision of SCM posed in this thesis can be observed, based on these constructs, in one case study of a relevant Company in LATAM.

Below we present, based on the constructs defined as a guide for our research, the propositions that emerged and were analyzed, through the coincidences and differences arising from them in both field studies, the conclusions to which, through the present work of research, has been arrived.

Regarding construct N° 1 “Degree of participation of the SCM strategy in the business strategy” There are strong coincidences in both field studies, the established propositions coincide conceptually so that the strategic conception of the SCM and the importance of the participation of the SCM strategy in the business strategy are ratified. In principle, there is not an important gap between these conclusions and the strategic view of SCM presented by Mentzer et al., (2001) and Cooper, Lambert, et al., (1997) which reinforces and ratifies the strategic nature of the SCM. The importance of viewing the SCM from a strategic framework linking companies as expressed by Slone, (2004) and (Hofmann, 2010) matches the results of this thesis.

About construct N° 2 “Criteria to guide segmentation of providers and customers” it is possible to observe the first inconsistency between both works, while the experts in Latin America expel the need to segment, they do not have clear criteria for it, or at least they express important differences. Surprisingly, the case study shows a very important finding for research, regardless of the different segmentation criteria that a company can do, either from clients or suppliers, depending on its importance or other parameters, from the point of view of relationships in the chain, *the conditions of cultural affinity are those that dominate when defining the way how to relate to customers and suppliers.* This level of maturity in the strategic decisions in these aspects of SCM are not perceived by the experts, however they have been observed in the company studied. The case study shows the importance that the company gives to

the level of interrelation with suppliers and customers based on an affinity principle, which coincides with what is proposed by Heide, (1994) and with the 4C's criteria for relationship proposed by Lejeune & Yakova, (2005) that can be applied for segmentation's criteria since communicative, coordinated, collaborative and co-competitive can be utilized as a guide for segmentation criteria in coincidence with the criteria applied in the company.

The Supply Chain Orientation presented by Mentzer et al., (2001) reinforce these concepts of segmentation in the SCM, too.

The conclusions, in accordance with the literature, shows which should be the criteria for a correct segmentation in SCM.

With respect to construct N°3 "Culture of the organization" the behavior of this construct and therefore the presented propositions show another of the most important findings found throughout this investigation. Again, as with the previous construct, the experts do not consider the culture of the company as a conditioner of the strategic decisions regarding SCM. The remarkable respect of this construct is that, unlike the experts' observations, the case study shows that cultural aspects strongly condition strategic decisions regarding SCM therefore, culture should be considered as an umbrella because is present as a conditioner of the rest of the guidelines that arise from the strategy of SCM, moreover, the culture of the company defines the guidelines on SCM that arise from the corporate strategy first and the business strategy then.

The aspects of trust, commitment, coordination, interdependence, among others, and their presence in the SCM's relationships are linked with cultural conditions because culture is the waver that make them possible. The conditions of trust, coordination and interdependence referred by Monczka et al., (1998) represent these cultural aspects that organizations use as a shield in their relations with customers and providers.

On the other hand, these cultural aspects detected as of most importance in the relationships between the members of the chain to obtain mutual benefits ratifies what is proposed by Ueltschy et al., (2007) and Ribbink & Grimm, (2014).

Therefore, based on what was obtained in a part of the existing literature and corroborated throughout this research, the cultural aspects that enable a relationship aimed at achieving the chain's efficiency are aligned with the criteria presented in the relational view (Dyer & Singh, 1998) but would not correlate with the principles professed by the TCE (O. E. Williamson, 1979).

Considering construct N°4 “Distribution of benefits along the chain's criteria” It is possible to observe that from the propositions formulated for both field studies it has been established that the benefits of the chain can arise from a long-term relationship and that they are not quantitatively measurable and can not be shared if the relationship is not collaborative. Here it has clearly been possible to establish the relationship between collaboration, trust and long-term; we do not work in a collaborative relationship only for the short term or to have a measurable economic benefit and this is key in the external relationship in light of the SCM strategy. The other conclusion that we arrive at is that this is only possible if there is cultural affinity between the companies so that this long-term collaborative relationship can be carried out and that both companies can find the benefit even if there is no direct measurement and quantitative of that benefit.

Long-term orientations support most recent findings, which discover that once transactors have made the up-front investment to develop self-enforcing safeguards such as relational trust, the transaction costs decline in the long term because self-enforcing safeguards can control opportunism over an indefinite time horizon (Dyer & Singh, 1998). Specifically, the transaction costs and inventory holding costs associated with arm's-length bidding practices, characterized by short-term relationships with a large number of short-term suppliers, can actually outweigh the costs of the parts themselves (Dyer, 2000). Specifically the way this construct has been

approached, how different companies working together within a Supply Chain distribute the benefits obtained is a gap in the literature. As it was mentioned in Chapter 3, there exists a vast literature with mathematics models but scarce about how to implement them.

The way companies will be committed to seek a win-win relationship that permit them to obtain mutual benefits can be find in a long-term relationship enriched with trust and commitment, otherwise only through power bargain companies will be predisposed to share benefits outside the edges of their companies.

In the case of construct N° 5 “Internal alignment of all the firm’s areas that participate in the SCM strategy” it has been possible to observe, both in the panel of experts and in the case study, different edges of the internal alignment. It emerged, for example, in the analysis of this construct the strong tendency with which experts relate the SCM with specific functions of the company, such as logistics and purchasing. Furthermore, the experts have not been clear about the relationship between the SCM strategy and the internal alignment nor how this guideline contributes to the efficiency of the chain. However, the strategic guidelines that lead to the internal alignment of the different areas of the company studied have been shown to contribute to global efficiency, that is, to the objective of the SCM. In turn, as we will see in the behavior of the following construct, there is a direct relationship between the strategic alignment of the company's areas and the incentive systems. The observation that we make of this difference between what was exposed by the panel of experts and what was revealed in the case is that there is still a strong tendency in Latin America to look at the SCM from three aspects that contradict or that are not completely aligned with the strategic vision of long-term global efficiency of the chain and that are described below. These three aspects are

- a major difficulty in looking at the long-term objectives of the SCM, strongly influenced by the need for SCM's actions to show quantitative and measurable

results within a reasonable period of time (probably, although not analyzed, within the company's fiscal year)

- directly related to the previous point, an inward vision of the SCM, with a strong focus on the efficiency of the company where the relationship outside the company has no ultimate goal to seek opportunities to improve the chain but the company.
- the belief that the improvement results in terms of SCM will be achieved through logistic efficiency.

As it can be seen , there is an aspect in which this study and literature review coincide what is the importance of internal alignment as expressed by (Kahn & Mentzer, 1996) and (Waller & Hoek, 2008) already cited in chapter 3. However, in this condition of internal alignment taken from the existing literature, there is an important gap for three reasons that consider it important and this work seeks to complete:

- The focus of the internal integration is only on logistics integration.
- The integration seeks to achieve greater efficiency of the company, the authors - in some cases they consider it - do not place the focus on a better performance of the chain, although, -as it was previously mentioned- Handfield et al., (2015) combine internal alignment based on dynamic capacities -with emphasis on internal communication- and external alignment..
- There is not a direct link between internal alignment and incentive systems.

Therefore, internal alignment is a prerequisite to any type of external alignment referred to SCM and -as we will see in the conclusion of the next construct- the incentive systems should be oriented to promote the aforementioned internal alignment, although they are also of fundamental importance to achieve external alignment.

When considering construct N° 6 “Coherence between strategic SCM'S alignment and incentive program for managers” it is evident, product of the propositions derived from this construct, that for the experts there would not be an alignment of the SCM strategies through the incentive systems to the managers. The case study shows a different position, the incentive systems reflect the intention that there is an internal alignment of the different areas of the company through the setting of global objectives and in some cases crossed objectives between areas. But the most important thing that stands out in the behavior of this construct in the case study is that the internal alignment -but mainly the external alignment through the decisions to collaborate with suppliers and clients- is not expected to occur through incentive systems but shaped by the culture of the company. Managers receive a strategic guideline that leads them to search for long-term relationships, although they do not have a formal incentive to do so. This apparent contradiction has its explanation in the culture of the company, as specifically pointed out Xavier Cuesta, corporate general manager of the group Plasticaucho. The experts did not relate the strategic alignment of the SCM with incentive systems and in this sense they were coherent with the Ecuadorian company, but at no time they consider that cultural issues could intervene in the way that managers align to the SCM strategy. This contradicts in some aspects the objectives of the incentive systems that throughout our investigation we consider as fundamentals to achieve the objectives set out in the strategy of SCM and quite well graphed in the phrase "tell me how you measure me and I will tell you how I behave ".

The gap between literature and the reality in LATAM exists. The incentive system for managers is not consider in a direct way –as it can be seen in both fiels studies- though theses incentives programs should align the objectives of the company or of the Supply Chain as expressed by Giunipero & Ketchen, (2004). On the other hand, as expersed in (Baker, 2002), the performance measures available are often the limitation to carry out an incentive system; this situation is exacerbated in the case of alignment through the incentive system of SCM objectives that go beyond the company's borders.

As a conclusion it can be said that although the literature has addressed the issue of incentive systems, it has not deepened it in the case of SCM. There is a gap that has not yet been settled. On the other hand, in none of the two field studies there is a real need to formally align the incentive systems to the success of the chain. This situation is a clear failure in the strategic direction of the SCM in LATAM if the objective of the same is efficiency in the chain, that is, beyond the company.

In reference to construct N° 7 “SCM manager’s role and profile” it arises as a need to define if an organization must mandatorily have an SCM manager or not and, in the case of an affirmative answer, which should be its position in the organization chart of the company, its profile and its functions. There are different opinions among the experts that are not in agreement in any of the four characteristics analyzed (existence, position, profile and functions). The literature has not helped either, an example of this is (Lambert et al., 2008a) that develops the role of the logistics manager in the field of SCM, but does not raise the existence of a SCM manager and much less makes reference to which should be he/she profile and functions; systematically the logistics manager is presented as the protagonist of the management of the SCM.

For this reason, beyond the opinion of the experts, the case study provides, from the experience in the development of the SCM of the company studied, very valuable information to define some aspects of the SCM manager and opens the door to continue deepening in this fundamental aspect in the development of the theoretical framework of the SCM.

The presentation that several managers –in the case study- made about the SCM manager as the "orchestra conductor" provides an excellent starting point for a future development of the functions and profile of the SCM manager. The strong consensus, also taken into account by some of the members of the panel of experts, about the soft characteristics that he/she must have, even over the hard ones, its function of staff -outside the line of operation- and its main function of coordination is another of the findings of great importance of this research.

7. CHAPTER 7 - MANAGERIAL IMPLICATIONS

It is necessary linking theory with practice. Nothing of what at the scientific level be done has sense if we do not stop saving effort so that the knowledge that emerges from science flows towards the fields of application.

It is the obligation of science working hard to break the silos that exist between theory and practice and thus break with the nefarious phrase used by the practitioners that says " theory is one thing, but practice is different", if it were like that, would have been possible for the man to go to the moon or for a robot to play the violin?

From the obtained conclusions in this investigation, there are several contributions that can be made towards the corresponding areas of application.

Every company when delineating its business strategy can consider the recommendations that are detailed below.

The management of companies that are interested in Supply Chain Management should understand its strategic nature and that there are many areas that involve the SCM. It is not about making a logistical planning of the operations or a rationalization of the inventories, but to look for the areas of opportunity that allow it, through clear strategic guidelines, to take advantage in conjunction with its chain's participant stakeholders to obtain benefits in the medium / long term.

Developing a specific SCM strategy is directly linked in the first place and as more important with the culture of the company.

Therefore

7.1 SCM is strategic

Companies need to think SCM as a strategic área. As companies understand the correct dimension of the SCM, they will be able to take advantage of its benefits.

- It is not logistics, it is more, in many cases the logistics could not be key for a correct implementation of the SCM. Although in most cases several solutions can go through logistics, but only in the operational phase of the SCM strategy.
- Involves all areas of the company.
- It requires a strong internal alignment before attempting to coordinate outside the company's borders.
- It is medium / long term. It is about achieving, through collaborative agreements and a joint effort with suppliers and customers (there may be others), a better result for the end customer.
- The collaborative agreements that are reflected in medium / long term improvements have results that can be asymmetric and with a strong qualitative content, characteristic of the medium / long term agreements. The quantitative results are presented indirectly, if the joint medium / long-term objectives have been correctly stated; for example, better market share achieved through commercial agreements with customers, or better availability of products in a retail store for better financial agreements.

7.2 Segmentation and SCM

There is no a correct segmentation criterion for SCM. This means that each company must analyze first which kind of compromises is willing to assume. Then, discover who are the stakeholders with whom you are willing to establish medium / long-term relationships, regardless of what specific commitment you take later.

Companies must develop different segmentation criteria based on specific needs; can have for example, a certain criterion of segmentation with providers that neither should be unique; different areas for different reasons can segment suppliers in different ways. This is valid for other segmentations.

Based on the above, the company should define an SCM segmentation criterion based on the opportunities to collaborate to a greater or lesser degree.

From the strategic definition of SCM, the criteria for that segmentation must be defined. Then the person in charge of the supply chain or of a certain area will apply those guidelines to define the scope of their relations in terms of SCM.

This criterion of segmentation in the matter of SCM materializes in the degree of collaboration that the company assumes with who enters within a certain category of that criterion.

The segmentation of SCM should be defined based on the "affinity" criteria that exist or can be generated between companies. This means that regardless of the relationship or classic segmentation criteria of suppliers and customers, the relationship should be established according to the cultural conditions of the companies that will interact with each other.

From there, the different degrees of relationship must be defined.

- Only transact under written conditions.

This is the case of companies with which there is no kind of affinity, even distrust and with which the relationship is produced exclusively by a specific need or convenience. In this case the relationship is short term and each company will seek the best conditions for itself. These relationships should be considered within the SCM since this type of relationship would exist in the chain.

- Coordinate some activities for mutual benefit.

This case applies between companies with some degree of "affinity" with which specific coordination can be made. The characteristic in this case is that there must be a clear convenience whose results materialize in the short term.

This type of relationship is to be applied when it is in the stage of "recognition" to the extent that these coordinations go materializing both companies will experience greater or lesser degree of "affinity". This may take them, or not, to a higher level of interaction with consequent longer-term agreement.

- Collaboration looking for medium / long term improvement opportunities.

The agreements in this level arise from understanding the problematic of the relationship between both companies in a global level of the business. Companies that has cultural affinity explore opportunities for results that may well occur if in the short term, tend to result in solutions of medium / long term. In this type of relationship, which can only occur if there is a decision on a strategic level translated into clear guidelines for managers to define these agreements, are not expected:

- Short-term results.
- That the results are explicitly measurable, although there must be conditions that show that we will produce them in the medium / long term.
- That the results obtained are produced specifically and in a balanced way in the companies that interact. Although, if they occur, they have to be to a greater or lesser extent, mutual benefits.

It is important to clarify that, although this segmentation criterion is presented as three segments, in reality it is a continuum. In each case the companies must find in each relationship the opportunities that may arise from it and, depending on the affinity already mentioned, the degree of relationship they are willing to have.

As it can be observed, this criterion of segmentation, that has similarities with the criterion of the "3C's" (Coordination - Cooperaton - Collaboration) since conceptually they have much in common, differs because of what I consider a semantic problem. The "C" Collaboration and the "C" Cooperation derive from the same origin that is "work together" (CO - labor and CO – operate) where it is clear that labor and operate are synonymous from the point of view of the relationship. Nor does it share the perspective of the 4C's (Comunicative - coordinative - collaborative - coopetitive) presented by Lejeune & Yakova, (2005). On the other hand, this vision is probably closer to the calification of Transactional - Translational – Relacional (Paulraj, Chen, & Lado, 2012).

In short, with whom and how to work collaboratively is the result of discovering a certain degree of "affinity". The support of top management from a strategic guideline that enables managers to feed this type of relationship must be present (I. Chen & Paulraj, 2004)

7.3 Incentive to managers

Probably, it is the most delicate point to define and the one that, if badly implemented, will be a hindrance to the correct operationalization of the strategic guidelines regarding SCM.

- Internal alignment

Achieving coordination that encourages an internal alignment aimed at breaking down "silos" is possible to the extent that the incentives are correctly directed, this means that the objectives must be aligned to the business and not to the efficiency of a specific area. Furthermore, the design of "crossed" objectives that promote collaborative work among areas of the company contributes to internal alignment.

- External collaboration's opportunities

This is probably a difficult goal to achieve through incentive programs. This is where the "cultural" theme appears as the main factor. Achieving that the different areas of the company look for medium / long term opportunities through the collaborative relationship with suppliers and clients (or other stakeholders) will emerge from a clear strategic guideline and a guarantee from top management when a collaboration program does not show improvements of some kind, including cost overruns or inefficiencies, in the short term. The improvements could show results, perhaps, in another fiscal year.

7.4 Need a Supply Chain Manager?

How all these recommendations have to be implemented? Is it really needed a SCM manager?

The answer is "it all depends". Each company should evaluate with what resources it counts to carry out a correct SCM strategy and then be able to implement it.

A small company can, without any type of inconvenience, that the responsibility of designing the SCM strategy and ensuring that it is present when the business strategy is outlined rests with the CEO, general manager or the owner of the company. In this case, he/she must evaluate if own availability, in time and priority, to conduct its subsequent operationalization, if so, there is no one in the best position, if he/she is convinced of the added value that the correct application of the SCM can provide to the Company.

In the case of large companies, the figure of SCM manager must exist mandatorily. The presence of a person in charge who participates actively in the design of the strategy of the company, contributing the vision of internal and external integration, is of the utmost importance, this is especially so in those companies that have not yet matured in terms of SCM; in the latter case (little mature company in the areas of SCM) is recommended that the SCM manager has previous experience to contribute to inculcate the culture of SCM in the company

The manager of SCM, is also who will work as a consultant and coordinator of the activities, first internal, for example in the figure of who leads the operational planning of the company and then external, with a very strong interaction with the areas that have the responsibility of the relationship with the stakeholders, especially purchases and the commercial area. However, taking into account that opportunities in the field of SCM can occur in all areas of the company, he/she will be the support of any area that finds an opportunity for improvement through external development.

There is no doubt that this manager will have to occupy a staff position in the organigram of the organization depending directly on top management. It is a strong

recommendation, that each company will evaluate in light of its own reality, that its greatest strength is a global vision of the business and excellent soft qualities such as empathy, negotiation and communication skills.

Another trait is that of his hard abilities. Must be a manager with a strong capacity for planning and monitoring, may have basic knowledge of finance, production or logistics, among others. Whatever the hard profile of the selected person, senior management should ensure that they have a thorough knowledge of SCM's functions to avoid the bias that, due to previous activities, he/she could introduce.

As a summary, companies must understand the strategic nature of the SCM, its two major components that are the internal alignment that will lead to external coordinations. Achieving both will depend fundamentally on the culture of the company and its willingness or not to generate long-term relationships with its environment.

8. CHAPTER 8 - NEXT STEPS PROPOSED FOR THIS INVESTIGATION

This doctoral thesis aimed to show, analyze and propose the correct application of the principles of the SCM in Latin America.

As such, the research has been, ex-professo, very comprehensive, presenting many aspects that make the design of the SCM strategy and its subsequent operationalization.

It is proposed as steps to further deepen this vision of SCM and be able to provide more tools to the companies in the region, take each of the constructs presented here and develop in detail each one of them.

The possibility of adding other edges to this vision would be a very important contribution, as well as analyzing other cases that provide more information.

It would be a great contribution to complement this research a longitudinal study in which you can define some variables that, studied over time can measure and therefore show the benefits in the long term.

In summary it is proposed as next steps of this investigation

- Analyze other cases that contribute more information to the SCM phenomenon in Latin America.
- Deepen the study of the constructs proposed here.
- Present other constructs that can complement or complete this investigation
- Carry out a longitudinal study in one or more pilot companies to try to measure the medium / long term results.
- Once deepened in the behavior of these and other possible constructs, design a framework showing the conceptualization of what has been researched and be
 - a contribution to the theory
 - a guide for teaching
 - a tool for its implementation in companies.

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10. ANNEXES

10.1 Annex 1 - Matrix of experts

	Name	Actually working on	Group	Influence Country	Studies	Relation	e-mail
1	Fernando Balzarini	Regional President - Miebach Consulting	Consultant	Argentina - Paraguay - Uruguay - Chile - Colombia	Mechanical Engineer	We work together at Miebach Consulting - I have a professional and teaching relationship with him for 18 years - Friend	balzarini@miebach.com
2	Alberto Lournagaray	Manager of SCM solutions - Deloitte de Argentina	Consultant	Argentina	Industrial Engineer	We collaborated together in the Board of Directors of ARLOG (Argentine Association of Business Logistics) for several years	alournagaray@deloitte.com
3	Gustavo Di Capua	Senior Manager SCM de Earns & Young de Argentina	Consultant	Argentina	Industrial Engineer	We work together at Miebach Consulting - Friend	Gustavo.di-capua@ar.ey.com
4	Santiago Kraiselburd	Regional Director, Latam Hub, Supply Chain Management & Procurement-KPMG, Argentina, Brasil & Chile	Consultant - Academic	Argentina - Brasil - Chile	Ph.D Harvard University Electronic Engineer	I had no previous relationship with him	skraiselburd@gmail.com
5	Matías Enz	Academic Researcher of the Global Supply Chain Forum - Researcher CONICET	Academic	Argentina	Ph.D Ohio State University - MBA - Electronic Engineer	Contact in a Logistics Management Seminar that he attended as a speaker on SCM	matias.enz@gmail.com
6	Sebastián García-Dastugue	Researcher University of San Andrés	Academic	Argentina	Ph.D Ohio State University	He had read some papers he wrote with Lambert. I met him at the Australian Embassy on the occasion of Jhon Gattorna's visit to Buenos Aires	sebastian@garcia-dastugue.com
7	Isabel Agudelo	Applied research in supply chain management at LOGYCA Foundation	Academic	Colombia	Master of Engineering in Logistics and SCM - MBA - Industrial Engineer	I had no previous relationship with her	isaagudelo74@gmail.com
8	Andrés Cisneros	Corporate Manager of SCM - Plasticaucho S.A.	Practitioner	Ecuador - Colombia - Perú	Economist - MBA	I have done several consultancy work in the company where he works in Ecuador. We have known each other for more than 7 years	acisneros@plasticaucho.com
9	Guillermo Fazio	Director of SCM for Latin-América - Nestlé	Practitioner	Argentina - Chile - Uruguay - Ecuador - Colombia - Perú	Mechanical Engineer - MBA	We have known each other professionally for 15 years	guillermo.fazio@ar.nestle.com
10	Leonardo Ezcurra	Executive Manager of Logistics - Volkswagen Argentina	Practitioner	Argentina	Mechanical Engineer - MBA	I did not know him previously. Contact through my advisor from VW Navarra	leonardo.ezcurra@vw.com.ar
11	Rodrigo Bernaldo de Quirós	Director of SCM of Easy Home Argentina	Practitioner	Argentina - Chile	Economist - MBA	Colleague with whom I worked as a client in the implementation of a Distribution Center. I've known him for 15 years	rodrigo.quirós@easy.com.ar
12	Santiago López Novotny	Manager of Logistics and Distribution - Coca Cola Andina Argentina S.A.	Practitioner	Argentina	Industrial Engineer - MBA	We have known each other for more than 10 years both personally and through activities in the logistics environment.	slopez@koandina.com
13	Fernando Di Giusto	Operations Planning Manager Arcor S.A.I.C.	Practitioner	Argentina	Computer Systems Engineer	I had no previous relationship with him	fernandodigiusto@gmail.com

10.2 Annex 2 – Agenda of previous interviews with experts

Name	Fecha	Schedule (+3)	Place
Fernando Balzarini	martes, 25 de agosto de 2015	15:00 to 18:30 hs.	Miebach consulting office
Alberto Lurnagaray	viernes, 03 de julio de 2015	13:30 to 18:00 hs.	Deloitte office
Gustavo Di Capua	lunes, 20 de julio de 2015	13:00 a 1530 hs.	Work lunch
Santiago Kraiselburd	jueves, 11 de junio de 2015	15:00 to 18:00 hs.	KPMG office
Matías Enz	sábado, 20 de junio de 2015	15:00 to 19:30 hs.	His house in Rosario
Sebastián Garcia-Dastugue	miércoles, 15 de julio de 2015	10:30 hs. to 15:00 hs.	His house in BA
Isabel Agudelo	martes, 07 de julio de 2015	14:00 to 15:00 hs	SKYPE
Andrés Cisneros	viernes, 17 de julio de 2015	13:00 to 16:30 hs.	SKYPE
Guillermo Fazio	viernes, 03 de julio de 2015	10:00 to 12.00 hs.	Nestlé Office
Leonardo Ezcurra	martes, 07 de julio de 2015	10:00 to 12.30 hs	VW production plant
Rodrigo Bernaldo de Quirós	viernes, 21 de agosto de 2015	17:00 to 19:30 hs.	Easy office
Santiago López Novotny	lunes, 03 de agosto de 2015	10:00 to 1230 hs.	SKYPE
Fernando Di Giusto	viernes, 04 de septiembre de 2015	10:00 to 12:00 hs.	Arcor office

10.3 Annex 3 - List of questions presented to the experts.

	PLANEAMIENTO ESTRATEGICO DEL NEGOCIO	Contar palabras
1	Todas las empresas deberían realizar un " planeamiento estratégico del negocio " <u>formal</u> .	11
2	Dentro del proceso de " planeamiento estratégico del negocio " se deben establecer los lineamientos para la definición de la " estrategia de SCM "	21
3	La "estrategia de SCM" debe estar siempre alineada con el " planeamiento estratégico del negocio ".	14
4	Los procesos de " planeamiento estratégico del negocio " son más formales en las empresas multinacionales que en las locales.	18
5	Los procesos de " planeamiento estratégico del negocio " son más formales a medida que crece el tamaño de la empresa.	19
	ESTRATEGIA DE SCM	
6	Es crítico para las empresas formular una " estrategia de SCM "	10
7	La definición de la " estrategia de SCM " está relacionada con la <u>integración interna</u> (las diferentes áreas de la empresa) y/o <u>integración externa</u> (proveedores y clientes) del negocio	27
8	La definición de la " estrategia de SCM " está relacionada con la <u>integración externa</u> (proveedores y clientes) del negocio.	18
9	La " estrategia de SCM " debe ser definida únicamente por la dirección de la empresa	13

10	La " estrategia de SCM " se define de distinta manera si la empresa es pequeña, mediana o grande	17
11	La " estrategia de SCM " se define de distinta manera si la empresa es local, multilatina (empresa multinacional en el ámbito de latinoamerica) o multinacional	24
12	La cultura de la empresa incide en el contenido de la " estrategia de SCM "	14
13	La " estrategia de SCM " debe buscar lograr una <i>mejor eficiencia (que puede traducirse en mayor rentabilidad, imagen, servicio al cliente, etc.)</i> para al empresa exclusivamente	25
14	La " estrategia de SCM " debe buscar lograr una <i>mejor eficiencia (que puede traducirse en mayor rentabilidad, imagen, servicio al cliente, etc.)</i> para la cadena o como mínimo una diada (relacion cliente-proveedor).	31
15	En la " estrategia de SCM " se deben definir indicadores para medir objetivamente la mejor eficiencia de la empresa o de la cadena.	22
RELACION CON CLIENTES / PROVEEDORES EN LA ESTRATEGIA DE SCM		
16	La colaboración con (algunos) proveedores y clientes genera mejor rentabilidad al negocio en el corto plazo.	16
17	La colaboración con (algunos) proveedores y clientes genera mejor rentabilidad al negocio en el largo plazo.	16
18	La " estrategia de SCM " debe buscar mecanismos de relacionamiento con clientes y proveedores que permitan lograr el objetivo de una mejor eficiencia de la empresa exclusivamente	26
19	La " estrategia de SCM " debe buscar la forma de relacionarse con clientes y proveedores que permita lograr el objetivo de una mejor eficiencia global de la cadena / mejor servicio al cliente final (alguna de ellas o ambas)	38
20	Se deben definir a nivel " estrategia de SCM " los lineamientos que permitan redistribuir los resultados por las eficiencias logradas en la cadena	22

21	Se DEBE DEFINIR en la " estrategia de SCM " la voluntad de contribuir o no con proveedores /clientes para lograr eficiencia en la cadena aunque la misma <u>no se produzca en la empresa.</u>	32
SEGMENTACIÓN DENTRO DE LA ESTRATEGIA DE SCM		
22	Las empresas se DEBEN RELACIONAR de la misma manera con todos los clientes / proveedores	15
23	Las empresas DEBEN APLICAR criterios de <u>segmentación de proveedores</u> a la hora de definir su " estrategia de SCM "	18
24	Las empresas DEBEN APLICAR criterios de <u>segmentación de clientes</u> a la hora de definir su " estrategia de SCM "	18
25	Las empresas DEBEN HACER una clara diferenciación dentro de su " estrategia de SCM " con quien colaborar , con quien coordinar y con quien sólo transaccionar .	24
26	Las empresas DEBEN SEGMENTAR para diferenciar las empresas con las que <u>transaccionan exclusivamente, coordinar o cooperar</u> en su relacionamiento externo dentro de su " estrategia de SCM ".	26
27	Las empresas DEBEN TENER en cuenta las condiciones <u>culturales de "afinidad"</u> con proveedores al aplicar criterios de segmentación relacionados con el SCM.	22
28	Las empresas DEBEN TENER en cuenta las condiciones <u>culturales de "afinidad"</u> con clientes al aplicar criterios de segmentación relacionados con el SCM.	22
29	La segmentación definida en la " estrategia de SCM " además de las " condiciones culturales " considera otros criterios.	16
30	La <u>segmentación de clientes / proveedores</u> debe responder a criterios / objetivos que no se relacionan necesariamente con la " estrategia de SCM ", mas bien con <u>objetivos de otras áreas</u> específicas de la empresa.	33
31	Algunos proveedores deben participar <u>directamente</u> en la definición de la " estrategia de SCM " de la empresa	16

32	Algunos clientes deben participar <u>directamente</u> en la definición de la "estrategia de SCM" de la empresa	16
33	Algunos proveedores deben participar <u>indirectamente</u> en la definición de la "estrategia de SCM" de la empresa	16
34	Algunos clientes deben participar <u>indirectamente</u> en la definición de la "estrategia de SCM" de la empresa	16
	RELACIÓN DE SCM CON DIFERENTES AREAS DE LA EMPRESA	
35	SCM es la evolución de la logística y/o de compras y abastecimiento.	13
36	SCM y logística / SCM son funciones similares o muy relacionadas en las empresas.	13
37	SCM y compras/abastecimiento son funciones similares o muy relacionadas en las empresas.	13
38	El área de logística y/o de compras deben ser las únicas que participan en el diseño de la "estrategia de SCM"	22
39	El área de logística y/o compras deben ser la de mayor importancia/influencia en el diseño de la "estrategia de SCM"	22
40	Múltiples áreas deben participar en el diseño de la "estrategia de SCM"	12
41	Las empresas que formulan "estrategia de SCM" lo deben hacer desde una perspectiva de lograr <u>eficiencia logística</u> .	17
	FUNCIONES DEL GERENTE DE SCM	
42	Las empresas deben tener un gerente de SCM o, para el caso de empresas pequeñas, un responsable por esa gestión.	20
43	Las decisiones relacionadas con SCM, deben estar distribuidas en varios departamentos	11
44	El gerente de logística debe reportar al gerente de SCM	10
45	El gerente de compras/abastecimiento debe reportar al gerente de SCM	10

46	El gerente de SCM debe reportar al gerente de algún área operativa (compras, abastecimiento, logística o algún otro)	18
47	Debe haber gerente de logística y de SCM coexistiendo en las empresas ya que sus funciones son diferentes.	18
48	La gerencia de SCM es una gerencia operativa (a cargo de las operaciones o de algunas operaciones)	17
49	SCM es un área funcional de soporte (staff) cuya función principal es lograr la <u>alineación interna</u>	16
50	SCM es un área funcional de soporte (staff) cuya función principal es lograr la coordinación de <u>actividades externas</u> con proveedores y clientes	22
51	El gerente de SCM debe tener más capacidades de negociación, coordinación, relacionamiento (blandas o de gestión) que de conocimientos técnicos en logística, compras o abastecimiento.	25
52	Es <u>imprescindible</u> que el gerente de SCM tenga conocimientos de áreas duras como la logística, compras o abastecimiento.	18
SISTEMAS DE INCENTIVO (internos) / ALINEACION EN LA ESTRATEGIA DE SCM		
53	Los sistemas de incentivo a DIRECTORES y GERENTES deben ayudar a alinear los objetivos de las diferentes áreas de la empresa para lograr una mejor <u>eficiencia de la empresa</u>	29
54	Los sistemas de incentivo a DIRECTORES y GERENTES deben ayudar a alinear los objetivos de las diferentes áreas de la empresa para lograr una mejor <u>eficiencia de la cadena</u>	29
55	Los sistemas de incentivos a DIRECTORES y GERENTES deben estar orientados a que cada área/departamento logre la <u>mayor eficiencia de su area o departamento</u>	24
56	Dentro de la " <u>estrategia de SCM</u> " tomar decisiones orientadas a lograr la <u>integración/alineación interna</u> de las distintas áreas/departamentos es <u>fundamental</u> .	20
57	Los sistemas de incentivo a DIRECTORES y GERENTES deben estar alineados con los objetivos planteados en el " <u>planeamiento estrategico del negocio</u> "	21
58	Los sistemas de incentivo a DIRECTORES y GERENTES deben estar alineados con los objetivos planteados en la " <u>estrategia de SCM</u> "	20

Indique su grado de acuerdo en las 3 visiones presentadas a continuación y que correspondería a la definición de SCM?

VISION LOGISTICA SCM toma las competencias de la logística y las presenta de una manera “superadora” haciendo hincapié en todos los procesos logísticos que forman parte de la cadena de abastecimiento	29
VISION DE OPERACIONES SCM entiende que los procesos van más allá de las fronteras de la empresa pero manteniendo el foco en los procesos operativos (compras, logística, pronóstico de demanda, etc.) o sea, una integración operativa de toda la cadena de abastecimiento con foco en obtener beneficios dentro de la empresa.	48
VISION DE NEGOCIO SCM surge de entender que los procesos de “negocio” están fuertemente interrelacionados tanto internamente dentro de la empresa como a lo largo de “toda la cadena de valor”, más allá de la empresa.	33
PROMEDIO DE PALABRAS	28

10.4 Annex 4 – E-mail Communication to experts’ model – 1° Round

Asunto: INSTRUCTIVO Y CUESTIONARIO DELPHI

De: cr_arredondo@yahoo.com.ar

Para: matias.enz@gmail.com

Fecha: miércoles, 26 de agosto de 2015 10:34:32 ART

Estimado Matias

Nuevamente gracias por participar en el panel de expertos.

Como te comenté en nuestra reunión, necesito que hagas tu mejor esfuerzo para responder concienzudamente al cuestionario y los comentarios a las preguntas.

De más está decirte lo importante de tu colaboración para lograr, no solo contribuir al desarrollo de mi tesis doctoral sino de avanzar un paso más en el estudio del SCM en latinoamérica.

Mi estimación, luego de algunas pruebas previas, es que esta etapa 1 del estudio no debería llevarte mas de 2 a 2,5 hs.

No es necesario que lo hagas de una vez sino que puedes hacerlo parcialmente si no dispones del tiempo todo junto.

Por favor, lee atentamente el instructivo antes de responder al cuestionario.

Fecha límite para devolver el cuestionario respondido **Etapa 1: miércoles 09 de setiembre** (te enviaré un recordatorio unos días antes)

Por último, te pido especialmente que me envíes un mail **confirmando que has recibido los archivos**, me **consultes cualquier duda que te haya quedado** y que vas a poder **cumplir con la fecha límite** que te solicito.

Un cordial saludo

Carlos Raúl Arredondo



¿Realmente necesitas imprimir este correo?

*Antes de hacerlo pensá en el medio ambiente.
Entre todos podemos cuidar el planeta.
Gracias por tenerlo en cuenta.*



Instructivo para panel Delphi v4.docx
21kB



MARCO-DELPHI v6.xlsx
17.3kB

10.5 Annex 5 - E-mail remainder to experts' model – 1° Round

Asunto: RECORDATORIO-PANEL DE EXPERTOS

De: cr_arredondo@yahoo.com.ar

Para:

Fecha: jueves, 3 de septiembre de 2015 13:08:56 ART

Estimados integrantes del panel de Expertos

Les envío este correo para pedirles que, por favor, no se olviden de buscar un rato para responder a la primer etapa del cuestionario Delphi.

La fecha que les he propuesto es el próximo miércoles 9 de setiembre.

De más está decirles que si alguno tiene inconvenientes para responder hasta esa fecha no hay ningún problema, lo esperaré el tiempo razonable que necesite, simplemente le pido me avise para estar al tanto y reprogramar si fuera necesario.

Desde ya muchas gracias.

Carlos Raúl Arredondo



¿Realmente necesitas imprimir este correo?

Antes de hacerlo pensá en el medio ambiente.
Entre todos podemos cuidar el planeta.
Gracias por tenerlo en cuenta.

10.6 Annex 6 - E-mail Reinforcing reminder to experts' model – 1° Round

Asunto: POR FAVOR- ES IMPORTANTE TU RESPUESTA

De: cr_arredondo@yahoo.com.ar
Para: cr_arredondo@yahoo.com.ar
Fecha: viernes, 28 de agosto de 2015 17:05:46 ART

Estimado colega

Hace 2 días te envié un correo con el instructivo y primer ronda del cuestionario Delphi. Ahí te pido que me confirmes su recepción, si tienes alguna duda y si tienes algún tipo de inconveniente en cumplir con la fecha límite que te propongo.

Es muy importante recibir tu confirmación.

Desde ya te agradezco tu colaboración

Un cordial saludo

Carlos Raúl Arredondo



¿Realmente necesitas imprimir este correo?

Antes de hacerlo pensá en el medio ambiente.
Entre todos podemos cuidar el planeta.
Gracias por tenerlo en cuenta.

10.7 Annex 7– E-mail Communication to experts' model – 2° Round

Asunto: INICIO 2° ETAPA ESTUDIO DELPHI

De: cr_arredondo@yahoo.com.ar

Para: gustavo.di-capua@ar.ey.com; sebastian@garcia-dastugue.com; rodrigo.quiros@easy.com.ar; balzarini@miebach.com; alarnagaray@deloitte.com; acisneros@plasticaucho.com; matias.enz@gmail.com; guillermo.fazio@ar.nestle.com; skraiselburd@gmail.com; fdigiusto@arcor.com; lagudelo@logyca.org; leonardo.ezcurra@vw.com.ar; slopez@koandina.com

Fecha: miércoles, 21 de octubre de 2015 10:19:23 ART

Estimados miembros del panel de expertos

Como se habrán dado cuenta el arranque de la 2° vuelta tuvo algún retraso por diversos motivos que tengo la esperanza que no se repitan en esta 2° etapa.

Les enviaré a cada uno de uds. una nueva planilla con la información de la 1° etapa procesada para que tengan la información correspondiente que les permita participar satisfactoriamente de la 2° vuelta.

He puesto foco en presentarles la información lo más accesible y amigable posible para que no tengan inconvenientes en responder nuevamente al cuestionario, espero haber logrado el objetivo.

Algunas recomendaciones que quiero hacerles y les voy a reiterar nuevamente al enviarles el nuevo archivo.

- El método aplicado no admite abrir una discusión abierta sobre la formulación de las preguntas.
- No hay dudas que hay muchos otros factores a considerar cuando se presentan las preguntas, pero este estudio está acotado a temas específicos.
- Los comentarios no son el lugar para hacer preguntas sobre dudas, interpretaciones o cosas similares. De existir las mismas les pido encarecidamente que se pongan en contacto conmigo para hacer las aclaraciones correspondientes.
- Los comentarios son para ser leído por sus colegas antes de responder nuevamente por lo que es importante que estén centrados en aclarar o ampliar su respuesta.
- Nuevamente insisto en que tienen que dar su opinión, no lo que sucede en su país, lo que algunas empresas hacen o lo que hace su empresa SINO SU OPINIÓN PROFESIONAL SOBRE EL TEMA.
- He tratado de mantener los comentarios tal cual los han enviado. Algunas modificaciones o eliminaciones tienen que ver con evitar que se "delate" la identidad de algún experto ya que el anonimato es fundamental en el proceso.

Les reitero mi agradecimiento por participar y seguir participando de este trabajo de investigación. El aporte que están haciendo es "enorme". Como siempre estoy 100% disponible para cualquier duda, sugerencia o comentario que quieran hacer
Un muy cordial saludo

PD Les pido hagan acuse recibo del correo para saber que lo han recibido y así no seguir reenviándolo.

Carlos Raúl Arredondo



¿Realmente necesitas imprimir este correo?

Antes de hacerlo pensé en el medio ambiente.
Entre todos podemos cuidar el planeta.
Gracias por tenerlo en cuenta

10.8 Annex 8 - E-mail remainder to experts' model – 2° Round

Asunto: SOLICITARLES CONFIRMACIÓN

De: cr_arredondo@yahoo.com.ar

Para:

Fecha: miércoles, 4 de noviembre de 2015 10:31:51 ART

Estimados expertos

Entre el 21 y 23 de octubre les envié a cada uno de uds. un mail con algunos comentarios sobre la 1° etapa del DELPHI y les solicité encarecidamente que me enviaran un mail de confirmación para estar seguro que lo habían recibido.

Unos días después les envié un nuevo mail con la planilla procesada para realizar la 2° etapa y nuevamente les pedí confirmación y que me indiquen si la fecha propuesta era factible para uds.

Muchos de uds. no me enviaron la confirmación de uno o de ninguno de los 2 correos por lo que no se si lo han recibido o no.

Se que puede parecerles molesto pero mirar un correo, leerlo y confirmar su recepción no debería llevarles demasiado tiempo. Como siempre les he dicho, entiendo que tienen responsabilidades, obligaciones y no les sobra el tiempo, pero también entiendo que ante su respuesta afirmativa a colaborar eso creó algún tipo de obligación, con baja prioridad, de acuerdo, por eso estoy dispuesto a esperar si no pueden responderme en tiempo, pero si no pueden cumplir en los tiempos solicitados lo que les pido es que me avisen, así como les pido que me confirmen la recepción de un correo.

En la 1° etapa esperé retrasos de mas de 1 mes, lo entiendo y lo acepto, solo quiero saber que pasa del otro lado.

Sinceramente espero que ninguno se sienta molesto por lo que les digo ya que se que le han dedicado y le dedicarán tiempo pero sentí la necesidad de expresarlo.

Les había propuesto como fecha para entregar la 2° etapa LUNES 16 DE NOVIEMBRE. Algunos me dieron el OK, de otros no se nada. Si alguien cree que no va a poder enviarme la planilla para esa fecha, por favor también avísame.

Desde ya muchas gracias a todos.

PD A cada uno que me envió correo de confirmación le contesté, como hago siempre, y de esa manera saben que el mail llegó. Si no recibió mi OK es porque no lo recibí

Carlos Raúl Arredondo



¿Realmente necesitas imprimir este correo?

Antes de hacerlo pensé en el medio ambiente.

Entre todos podemos cuidar el planeta

Gracias por tenerlo en cuenta

10.9 Annex 9 - E-mail Reinforcing reminder to experts' model – 2° Round

Asunto: RECORDATORIO ENVIO 2° ETAPA DELPHI

De: cr_arredondo@yahoo.com.ar

Para: balzarini@miebach.com; alaumagaray@deloitte.com; gustavo.di-capua@ar.ey.com; acisneros@plasticaucho.com; matias.enz@gmail.com; guillermo.fazio@ar.nestle.com; skraiselburd@gmail.com; fdigiusto@arcor.com; iagudelo@logyca.org; Leonardo.Ezcurra@VW.COM.AR; SLopez@koandina.com; sebastian@garcia-dastugue.com; rodrigo.quiros@easy.com.ar

Fecha: jueves, 12 de noviembre de 2015 14:36:14 ART

Estimado expertos

Les envío este correo para recordarles que se acerca la fecha límite para enviar las respuestas y nuevos comentarios de lo que es la 2° etapa del estudio DELPHI.

Alguno de uds. no me ha respondido en ninguna de las 3 ocasiones que les envié correos sobre esta 2° etapa. Asumo que evidentemente la escasez de tiempo no se lo haya permitido; si es así vuelvo a insistir que saber si van poder responder y una fecha, aunque sea tentativa, es de gran ayuda para organizar el trabajo.

Por favor, no dejen de avisarme si tienen dudas y/o algún tipo de inconveniente para cumplir la fecha pactada/solicitada.

Desde ya agradezco el esfuerzo que hacen

Un cordial saludo

Carlos Raúl Arredondo



¿Realmente necesitas imprimir este correo?

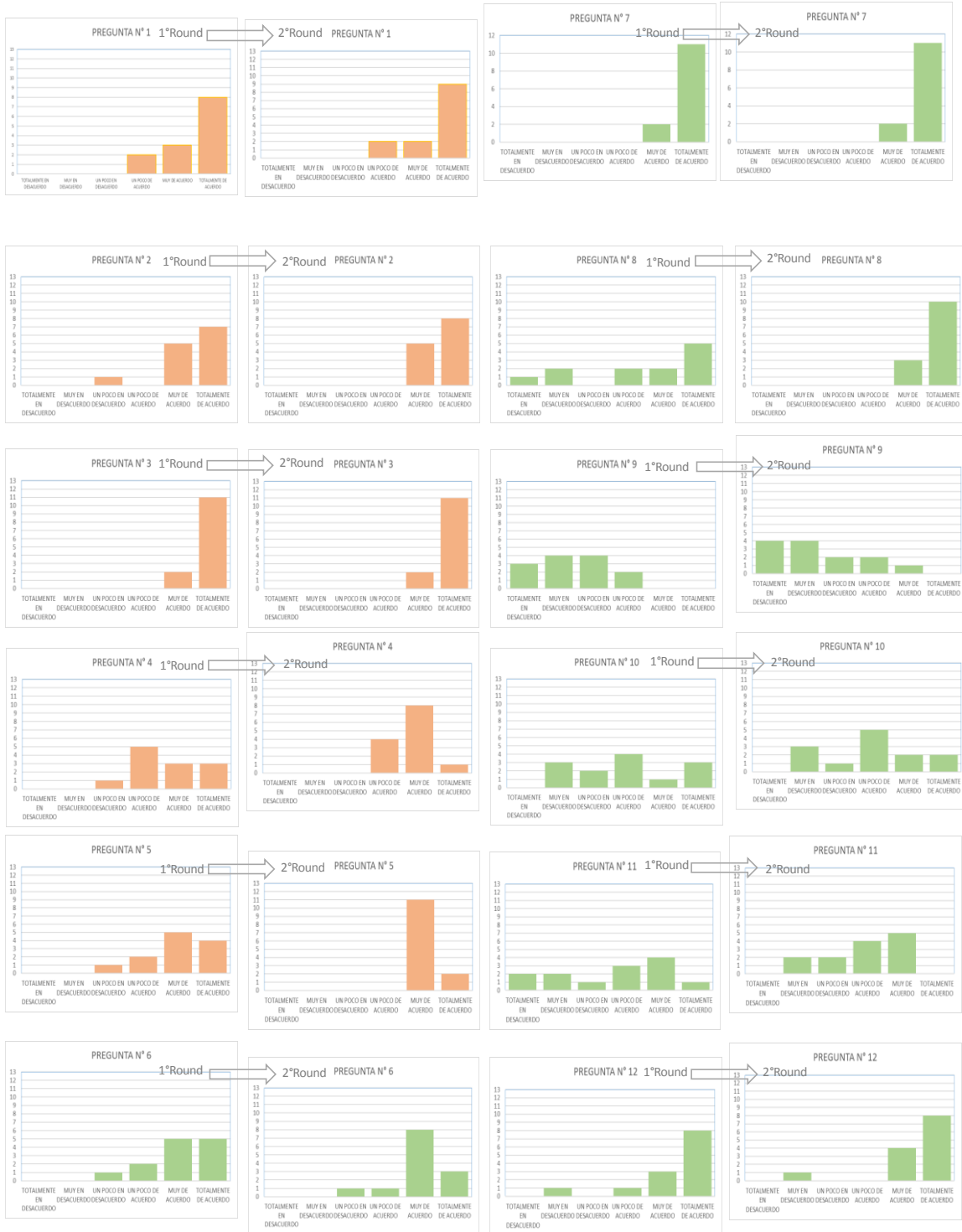
Antes de hacerlo pensá en el medio ambiente.
Entre todos podemos cuidar el planeta
Gracias por tenerlo en cuenta

10.10 Annex 10 - Delphi tracking matrix

PANEL DE EXPERTOS -METODO DELPHI
Planilla de seguimiento

Expertos	ETAPA 1							ETAPA 2						
	ENVIÓ	CONFIRMACIÓN RECEPCION	REITERACION ENVIÓ	CONFIRMACIÓN RECEPCION	RECEPCIÓN ETAPA 1	TIEMPO (días)	ENVIÓ MAIL PREVIO	CONFIRMACIÓN RECEPCION MAIL PREVIO	ENVIÓ CUESTIONARIO	REITERACION ENVIÓ CUESTIONARIO	CONFIRMACION RECEPCION CUESTIONARIO 2	RECORDATORIO ENTREGA ETAPA 2	RECEPCIÓN ETAPA 2	TIEMPO (días)
Baltarini	26-ago-15	27-ago-15	28-ago-15	31-ago-15	04-oct-15	39	21-oct-15	21-oct-15	23/10/2015	04-nov-15		12-nov-15	15-nov-15	23
Lauemagaray	26-ago-15	28-ago-15			05-sep-15	10	21-oct-15	22-oct-15	23/10/2015	04-nov-15	27-oct-15		10-nov-15	18
Di Capua	26-ago-15		28-ago-15	31-ago-15	14-sep-15	19	21-oct-15		23/10/2015	04-nov-15	23-oct-15	12-nov-15	18-nov-15	26
Agudelo	26-ago-15		28-ago-15	31-ago-15	18-sep-15	23	21-oct-15	27-oct-15	23/10/2015	04-nov-15	04-nov-15	12-nov-15	15-nov-15	23
Cisneros	26-ago-15	27-ago-15			15-sep-15	20	21-oct-15	21-oct-15	23/10/2015	04-nov-15		12-nov-15	20-nov-15	28
Fazio	26-ago-15		28-ago-15	28-ago-15	08-oct-15	43	21-oct-15	21-oct-15	23/10/2015	04-nov-15		12-nov-15	02-dic-15	40
Ecurra	26-ago-15		28-ago-15	28-ago-15	07-sep-15	12	21-oct-15	21-oct-15	23/10/2015	04-nov-15	04-nov-15		17-nov-15	25
Lopez Novotny	26-ago-15		28-ago-15	28-ago-15	09-sep-15	14	21-oct-15	21-oct-15	23/10/2015	04-nov-15	23-oct-15		01-nov-15	9
Quiros	26-ago-15	27-ago-15			11-sep-15	16	21-oct-15	21-oct-15	23/10/2015	04-nov-15			10-nov-15	18
Enz	26-ago-15	27-ago-15			14-sep-15	19	21-oct-15		23/10/2015	04-nov-15	24-oct-15	12-nov-15	18-nov-15	26
Kraiselburd	26-ago-15		28-ago-15	31-ago-15	24-sep-15	29	21-oct-15		23/10/2015	04-nov-15		12-nov-15	10-ene-16	79
García Dastugue	26-ago-15	27-ago-15			20-sep-15	25	21-oct-15		23/10/2015	04-nov-15	04-nov-15	12-nov-15	22-nov-15	30
Di Giusto	03-sep-15	03-sep-15			14-sep-15	11	21-oct-15		23/10/2015	04-nov-15	26-oct-15	12-nov-15	12-nov-15	20
					PROMEDIO	22							PROMEDIO	28

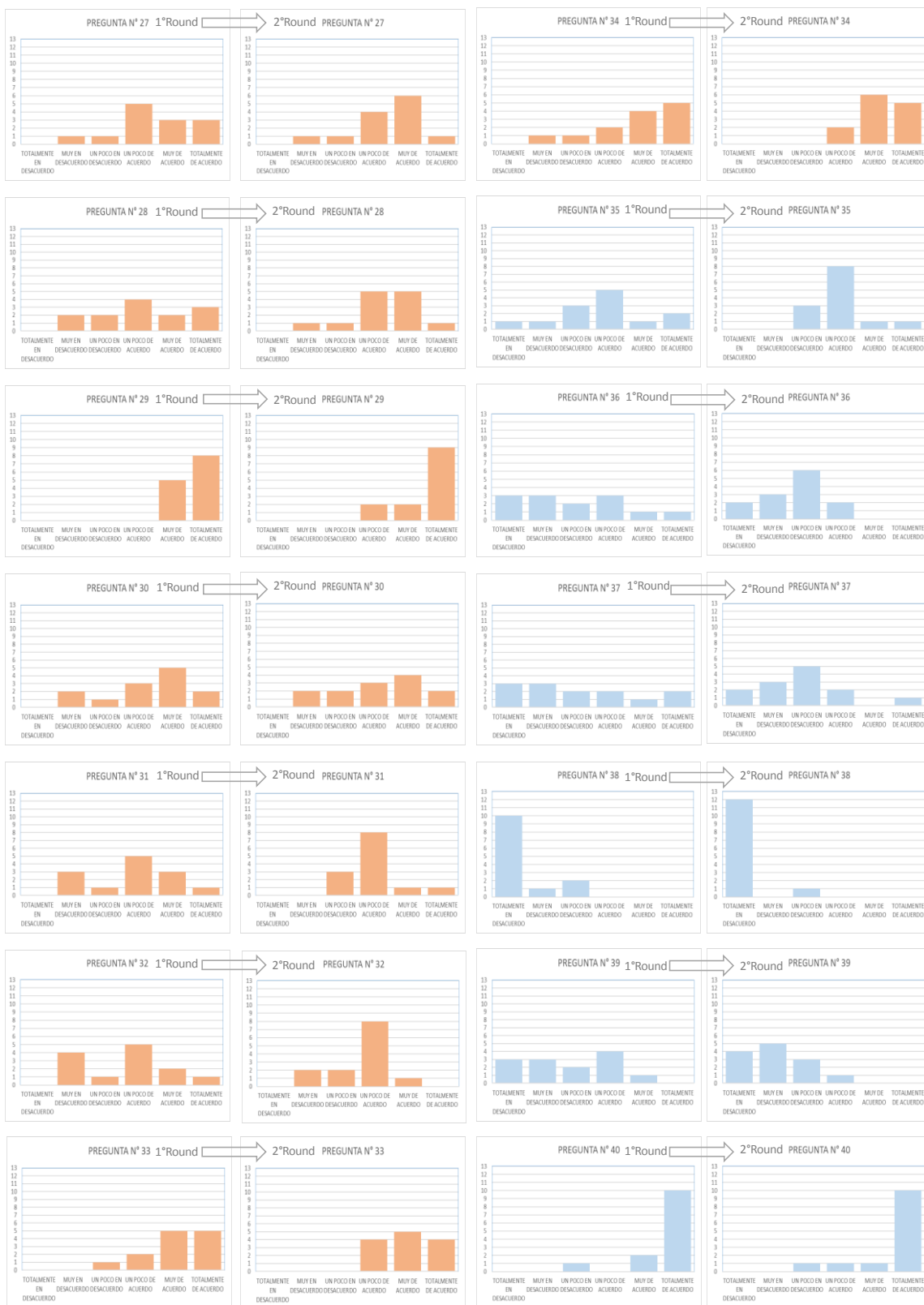
10.11 Annex 11 - Detail and evolution of experts' reponses



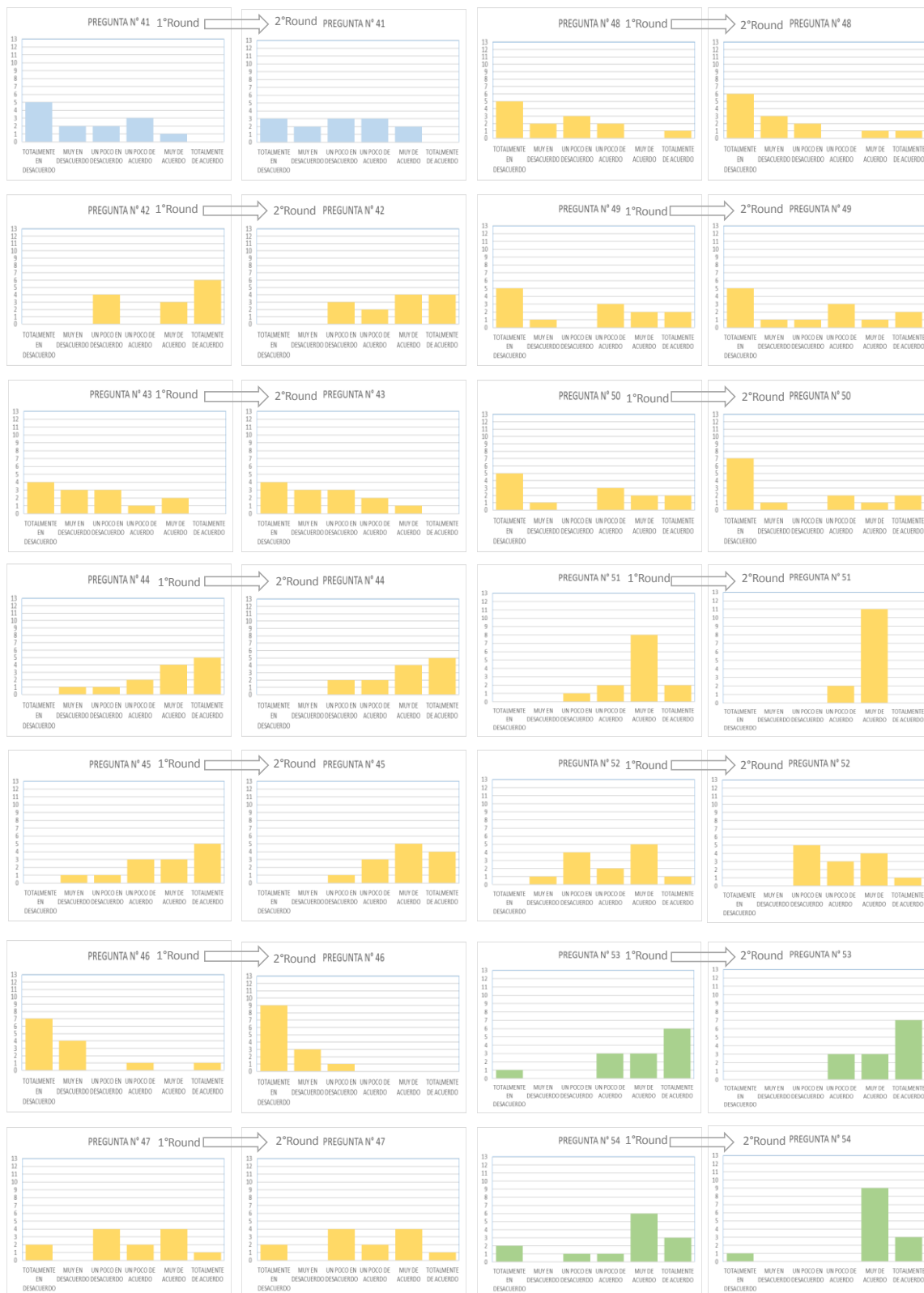
Annex 11 - Detail and evolution of experts' reponses (Cont. 2 of 4)



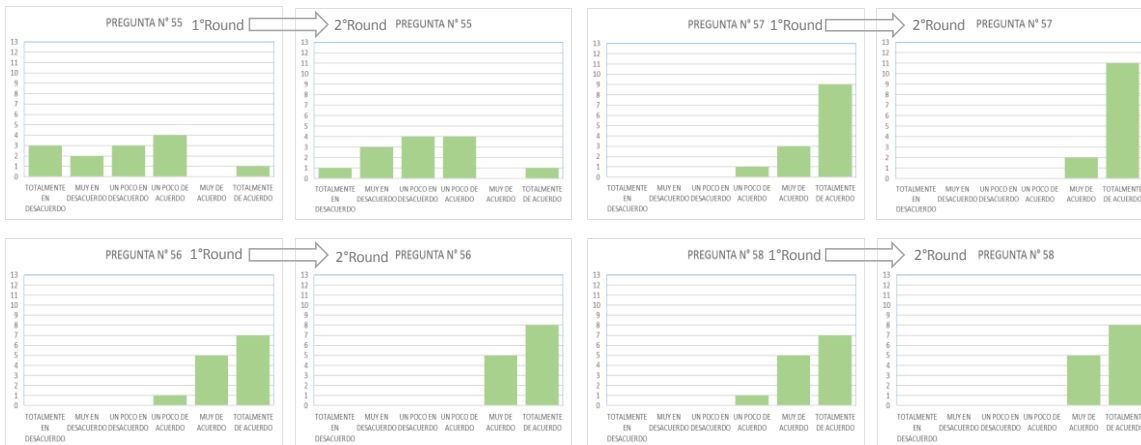
Annex 11 - Detail and evolution of experts' reponses (Cont. 3 of 4)



Annex 11 - Detail and evolution of experts' reponses (Cont. 3 of 4)



Annex 11 - Detail and evolution of experts' reponses (Cont. 4 of 4)



10.12 Annex 12 – Delphi Questionnaire - Convergence and deviation 1 of 4

		Media	Desvío	Media	Desvío	Dif. Desvío	% Desvío
1	Todas las empresas deberían realizar un "planeamiento estratégico del negocio" formal.	5,46	0,78	5,54	0,78	0,00	0%
2	Dentro del proceso de "planeamiento estratégico del negocio" se deben establecer los lineamientos para la definición de la "estrategia de SCM"	5,38	0,87	5,62	0,51	0,36	42%
3	La "estrategia de SCM" debe estar siempre alineada con el "planeamiento estratégico del negocio" .	5,85	0,38	5,85	0,38	0,00	0%
4	Los procesos de "planeamiento estratégico del negocio" son más formales en las empresas multinacionales que en las locales.	4,62	0,96	4,77	0,60	0,36	38%
5	Los procesos de "planeamiento estratégico del negocio" son más formales a medida que crece el tamaño de la empresa.	4,92	0,95	5,15	0,38	0,58	61%
6	Es crítico para las empresas formular una "estrategia de SCM"	5,08	0,95	5,00	0,82	0,14	14%
7	La definición de la "estrategia de SCM" está relacionada con la integración interna (las diferentes áreas de la empresa) y/o integración externa (proveedores y clientes) del negocio	5,85	0,38	5,85	0,38	0,00	0%
8	La definición de la "estrategia de SCM" está relacionada con la integración externa (proveedores y clientes) del negocio.	4,50	1,74	5,77	0,44	1,30	75%
9	La "estrategia de SCM" debe ser definida únicamente por la dirección de la empresa	3,62	1,04	3,62	1,33	-0,28	-27%
10	La "estrategia de SCM" se define de distinta manera si la empresa es pequeña, mediana o grande	3,92	1,50	3,92	1,38	0,12	8%
11	La "estrategia de SCM" se define de distinta manera si la empresa es local, multilatina (empresa multinacional en el ámbito de latinoamérica) o multinacional	3,62	1,66	3,92	1,12	0,55	33%
12	La cultura de la empresa incide en el contenido de la "estrategia de SCM"	5,31	1,18	5,38	1,12	0,06	5%
13	La "estrategia de SCM" debe buscar lograr una <i>mejor eficiencia (que puede traducirse en mayor rentabilidad, imagen, servicio al cliente, etc.)</i> para al empresa exclusivamente	3,23	1,69	3,54	1,13	0,56	33%
14	La "estrategia de SCM" debe buscar lograr una <i>mejor eficiencia (que puede traducirse en mayor rentabilidad, imagen, servicio al cliente, etc.)</i> para la cadena o como mínimo una diada (relacion cliente-proveedor).	4,92	1,44	5,38	0,77	0,67	47%
15	En la "estrategia de SCM" se deben definir indicadores para medir objetivamente la mejor eficiencia de la empresa o de la cadena.	5,46	1,33	5,69	0,85	0,48	36%
16	La colaboración con (algunos) proveedores y clientes genera mejor rentabilidad al negocio en el corto plazo.	4,38	1,19	4,08	0,76	0,43	36%
17	La colaboración con (algunos) proveedores y clientes genera mejor rentabilidad al negocio en el largo plazo.	5,62	0,65	5,77	0,44	0,21	33%

Annex 12 – Delphi Questionnaire - Convergence and deviation 2 of 4 (Continuation)

		Media	Desvío	Media	Desvío	Dif. Desvío	% Desvío
18	La " estrategia de SCM " debe buscar mecanismos de relacionamiento con clientes y proveedores que permitan lograr el objetivo de una mejor eficiencia de la empresa exclusivamente	3,23	1,59	3,54	1,45	0,14	9%
19	La " estrategia de SCM " debe buscar la forma de relacionarse con clientes y proveedores que permita lograr el objetivo de una mejor eficiencia global de la cadena / mejor servicio al cliente final (alguna de ellas o ambas)	5,31	1,18	5,38	0,77	0,41	35%
20	Se deben definir a nivel " estrategia de SCM " los lineamientos que permitan redistribuir los resultados por las eficiencias logradas en la cadena	4,46	1,45	5,00	0,71	0,74	51%
21	Se DEBE DEFINIR en la " estrategia de SCM " la voluntad de contribuir o no con proveedores /clientes para lograr eficiencia en la cadena aunque la misma no se produzca en la empresa.	4,15	1,14	4,54	1,20	-0,05	-5%
22	Las empresas se DEBEN RELACIONAR de la misma manera con todos los clientes / proveedores	4,23	1,36	4,31	1,38	-0,01	-1%
23	Las empresas DEBEN APLICAR criterios de segmentación de proveedores a la hora de definir su " estrategia de SCM "	5,46	1,13	5,38	1,39	-0,26	-23%
24	Las empresas DEBEN APLICAR criterios de segmentación de clientes a la hora de definir su " estrategia de SCM "	5,38	1,12	5,77	0,44	0,68	61%
25	Las empresas DEBEN HACER una clara diferenciación dentro de su " estrategia de SCM " con quien colaborar , con quien coordinar y con quien sólo transaccionar .	5,46	1,13	5,85	0,38	0,75	67%
26	Las empresas DEBEN SEGMENTAR para diferenciar las empresas con las que transaccionan exclusivamente, coordinar o cooperar en su relacionamiento externo dentro de su " estrategia de SCM ".	5,50	0,67	5,62	0,65	0,02	4%
27	Las empresas DEBEN TENER en cuenta las condiciones culturales de "afinidad" con proveedores al aplicar criterios de segmentación relacionados con el SCM.	4,46	1,20	4,38	1,04	0,15	13%
28	Las empresas DEBEN TENER en cuenta las condiciones culturales de "afinidad" con clientes al aplicar criterios de segmentación relacionados con el SCM.	4,15	1,41	4,31	1,03	0,37	27%
29	La segmentación definida en la " estrategia de SCM " además de las " condiciones culturales " considera otros criterios.	5,62	0,51	5,54	0,78	-0,27	-53%
30	La segmentación de clientes / proveedores debe responder a criterios / objetivos que no se relacionan necesariamente con la " estrategia de SCM ", mas bien con objetivos de otras áreas específicas de la empresa.	4,31	1,32	4,15	1,34	-0,03	-2%
31	Algunos proveedores deben participar directamente en la definición de la " estrategia de SCM " de la empresa	3,85	1,28	4,00	0,82	0,46	36%

Annex 12 – Delphi Questionnaire - Convergence and deviation 3 of 4 (Continuation)

		Media	Desvío	Media	Desvío	Dif. Desvío	% Desvío
32	Algunos clientes deben participar directamente en la definición de la " estrategia de SCM " de la empresa	3,62	1,33	3,62	0,87	0,46	34%
33	Algunos proveedores deben participar indirectamente en la definición de la " estrategia de SCM " de la empresa	5,08	0,95	5,00	0,82	0,14	14%
34	Algunos clientes deben participar indirectamente en la definición de la " estrategia de SCM " de la empresa	4,85	1,28	5,23	0,73	0,56	43%
35	SCM es la evolución de la logística y/o de compras y abastecimiento.	3,77	1,42	4,00	0,82	0,61	43%
36	SCM y logística son funciones similares o muy relacionadas en las empresas.	3,08	1,61	3,38	0,96	0,64	40%
37	SCM y compras/abastecimiento son funciones similares o muy relacionadas en las empresas.	2,92	1,80	3,15	1,34	0,46	25%
38	El área de logística y/o de compras deben ser las únicas que participan en el diseño de la " estrategia de SCM "	4,62	0,77	4,85	0,55	0,21	28%
39	El área de logística y/o compras deben ser la de mayor importancia/influencia en el diseño de la " estrategia de SCM "	3,23	1,36	3,92	0,95	0,41	30%
40	Múltiples áreas deben participar en el diseño de la " estrategia de SCM "	5,62	0,87	5,54	0,97	-0,10	-11%
41	Las empresas que formulan " estrategia de SCM " lo deben hacer desde una perspectiva de lograr eficiencia logística.	3,54	1,45	3,08	1,44	0,01	1%
42	Las empresas deben tener un gerente de SCM o, para el caso de empresas pequeñas, un responsable por esa gestión.	4,85	1,34	4,69	1,18	0,16	12%
43	Las decisiones relacionadas con SCM, deben estar distribuidas en varios departamentos	2,54	1,45	2,46	1,33	0,12	8%
44	El gerente de logística debe reportar al gerente de SCM	1,15	1,28	1,08	1,12	0,17	13%
45	El gerente de compras/abastecimiento debe reportar al gerente de SCM	1,23	1,30	1,08	0,95	0,35	27%
46	El gerente de SCM debe reportar al gerente de algún área operativa (compras, abastecimiento, logística o algún otro)	4,08	1,50	4,62	0,65	0,85	57%
47	Debe haber gerente de logística y de SCM coexistiendo en las empresas ya que sus funciones son diferentes.	3,69	1,55	3,69	1,55	0,00	0%
48	La gerencia de SCM es una gerencia operativa (a cargo de las operaciones o de algunas operaciones)	3,54	1,56	3,77	1,64	-0,08	-5%
49	SCM es un área funcional de soporte (staff) cuya función principal es lograr la alineación interna	3,15	2,03	3,00	1,96	0,08	4%
50	SCM es un área funcional de soporte (staff) cuya función principal es lograr la coordinación de actividades externas con proveedores y clientes	3,15	2,03	2,62	2,06	-0,03	-1%
51	El gerente de SCM debe tener más capacidades de negociación, coordinación, relacionamiento (blandas o de gestión) que de conocimientos técnicos en logística, compras o abastecimiento.	4,85	0,80	4,85	0,38	0,43	53%

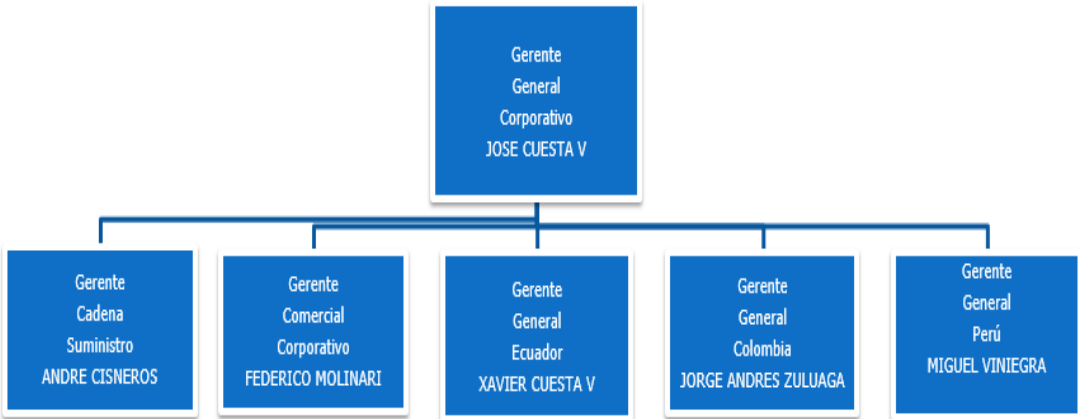
Annex 12 – Delphi Questionnaire - Convergence and deviation 4 of 4 Continuation

		Media	Desvío	Media	Desvío	Dif. Desvío	% Desvío
52	Es imprescindible que el gerente de SCM tenga conocimientos de áreas duras como la logística, compras o abastecimiento.	4,08	1,19	4,08	1,04	0,15	13%
53	Los sistemas de incentivo a DIRECTORES y GERENTES deben ayudar a alinear los objetivos de las diferentes áreas de la empresa para lograr una mejor eficiencia de la empresa	4,92	1,44	5,31	0,85	0,59	41%
54	Los sistemas de incentivo a DIRECTORES y GERENTES deben ayudar a alinear los objetivos de las diferentes áreas de la empresa para lograr una mejor eficiencia de la cadena	4,38	1,71	4,92	1,26	0,45	27%
55	Los sistemas de incentivos a DIRECTORES y GERENTES deben estar orientados a que cada área/departamento logre la mayor eficiencia de su area o departamento	3,08	1,50	2,85	1,28	0,22	14%
56	Dentro de la " estrategia de SCM " tomar decisiones orientadas a lograr la integración/alineación interna de las distintas areas/departamentos es fundamental .	5,46	0,66	5,62	0,51	0,15	23%
57	Los sistemas de incentivo a DIRECTORES y GERENTES deben estar alineados con los objetivos planteados en el " planeamiento estrategico del negocio "	5,62	0,65	5,85	0,38	0,27	42%
58	Los sistemas de incentivo a DIRECTORES y GERENTES deben estar alineados con los objetivos planteados en la " estrategia de SCM "	5,46	0,66	5,62	0,51	0,15	23%
59	VISION LOGISTICA SCM toma las competencias de la logística y las presenta de una manera "superadora" haciendo hincapié en todos los procesos logísticos que forman parte de la cadena de abastecimiento	3,46	1,33	3,38	1,45	-0,12	-9%
60	VISION DE OPERACIONES SCM entiende que los procesos van más allá de las fronteras de la empresa pero manteniendo el foco en los procesos operativos (compras, logística, pronostico de demanda, etc.) o sea, una integración operativa de toda la cadena de abastecimiento con foco en obtener beneficios dentro de la empresa .	2,38	1,39	2,46	1,20	0,19	14%
61	VISION DE NEGOCIO SCM surge de entender que los procesos de "negocio" están fuertemente interrelacionados tanto internamente dentro de la empresa como a lo largo de "toda la cadena de valor", más allá de la empresa.	5,69	0,48	6,00	0,00	0,48	100%

10.13 Annex 13 – Plasticaucho’s corporative structure



ESTRUCTURA CORPORATIVA



GRUPO PLASTICAUCHO

10.14 Annex 14 – Interview schedule – Case study

Cronograma de entrevistas

NOVIEMBRE y DICIEMBRE 2017

	MIÉRCOLES 29	JUEVES 30	VIERNES 1	LUNES 4	MARTES 5	MIÉRCOLES 6	JUEVES 7
8H30							
9H00 - 10h00	FRANCISCO LOAYZA	ECUATRAN	ECUATRAN	JOSE CUESTA V	MIGUEL VINIEGRA (VIDEO CONFERENCIA)	PATRICIO TORO	LUIS MARTINEZ
10H00- 11h00	XAVIER CUESTA			FEDERICO MOLINARI	IVAN ALVAREZ		
11H00 - 12h00							
12H00 - 13h00							
13H00 - 13h30							
13H30 - 15h00							
15H00 - 16h00	ANDRES CISNEROS	ECUATRAN	ECUATRAN	ALEX QUINDE	ANDRES CALDERON	JUAN IGNACIO SEVILLA	
16H00 - 17h00							
17H00 - 18h00							

LUGAR	PIA
LUGAR	CATIGLATA

10.16 Annex 16 - Semi-structured interview - Interview guide

Entrevista semi-estructurada - Guía de la entrevista

Se prevén entrevistas a 3 niveles en la organización

Las primeras entrevistas estarán dirigidas a los máximos responsables operativos de la organización. Xavier Cuesta y José Cuesta, quienes forman parte del Directorio Corporativo de calzado (unidad de negocio a analizar – Plasticaucho S.A.) y del Comité administrativo familiar.

El objetivo principal de estas entrevistas es entender qué tipo de decisiones estratégicas se toman a nivel de Comité administrativo y que decisiones a nivel de Unidad de negocio.

La entrevista busca entender cómo ven al más alto nivel el SCM y cuál es la importancia que le otorgan en las decisiones estratégicas de la unidad de negocio.

La segunda parte de la entrevista busca introducir los conceptos estratégicos definidos en los constructos para entender si de la estrategia de negocio surgen lineamientos para llevar adelante la estrategia de SC.

PRIMERA PARTE DE LA ENTREVISTA SOLO A LOS NIVELES CORPORATIVOS Y DIRECCIÓN

1. ¿Cada cuánto se realiza el planeamiento estratégico de la empresa y quienes participan?
2. ¿A qué nivel definen la estrategia? Se hacen planeamientos estratégicos a diferentes niveles (grupo, unidad de negocio, etc.)?, es decir, hay definiciones CROSS (que determinen lineamientos a nivel grupo) y luego definiciones estratégicas más específicas para cada Unidad de negocio?
3. Cuáles son los objetivos que se plantean cuando hacen el planeamiento estratégico? ¿Definen una guía previa o algún tipo de documento previo?
4. ¿Forman parte de la estrategia del negocio las decisiones en materia de SCM?
5. ¿A qué nivel del planeamiento estratégico se consideran las decisiones en materia de SCM

Annex 16 - Semi-structured interview - Interview guide (2 of 3)

6. ¿En el caso de CALZADO, como orientan la estrategia?, la analizan en forma global y luego definen lineamientos por áreas o sectores?, se centran sólo en los objetivos comerciales?
7. ¿Definen algún tipo de criterios para que las diferentes áreas coordinen en base a esos lineamientos? Me refiero a cualquiera de las áreas de la empresa que sea tomada en cuenta a este nivel. Producción, compras, desarrollo de producto, IT, RRHH, Logística, SCM.....
8. Consideran dentro del planeamiento aspectos de SCM referidos a colaboración con clientes o proveedores, criterios de segmentación para los mismos, criterios CULTURALES (compatibilidad entre cliente y proveedor). Si es así, ¿transmiten estos lineamientos a los gerentes?, ¿aplican algunos de estos criterios a los sistemas de incentivo de los gerentes?

SEGUNDA PARTE DE LA ENTREVISTA PARA TODOS LOS ENTREVISTADOS

1. ¿Cuál es la función del gerente de cadena de abastecimiento? ¿Cómo influyen a decisiones de cadena de abastecimiento en su área?
2. Como ven el área de SCM? Es un área estratégica o su función es netamente operativa?
3. ¿Cómo definirían el alcance y objetivos del SCM?
4. ¿Participa su área directa o indirectamente en el proceso de cadena de abastecimiento? ¿de qué manera?
5. ¿Dentro del proceso de cadena de abastecimiento ¿debe su área hacer algún tipo de coordinaciones con otras áreas de la empresa? Si es así el logro de esas coordinaciones se refleja de alguna manera en sus indicadores de gestión?, ¿tiene injerencia la gerencia de cadena de abastecimiento en estas coordinaciones entre áreas?
6. ¿Tiene su área relación directa o indirecta con proveedores o clientes?

Annex 16 - Semi-structured interview - Interview guide (3 of 3)

7. ¿La estrategia de SCM considera la coordinación de la cadena dentro de la organización? ¿ Hay lineamientos estratégicos que habiliten a los gerentes a lograr coordinaciones fuera de los límites de la empresa (clientes / proveedores)?
8. Se promueve a nivel estrategia optimizar toda la cadena (o la relación de 1er. tier, proveedores / cliente) más allá de la empresa?
9. ¿Hay incentivos o lineamientos estratégicos para trabajar en forma coordinada / cooperativa entre diferentes áreas de la empresa?
10. ¿Hay incentivos o lineamientos estratégicos para trabajar en forma coordinada / cooperativa con algunos clientes / proveedores?
11. Si es así, ¿consideran que hay aspectos CULTURALES (tanto propios como de sus clientes/proveedores) que influyen en estas decisiones?
12. ¿Considera que las condiciones culturales de Pasticaucho y las de la otra empresa afectan el grado de relacionamiento, por ejemplo mayor confianza, condiciones de cooperación, etc.?
13. ¿Se definen CRITERIOS de segmentación de clientes / proveedores a nivel estrategia?
14. Hay a nivel estratégico algún tipo de lineamiento respecto de los sistemas de incentivos a los gerentes en que estén presentes los objetivos de SCM?
15. En el relacionamiento estratégico con proveedores/clientes ¿hay lineamientos que fomenten la eficiencia de la cadena aunque esa eficiencia o beneficio se produzca fuera de la empresa?, suponiendo, o no, que algún mecanismo de compensación se genere entre ambos (empresa – prv/cliente)
16. De la estructura de la empresa surge que hay un gerente de SCM. ¿Qué funciones cumple? Consideran que tiene que tener áreas a cargo o debe ser un área de staff que busque la coordinación de la cadena.
17. Si es así, ¿le corresponde a sus funciones lograr las coordinaciones de la cadena fuera de la empresa, sea con clientes o proveedores?

10.17 Annex 17 - interrelation and frequency between codes (co-occurrence).

	ACHIEVEMENTS	BUSINESS STRATEGIC GUIDELINE SPONSORS	BUSINESS CHAIN EFFICIENCY	COLLABORATION	COORDINATION	CULTURE	CURIOSITY	EXTERNAL CHAIN COORDINATION	INCENTIVE PROGRAM FOR MANAGERS	INTERNAL CHAIN COORDINATION	LONG TERM	MANAGEMENT INDICATORS	PROCESS	RELATION BETWEEN BUSINESS STRATEGY AND SCM	RELATION WITH CUSTOMER	RELATION WITH PROVIDER	SCM AND FINANCE	SCM STAFF	SCM AND HR	SCM FUNCTION	SCM OPERATION	SCM PROFILE	SCM STRATEGY	SEGMENTATION OF CUSTOMERS	SEGMENTATION OF PROVIDERS	WIN-WIN
ACHIEVEMENTS	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
BUSINESS STRATEGIC GUIDELINE FOR SCM	0	5	8	2	1	3	0	3	4	9	1	0	1	14	6	3	1	1	0	5	2	0	4	2	4	
BUSINESS STRATEGY	0	5	0	0	0	7	0	0	0	2	4	0	2	10	1	0	0	0	0	0	0	0	3	0	0	
CHAIN EFFICIENCY	1	8	0	22	1	3	2	17	0	3	5	0	0	4	8	17	6	0	0	0	0	0	2	2	1	
COLLABORATION	0	2	0	22	0	9	1	11	0	1	3	0	0	1	7	25	5	0	0	0	0	0	1	1	1	
COORDINATION	0	1	0	1	0	0	0	1	0	5	0	0	0	1	0	0	0	0	0	4	0	0	0	0	0	
CULTURE	1	3	7	3	9	0	4	2	1	4	13	0	1	3	8	15	1	0	3	0	0	1	0	0	1	
CURIOSITY	0	0	0	2	1	0	4	1	0	0	0	0	0	0	1	0	0	0	2	0	0	1	0	0	1	
EXTERNAL CHAIN COORDINATION	0	3	0	17	11	1	2	1	0	4	1	0	0	4	5	14	2	2	0	4	0	0	4	2	1	
INCENTIVE PROGRAM FOR MANAGERS	0	4	0	0	0	1	0	0	0	8	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	
INTERNAL CHAIN COORDINATION	0	9	2	3	1	5	4	0	4	8	0	0	8	5	0	0	0	5	4	15	0	1	4	0	0	
LONG TERM	1	1	4	5	3	0	13	0	1	0	0	0	0	1	4	12	0	0	0	0	0	0	1	0	1	
MANAGEMENT INDICATORS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PROCESS	0	1	2	0	0	0	1	0	0	8	0	0	0	1	0	0	0	0	1	4	0	0	0	0	0	
RELATION BETWEEN BUSINESS STRATEGY AND	0	14	10	4	1	1	3	0	4	2	5	1	0	1	2	4	0	1	0	1	0	0	13	2	4	
RELATION WITH CUSTOMER	0	6	1	8	7	0	8	1	5	0	0	4	0	2	2	6	2	0	0	0	0	0	0	3	1	
RELATION WITH PROVIDER	0	3	0	17	25	0	15	0	14	0	0	12	0	0	4	6	5	0	0	0	0	0	1	1	14	
SCM AND FINANCE	0	1	0	6	5	0	1	0	2	0	0	0	0	0	2	5	1	0	1	0	1	0	0	0	1	
SCM STAFF	0	1	0	0	0	0	0	0	2	0	5	0	0	0	1	0	0	1	0	8	0	1	2	0	0	
SCM AND HR	1	0	0	0	0	0	3	2	0	0	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
SCM FUNCTION	0	5	0	0	0	4	0	0	4	0	15	0	0	4	1	0	0	1	8	0	0	1	2	0	0	
SCM OPERATION	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	
SCM PROFILE	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	
SCM STRATEGY	0	4	3	2	1	0	0	4	0	4	1	0	0	13	0	1	0	2	0	2	4	0	0	1	1	
SEGMENTATION OF CUSTOMERS	0	2	0	2	1	0	0	2	0	0	0	0	0	2	3	1	0	0	0	0	0	0	0	5	0	
SEGMENTATION OF PROVIDERS	0	4	0	1	1	0	1	0	1	0	1	0	0	4	1	14	1	0	0	0	0	0	1	5	0	
WIN-WIN	0	2	0	9	6	0	0	1	1	0	0	3	0	0	1	2	3	2	0	0	0	0	1	0	0	

10.18 Annex 18 – List of codes

#	Name	Definition	Quotations
1	ACHIEVEMENTS	This code indicates clues (not evidence as far as this is a qualitative study) of the achievements obtained.	11
2	BUSINESS STRATEGIC GUIDELINES FOR SCM	This code represents the guidelines defined in the business strategy for the SCM strategy	69
3	BUSINESS STRATEGY	This code is used to show decisions related or generated at Business Strategy level.	52
4	CHAIN EFFICIENCY	This code group decisions or actions that involve Chain efficiency beyond the borders for the company	69
5	COLLABORATION	This code groups comments related to collaboration inside the chain beyond the frontiers of the company. Represents the grade of involvement the company have in its intercompany relationship	47
6	COORDINATION	This code groups comments, decisions or situations linked with the grade of coordination inside and outside the company boundaries. In the case of relation with providers and customers differs from collaboration; in coordination the grade of commitment is lower than in collaboration	7
7	CULTURE	This code groups the cultural conditions of the firm, especially how they influence their relationship with customers and suppliers	82
8	CURIOSITY	This code reflects aspects that were not expected to find or very interest although they exceed the scope of the investigation.	12
9	EXTERNAL CHAIN COORDINATION	This code indicates the coordination with providers and customers.	48
10	INCENTIVE PROGRAM FOR MANAGERS	This code indicates the relation between SCM and incentive programs	32
11	INTERNAL CHAIN COORDINATION	This code indicates the coordination among areas in the internal chain	83
12	LONG TERM	This code indicates the Long term vision of the company that affects its decisions and how they build and shape their relationship with customers and providers	34
13	MANAGEMENT INDICATORS	This code is used to understand the use of indicators for SCM	1
14	PROCESS	Related to the way the company works. The process vision is linked to a structured form to do the everyday work.	20
15	RELATION BETWEEN BUSINESS STRATEGY AND SCM STRATEGY	Through this code is possible to understand the relation or connection between the Business' strategy and the SCM's Strategy. How is the SCM strategy present in the delineation of the business strategy?	60
16	RELATION WITH CUSTOMER	This code shows how is the relation between the company and its customers.	39
17	RELATION WITH PROVIDER	This code shows how is the relation between the company and its providers.	69
18	SCM AND FINANCE	This code groups and intend to show how is the relation between the SCM and the financial decisions; how financial decisions are part of the SCM.	15
19	SCM STAFF	This code is used to understand the nature of the SCM manager. Indicates his/her function as staff, no directly involved in the operations, inside the structure of the company.	27
20	SCM AND HR		8
21	SCM FUNCTION	This code is used to understand the functions of the SCM manager.	59
22	SCM OPERATION	This Code indicates the Operational view of the SCM. Is used to understand the nature of the SCM manager. Indicates his/her function as operative, directly involved in the operations, inside the structure of the company.	9
23	SCM PROFILE	This code highlights the personal qualities and soft and hard abilities a SMC manager should have.	16
24	SCM STRATEGY	This code indicates the strategy nature of SCM	39
25	SEGMENTATION OF CUSTOMERS	This code is used to understand the criteria related to decisions of segmentation of customers focusing on the SCM decisions.	14
26	SEGMENTATION OF PROVIDERS	This code is used to understand the criteria related to decisions of segmentation of providers focusing on the SCM decisions.	36
27	WIN-WIN	This code indicates how the company takes decisions in its relationship with customers and providers considering both sides winning in the relationship.	13

10.19 Annex 19 - List of Families

Family	Description	Codes related	Quotations
1	Degree of participation of SCM strategy in the business strategy	BUSINESS STRATEGIC GUIDELINES FOR SCM	153
		RELATION BETWEEN BUSINESS STRATEGY AND SCM STRATEGY	
		SCM AND FINANCE	
		SCM STRATEGY	
2	Parameters to guide segmentation of providers and customers	RELATION WITH CUSTOMER	133
		RELATION WITH PROVIDER	
		SEGMENTATION OF CUSTOMERS	
		SEGMENTATION OF PROVIDERS	
3	Culture of the organization	CULTURE	137
		LONG TERM	
		PROCESS	
		SCM AND FINANCE	
4	Distribution of benefits along the chain's criteria	CHAIN EFFICIENCY	200
		EXTERNAL CHAIN COORDINATION	
		INCENTIVE PROGRAM FOR MANAGERS	
		RELATION WITH CUSTOMER	
		RELATION WITH PROVIDER	
5	Internal alignment of all the firm's areas that participate in the SCM strategy	INCENTIVE PROGRAM FOR MANAGERS	119
		INTERNAL CHAIN COORDINATION	
		PROCESS	
6	Incentive program for managers	BUSINESS STRATEGIC GUIDELINES FOR SCM	98
		INCENTIVE PROGRAM FOR MANAGERS	
		MANAGEMENT INDICATORS	
7	SCM manager's role	SCM STAFF	101
		SCM FUNCTION	
		SCM OPERATION	
		SCM PROFILE	