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Global Network, Outsourcing and Relationship Management



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Global Network, Outsourcing and Relationship Management

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Introduction

The activities of companies operating in open markets go beyond the administrative boundaries of Nation-States. Therefore, the management of these activities have rapidly evolved over the years to adapt and quickly respond to the characteristics of the competition and the needs of the market. In particular, companies that operate internationally and especially global, tend to assume an operational network configuration.

Considering the economic activity of production, we can identify three main moments: procurement, processing and sales. In all three phases of the production process, the company has to interact with different actors, both internal and external to the enterprise.

The objective of this dissertation is an analysis of global network relation, in particular with regard to production outsourcing and management of the relationship with the partner.

However, as already mentioned, a business network includes relationships at all levels of the production process, from the sourcing to the distribution: this analysis is particularly focused on the supply side of productive relationships.

The work is divided into three chapters: the first chapter analyses inventory management and logistics in global networks, the second explores in depth global sourcing, outsourcing and relationship management and the third, finally, provides an example of the production network of IKEA and the management of the relationship with its suppliers.

The first step to justify a choice of make-or-buy like the decision to outsource a part of the production is an analysis of the inventory management, as it often reflects the production strategy of a company. The stock management is modified in relation to the competitive conditions and provides different configurations with regards to the location and the movement of stocks. It deals with the concepts of logistics and supply chain which, globally integrated, represent the forerunner to the network. As a conclusion of the first chapter, the description of the design and management of

networks, with particular reference to the supply network, that the company creates in collaboration with suppliers and manufacturing partners.

The speech continues in the second chapter with an analysis of global purchasing policies, comparing alternative choices of intra-firm supply and outsourcing, and with the presentation of different sourcing strategies. The question then comes to the heart of the problem, on how the outsourcing has changed in relation to present competitive environment, starting from a due description of the traditional form. After the listing of theoretical basis, advantages and disadvantages, widely supported by the existing literature, an original model of outsourcing is proposed. To support the model presented, the most important phases of the management of the relationship with the partner are presented, starting with the choice of the partner itself. The following steps are collaboration, evaluation and relationship management policy.

The third chapter proposes, as an example, the presentation of the IKEA group, starting from the observation of the corporate structure, continuing with the organization of supply and production and ending with the management of the relationship with its partners through different instruments, first of all the code of conduct.

Chapter 1

Inventory Management and Logistics in Global Business Network

1.1 Inventory Management

1.1.1 Evolution of Inventory Management

□ The need to accumulate, manage and track stocks has always existed in the human history: from cave dwellers storing wood as fuel for fire, light and heat to modern people shopping at a supermarket, buying all the goods they need for a whole week. These goods are placed in storage and used according to their daily needs (Molinary Fernandez, 2000).

In all periods of history there have been changes in environmental variables of all kinds: economic, social, commercial, technological, political, etc. But in the recent decades they have come forward with a rhythm and a flow rate such as to make it difficult and, however, approximate to predict the future evolution of the conditions of existence of businesses and the whole society. In this historical period, characterised by heightened dynamism, the variability of the conditions of existence is the fundamental challenge which any organisational entity, and therefore businesses must confront incessantly. Any company, in fact, have to operate in an environment of increasing complexity in which the political, cultural, socio-economic and technical, that define the environment, evolve seamlessly, resulting in changes in society, in companies and in the relations between companies and other systems (Pinna, 2006).

Inventory management, as well as all the functions involved in business activity, must be arranged with the environment, both internal and external to the firm.

For this purpose, it is useful to set the starting point of the analysis back to the beginning of the XXth century with the publication of the monograph "The Principles of Scientific Management" (Taylor, 1911).

□ Taylor started his book with a quote of Theodore Roosevelt, the President of the United States at that moment: "The conservation of our national resources is only preliminary to the larger question of national efficiency." The whole country at once recognized the importance of conserving our material resources and a large movement has been started which will be effective in accomplishing this object. As yet, however, we have but vaguely appreciated the importance of "the larger question of increasing our national efficiency."

After the introduction, Taylor's monograph is divided into two chapters: the first one about the fundamentals of scientific management and the second one about the principles of scientific management.

In the second chapter, Taylor present the four principles of scientific management:

- They develop a science for each element of a man's work, which replaces the old rule-of-thumb method.
- 2) They scientifically select and then train, teach, and develop the workman, whereas in the past he chose his own work and trained himself as best he could.
- They heartily cooperate with the men so as to ensure all of the work being done in accordance with the principles of the science which has been developed.
- 4) There is an almost equal division of the work and the responsibility between the management and the workmen. The management take over all work for which they are better fitted than the workmen, while in the past almost all of the work and the greater part of the responsibility were thrown upon the men.

The practical application of Taylor's scientific management is observable with the automobile entrepreneur Henry Ford in the mechanical technology of the assembly line inside the large factory, which will become a key element of modern manufacturing industry. The introduction of the conveyor belt resulted in a further fragmentation of the work and its consequent simplification. Ford launched an industrial system that the United States will later spread around the world that will produce a series of standardized products on a large scale (mass production). Compared to Taylorism, the main difference is that high levels of productivity are achievable thanks to material incentives and increase in wages of workers, and not only with the direct control of the foreman. Another difference between Taylorism is that the latter, which leverages the technology to change operations in the assembly, results as more practical and applicable than it appeared to be a mere scientific method.

The Ford approach, which was based on the supremacy of production orientation and the theory of the scientific organisation of labour, was designed to achieve economies of scale based on standardised mass production, the rationalisation of the manufacturing process and a reduction in dead time, by the introduction of the assembly line.

Production orientation is applied both in qualitative and quantitative terms, with no need for differentiation: all the activities are focused on production control and optimisation of productive processes. The market is seen as a whole undifferentiated segment, an unsatisfied and growing demand.

Market demand is expandable and the quantity offered is defined by the firm. To create a mass product means to deal with the demand controlling the quantity, and then the price, keeping quantities far from the saturation level in order to maintain the condition of scarcity of supply.

The second milestone in the evolutionary process of industrial organisation, and therefore of inventory management, is represented by Ohno (1988) and thus by the Japanese School of Management. Taiichi Ohno is universally recognised as the father of the Toyota Production System and, by extension, of the manufacturing philosophy known as 'lean manufacturing' (based on the 'integrated plant', the 'just-in-time' system and 'total quality') which has generated the modern management philosophy known as marketdriven management.

The basis of the Toyota Production System is absolute elimination of waste. The two pillars that this is based on are just-in-time and autonomation. In just-in-time production, a later process goes to an earlier process in the operation flow and withdraws only the number of parts needed, when they are needed. Autonomation refers to automating a process to include inspection. Human attention is necessary only when a defect is detected (the machine will stop and not continue until the problem is solved). Another primary principle to the Toyota Production System is in determining profit margins. Instead of selling price = actual. cost + profit, Toyota understands that the consumer, not the manufacturer sets price. Therefore they use the formula of selling price - cost = profit. The goal now is cost reduction, not increasing selling price.

□ In order to begin reducing costs, production leveling was instituted. For example, if a part is needed at a rate of 1000 per month, 40 parts a day should be made for 25 days. To go further, if there are 480 minutes per workday, one part should be made every 12 minutes, and to produce more would create an overstock. Establishing production flow and a way to maintain a constant supply of raw materials was the way Japanese production should be operated (Ohno, 1988).

The Toyota Production System relies on elimination of waste as essential. The preliminary step toward application of the Toyota Production System is to identify wastes completely:

- waste of overproduction
- waste of time on hand (waiting)
- waste of transportation

- waste of processing itself
- waste of stock on hand (inventory) waste of movement
- waste of making defective products

Another Japanese contributor that supported and corroborated Ohno's theories is Kenichi Ohmae, who analysed the strategic management some years later, in the lights of the competitive conditions of globalisation that were arising in that time. The market has already gone through a big shock in the late '70s because of the oil crisis and, as a result, was no longer stable and has shifted from a scarcity of supply condition to a balance between demand and supply, the so-called controlled competition. This condition was characterised by the importance of controlling demand by differentiating supply through non-price competition logics. With the oil crisis, the market was primarily characterised by saturated demand and by the competitive role of time (time-based competition) and space (market-space competition). All these drivers, together with the globalisation that was emphasising the criticism of competition, brought some markets into a condition of over-supply, with supply constantly exceeding demand level. To succeed, companies must act on the global stage, leveraging radically the drivers of economic power and growth.

The third milestone is represented by the shift from the Japanese School to the European School (Day, 2001; Lambin, 2000; Lambin & Brondoni, 2001), that marks the evolution from marketing management to Market-Driven Management. The main sign of this evolution has been the advent of the concept of market orientation, that substitutes the traditional marketing concept of the four Ps (product, price, place, promotion). This concept rethinks the role of the marketing function and extends the definition of market not only to the customer, but to all its main players and stakeholders.

Although there are no rules or behaviour than can guarantee that all companies will be successful market-driven companies, Day (2001) identifies three characteristics which, when skilfully combined, i.e. a combination that is superior to that of the competition, may produce a successful market-driven company. These characteristics may be summed up as (Gordini, 2010):

- a culture focused on the outside world, with dominant convictions, values and behaviour that highlight the importance of creating value for the customer and of the continuous search for new sources of competitive advantage;

- particular distinctive capabilities to perceive the market, to relate to market demand, and to define anticipatory strategies. This means that market-driven companies understand their markets in greater depth and are more skilful in forging close links with more important customers. The clarity of their strategic ideas helps market-driven organisations to adopt winning lines of conduct that anticipate opportunities rather than reacting to threats from the market;

- an organisational configuration that enables the whole company to constantly anticipate customers' changing needs and to respond to market conditions. This configuration includes all the other capabilities to generate value for the customer: from product design to order filling, as well as an adaptive organisational structure and all the systems to support, control, assess and develop human resources. All the elements of the organisational configuration are aligned with a superior value proposition.

In summary, production orientation, marketing orientation and market-driven management were influenced and motivated by the evolution of competitive conditions. These competitive conditions, described as an historical progression, are presented nowadays as alternatives, because all of them are currently existing and characterise specific markets and industries.

Competitive conditions can be outlined as: (Brondoni, 2005a):

- conditions of scarcity of supply (D>S), dominated by forms of market monopoly, with business economics focused on price competition and on local markets;

- conditions of demand and supply in dynamic balance ($D\approx S$), or markets with controlled competition, where management economics embodies widespread

internationalisation and non-price competition policies (typically focused on advertising and sales promotion);

- conditions of over-supply (D<S), or markets with a dynamic oligopoly, where management economics underlines the central role of intangible assets (both corporate and product intangible assets), the globalisation of the markets and the crucial role of continuous innovation for intermediate and final demand.

Competitive conditions are, on the other hand, related to the competitive rivalry, defined as the ongoing set of competitive actions and competitive responses occurring between competitors as they compete against each other for an advantageous market position. Especially in highly competitive industries, firms constantly jockey for advantage as they launch strategic actions and respond or react to rivals' moves (Nair & Filer, 2003).

Competitive rivalry influences an individual firm's ability to gain and sustain competitive advantage (Porter, 1985; Jayachandran et al., 1999).

1.1.2 Inventory Management and Competitive Conditions

A stock is the amount of raw materials, work-in-process and finished goods needed for the manufacturing processes of a firm. The concept of stocks has traditionally been linked with the inventory as a physical place where these objects were stored in the wait to be used.

Nowadays, especially because of the globalisation of firms and markets and of the usual creation of business networks, inventory management may vary with respect not only to the type of activity run but also to the competitive conditions under which a firm operates. In her book about inventory management, Corniani (2009) identifies inventory and classify management policies with regard to some competitive conditions (shown in Figure 1), that result into three business orientation.

	D>S	D≈S	D <s< th=""></s<>
	Inbound	Outbound	Logistics
Stock Location	Production site	Sales place	Dynamic
Inventory Management	Manufacturer	Manufacturer	Trade
Logic	Stock control (push)	Flow control (pull)	Just-in-time
Objective	Min. out-of-stock	Min. stock	No stock
	risk		
Focus	Absorptive and	Demand evolution	Activities
	supplying time		synchronisation
Tools	Operational	Material	New Technologies
	research	Requirement	(RFID)
		Planning	

Figure 1 Inventory Management and Competitive Conditions

In the first condition, the scarcity of supply, the level of the demand is higher than the supply's one and firms are therefore oriented towards production. In the case of controlled competition, characterised by a balancing between demand and supply, firms are more focused on marketing and sales. Finally, when the supply exceeds the demand, it is the over-supply condition, the main orientation of the firm goes towards the market as a whole.

In production-oriented businesses, inventory management is based on an inbound approach. Stocks are located by the production site and the manufacturer is in charge for the management of inventory. The choice of location is motivated by the same orientation of this kind of companies: the production. Having the inventory physically next to the factory is advantageous in terms of costs and time saving, and helps having a rapid knowledge of the needs of the inventory, such as raw materials and work-in-process. For the same reason, inventory is managed directly by the manufacturer in order to have a stronger and more efficient control on the productive operations. The logic underneath inbound approach is of stock control, the process of making sure that the correct level of stock is maintained, to be able to meet demand while keeping the costs of holding stock to a minimum. Actually, the minimisation of the stock is not the main concern of production-oriented business: they are rather willing to minimise the risk of out-of-stock, which would endanger the continuity of production. For this very reason, the focus of inbound stocks management business is on absorptive and supplying time, focus that they try to reach with tools like operational research.

For what is concerns marketing-oriented businesses, inventory management presents an outbound approach. Unlike production-oriented businesses, marketingoriented ones tend to place stocks near the sales place, but they still control the management of inventory. In this situation, the logic is of flow control, i.e. more focused on the handling of stocks than on their storing. On the contrary, the main objective is to minimise the stock and, by doing this, all the costs and management practices related to it, thus losing on the other hand some control power. To achieve this goal, the monitoring of demand evolution is vital. The most used tool is the material requirement planning, a sales forecast-based system used to schedule raw material deliveries and quantities, given assumptions of machine and labour units required to fulfil a sales forecast. In other words, it is a production planning, scheduling, and inventory control system used to manage manufacturing processes.

Finally, market-driven businesses adopt a logistics approach for their inventory management. The stocks location become dynamic and the inventory management is outsourced to the trade. The manufacturer is no longer in charge for the handling of stocks and act with a just-in-time logic. The objective in this competitive condition is therefore to have no stock and externalise at the highest degree the costs and responsibility of inventory management. The focus of the manufacturer, and to a certain extent of the trade too, is the activities synchronisation. New technologies like RFID (Radio-Frequency Identification) can be very helpful in meeting this objective. RFID is a data collection technology that uses electronic tags for storing data. The tag, also known as an "electronic label," is made up of an RFID chip attached to an antenna. RFID is coming into increasing use in industry as an alternative to the bar code. The advantage of RFID is that it does not require direct contact or line-of-sight scanning.

1.2 From Logistics to Supply Chain Management

1.2.1 Logistics and Global Market

The idea of logistics comes directly from the military sector. From this point of view, it can be defined as the science of planning and carrying out the movement and maintenance of forces [...] those aspects of military operations that deal with the design and development, acquisition, storage, movement, distribution, maintenance, evacuation and disposition of material; movement, evacuation, and hospitalization of personnel; acquisition of construction, maintenance, operation and disposition of furnishing of services (Department of Defense, 2010).

From a managerial economics point of view, the logistics system consists in the management of infrastructure, equipment, people, practices that allow the flow of goods and information, from the acquisition of raw materials to production and to distribution of finished products to the end customer. Otherwise, logistics can be defined as a system of integrated activities of synchronised flows with a given purpose.

Operationally, logistics is the design and management of a range of technical, organisational and financial activities that must be organised, controlled and audited. The integration of these activities expresses the unity of the function for the whole system of enterprise. It is a function that connects a company to its customers and suppliers. The flows composing logistics are both physical and information flows: the physical flows are the effective displacement of raw materials, work-in-process and finished goods moved by the firm, while the information flows are the tracking of the referential data connected with the physical flows. These flows must be synchronised and integrated in order to ensure a complete and effective logistics activity. The search for efficiency of flows, in relation to the resources necessary to goals, plans and operations aimed at achieving effectiveness and efficiency, in order to meet customer requirements at an acceptable cost. The objective of effectiveness is meeting the needs of the customer, providing the product in the right place at the

right time, while the objective of efficiency is providing the product itself together with the desired level of service at the lowest overall cost.

Logistics activities can be divided into three main categories: buying activities, production activities and distribution activities (see Figure 2).





The buying activities, also known as input logistics, encompasses all those tasks related to the purchase of raw material and semi-finished products, from supplying to stock management. It interfaces with suppliers to acquire materials and transport them to the units of use. It also deals with the make-or-buy dilemma to analyse whether it is a better choice to buy a product from the outside of the firm rather than to produce it within. The following group is the manufacture activities one, i.e. the internal logistics, a series of actions that start with the handling of materials bought in the previous phase. Also decision about the layout, i.e. the disposition of the machineries and equipment in the production plan falls into this group of activities. Furthermore, it is very important in an integrated view, to manage just-in-time procedures, in order to ensure that the correct quantity and type of goods and materials arrives at the right moment into the production chain. The last group includes distribution activities, the so-called commercial logistics, that depends first on the warehouse location. It is also important to manage correctly the relationship with the distributor, especially if it is an external partner and with its distribution network, always following the logic of cost reduction. The last activity in terms of distributive logistics is the customer delivery, that presents different characteristics depending on the nature of the customer itself. The three groups of activities should be considered all together with an integrated view.

Furthermore, the level of integration usually involve not only the direct logistics as we describe it, but also the so-called reverse logistics. While the term direct logistics refers to all the activities that regulate both the physical flow of raw materials and finished products and the intangible flow of information associated with goods in transit, towards the end market, the reverse logistics applies to the flow of products and materials in the opposite direction, from the market to the production sites or the specialised centres, where they are sent to be appropriately treated.

The circumstances that give rise to a reverse flow are numerous, as are the types of handled materials (Gandolfo & Sbrana, 2008):

- products returned by buyers because defective or because malfunctioned within 7 days from the date of purchase, or because the customer has changed his/her mind or did not remain satisfied after having tried the product;

- products returned by intermediate buyers (retailers) because defective or not corresponding to the order;

- products recalled by the manufacturer to the factory, after a discovery of technical problems or defects, in order to perform the necessary operations on the products to restore their full functionality and security;

- excessive stock in warehouses that have exhausted the available space and are not able to receive additional products (overstock);

- return of special packaging or containers after the product has been delivered or installed;

- products sent to the factory to be subjected to planned maintenance or development

1.2.2 Logistics vs Supply Chain

Logistics management typically includes inbound and outbound transportation management, fleet management, warehousing, materials handling, order fulfillment, logistics network design, and inventory management of third party logistics services providers. To varying degrees, the logistics function also includes sourcing and procurement, production planning and scheduling, packaging and assembly, and customer service.

Supply chain management is an integrating function with primary responsibility for linking major business functions and business processes within and across companies into a cohesive and high performing business model. It includes all of the Logistics Management activities noted above, as well as manufacturing operations, and it drives coordination of processes and activities with and across marketing, sales, product design, finance, and information technology (Kotabe & Helsen, 2010).

Parallel to this vision, there are many important contributions to the supply chain literature that link the logistics function with the concept of supply chain management, both as an evolution or as something completely different. One of the most significant work in this context is the study of Larson et al. (2007). The study reports results of a survey of senior-level CSCMP (Council of Supply Chain Management Professionals) members and considers four conceptual perspectives on supply chain management vs. logistics: traditionalist, re-labeling, unionist, and intersectionist (as shown in Figure 3).

The traditionalist positions supply chain management within logistics, i.e. as a function or subset of logistics. Re-labeling simply entails a name change; what was logistics is now supply chain management. Unionist positions logistics as a function of supply chain management. SCM subsumes many traditional business functional areas, including purchasing, logistics, operations, and marketing. A company adopting the unionist perspective may start by creating a new high-level position, such as Director of SCM. The unionist perspective is broad and deep, including all elements (strategic and tactical) across multiple functional areas. According to intersectionalists, SCM is not a subset of logistics but is a broad strategy which cuts across business processes both within the firm and through the channels. The

intersectionalist concept of SCM focuses on the strategic, integrative elements across purchasing, logistics, operations, marketing, and other functions.



Figure 3 Perspectives on Logistics vs Supply Chain Management

Source: (Larson et al., 2007)

Anyway, no matter from which perspective we look at the concept, supply chain management deals with actions and relationships, not only between firms (inside or outside the supply chain) but also between different business units within the firm.

An important function to analyse in order to have a clearer picture of the logistics/supply chain is without any doubt the production function, that deals with the conduct of the business activities of acquiring, combining and transforming an input for the purpose of obtaining an output destined for the final consumption or of using it as input itself for further productions.

There are several goals for the production; one of the most important being the research of productivity to contain production costs, not only direct costs such cost costs related to raw materials and direct labor, but also indirect costs like administration and energy. Together with the research and development department, it is also a goal of the production function the continuous proposition of innovative

product as well as the regular improvement of product quality. Objectives of punctuality, i.e. the ability to meet the agreed delivery times, and flexibility, the ability to make the production system adaptable to the needs of the surrounding environment, are also vital for the entire enterprise.

According to Monks' (2004) operation management definition, production system are those activities of an organisation where resources flowing within a defined system are combined and transformed in a controlled manner to add value in accordance to the policies communicated by the management.

Production systems can be classified in three main groups, depending on:

1) mode of manifestation of the demand;

2) methods of preparation of the offer;

3) the intrinsic characteristics of the product.

The first group underline the relevance of the time of the order by the customer, in which the company starts the production, and the range of activities carried out in front of the individual client. It encompasses three different methods: the production of individual orders, the production of repeated orders and the make-to-stock production (or predictive production).

In the production for individual orders (e.g. ships, villas) the company receives orders for different individual products, differentiated in a significant way (can also be unique) and highly customised. In the production of repeated orders instead (e.g. equipment and machinery) the company manufactures a range of products with defined characteristics for a fairly stable group of customers, requiring supplies spread over time. In build to orders (both single and repeated) there must be a demonstration of the demand, with a precise estimate; stocks are limited to semifinished, and there is no inventory. The make-to-stock production (or predictive production) requires the enterprise to manufacture, before the emergence of the orders, quite high volumes of products belonging to a range not excessively wide, that flow through a distribution network, to a large number of anonymous clients.

For the second group, variability of production cycles and volumes achieved in time are relevant. Production system in this group are: unit production, intermittent production and continuous production. In unit production (e.g. toys, appliances) the variability of production cycles is high, so that productive activity is organized according to the achievement of punctuality required by individual orders. Intermittent production (e.g. seasonal products, furniture, publishing) is characterised by cycles that are less variable over time and their use takes place with criteria of alternation. Products made in batches of higher entities to immediate needs, in order to generate inventory to be used later, when the operational centers will be engaged in other productive activities. In continuous production (e.g. petrol, cement) the cycles remain constant, even for very extended periods, resulting in an uninterrupted flow of products with homogeneous characteristics over time.

The third group of production systems depends on the intrinsic characteristics of the product and present two main systems: the production by process and the production by parts. In production by process (e.g. paper) the elements that constitute the final good cannot be easily identified. The product cannot be decomposed backwards, as the original components are no longer distinguishable or have changed in nature. In production for parts instead (e.g. cars) the asset obtained is constituted by a number of discrete components (easily separable) or parts, generally of a different nature. The production process includes the steps of manufacturing the assembly.

Traditionally, supply chains have been conceptualized as simple linear systems represented by a series of firms interacting through dyadic relationships. However, this linear conception of sequential dyadic relationships, while appealing, grossly oversimplifies and distorts the realities of modern supply chains. A supply chain can be modelled as a network by a set of "nodes" (see Figure 4 as an example) that represent autonomous business units as firms who are able to exercise sovereign choices, and a set of "connections" that link these firms together for the purposes of creating products or services. Connections between firms represent exchange relationships and the underlying contract if present (Hearnshaw & Wilson, 2013).



Figure 4 Levels of Relationship and Network Management

Source: (Ritter et al., 2004).

Indeed, supply chains structure has become more and more complex, and assumed the form of a network rather than of a line. This complexity has been increased not only by the nature of the firms involved, but also by the evolution of competitive elements. Braziotis et al. (2013) analysed this evolution also with a chronological point of view (as shown in Figure 5).

They report some of the most significant definition of supply chain management, in a range from the mid-1980s to today:

- Flow of materials (Jones & Riley, 1987);
- Integrative philosophy (Ellram & Cooper, 1993; Monczka & Morgan, 1997);
- Strategic (long-term) consideration (Mentzer et al., 2001)
- Assistance among members (Min, 2001)
- Mutuality and holistic approach (Christopher, 2005)
- Links together partners (Harrison & Van Hock, 2008).





Source: (Braziotis et al., 2013).

1.2.3 Supply Chain Management

□ Industrial organisations must supply a variety of products and services, meet the needs of fragmented customer expectations, and deal with complex global markets. To achieve those goals, firms do not act alone; they rather activate links and constraints on numerous and mutually interdependent actors, creating business networks, both on the supply and on the demand side. Focusing on the supply side, a supply chain can be described as the processes from the initial raw materials to the ultimate consumption of the finished product linking across supplier-user companies; and the functions within and outside a company that enable the value chain to make products and provide services to the customer (Cox et al., 1995).

Supply chain management concept was first introduced in 1982 by Keith Oliver in an interview with Arnold Kransdorff of the Financial Times (Oliver & Webber, 1982). Actually, even before Oliver's use of the term, supply chain management has already been an important issue, probably since the creation of the assembly line. Since then, various definitions of a supply chain have been offered in the years as the concept has gained popularity (Lummus & Vokurka, 1999; Gibson et al., 2005). In fact, the concept of supply chain management can be found also years before in Forrester (1958): "Management is on the verge of a major breakthrough in understanding how industrial company success depends on the interaction between the flows of information, materials, money, manpower, and capital equipment" (Forrester, 1958), even though the creation of the term Supply Chain Management is usually credited to Oliver and Webber.

Oliver defined supply chain management as follows: "Supply chain management (SCM) is the process of planning, implementing, and controlling the operations of the supply chain with the purpose to satisfy customer requirements as efficiently as possible. Supply chain management spans all movement and storage of raw materials, work-in-process inventory, and finished goods from point-of-origin to point-of-consumption"

He also identified the fundaments of supply chain management: first, the supply chain must be seen as a single entity rather than relegating fragmented responsibility for various segments in the supply chain to functional areas; second, it calls for – and in the end, depends upon – strategic decision making; third, it provides a different perspective on inventories and fourth, it requires a different approach to systems: integration, not simply interface, is the key.

First steps of supply chain management can be identified in quick response manufacturing (Suri, 1998), that comes directly from time-based competition (Stalk, 1988), and efficient consumer response (Kurt Salmon Associated Inc., 1993).

The evolution of supply chain management studies shows, according to Movahedi (2009), three major phases: creation, integration and globalisation (Movahedi et al., 2009). As we said, the concept of a supply chain in management was of great importance already in the early 20th century, especially with the creation of the assembly line. We may refer to this period as a creation era: the characteristics of this era of supply chain management include the need for large-scale changes, reengineering, downsizing driven by cost reduction programs, and widespread attention to Japanese management practices.

The second era – integration – can be identified with the development of electronic data interchange (EDI) systems in the 1960s, and developed through the 1990s by the introduction of enterprise resource planning (ERP) systems. This era has continued to develop into the 21st century with the expansion of Internet-based collaborative systems. This era of supply chain evolution is characterized by both increasing value added and cost reductions through integration.

The third movement of supply chain management development, the globalization era, is characterized by the attention given to global systems of supplier relationships and the expansion of supply chains over national boundaries and into other continents. This era is indeed characterized by the globalization of supply chain management in organizations with the goal of increasing their competitive advantage, adding value, and reducing costs through global sourcing.

In order to better understand the factors that influence the dynamics of the market, it is possible and useful to draw an evolutionary path of economic development. In this sense, the first detectable form is the so-called "economic self-sufficiency", characterized by the absence of exchange, as the "market" was made up by small family units that provide individually for themselves. Subsequently several family units joined to each other in the form of tribal economies, giving rise to small organizations of primitive "communism". With regard to the exchanges to the outside of the group, these have been characterized, in a first period, by the barter, which consists in the exchange of own products with others from other communities. This fostered an early form of productive specialization. The idea of the market becomes more regular, periodic and organized thanks to the emergence of local markets and fairs, specialized structures dedicated to the exchange of products. The important following step is monetary economics: with the introduction of the currency as a unit of exchange corresponding to the value of the product, brokering activities also develop. It represents the birth of the first figures of professionals traders and bankers. At that point the way forward was clear: from a first stage of paleo-capitalism, characterized by a shortage of supply, in which the demand was greater than supply and business activity consists in finding consumers, identifying markets and transferring goods, we passed, slowly but surely, to mass production. At this stage, due to the intensification of the exchange activities and the increase in production volumes, we arrive at a situation where the demand and supply are in dynamic equilibrium, or in a position of substantial and balancing equality. Very important is thus the contribution of marketing with commercial function in supporting sales. The evolution continues with the transition to the so-called "affluent society", in which economic, technical and social progress leads to an overabundance of money compared to the primary needs. The quantities offered are, consequently, more and more close to those required or, in certain cases, even higher. The marketing function is changed: the objective, at this stage, is to identify the needs of consumers and the creation of products and services able to meet these needs. The final stage of the evolution of economic development is the over-supply, characterized by a structural superiority of supply over demand. Besides the increase of the offered quantities in this phase the variety of products drastically increases,

under the desire to create products that, once again, meet the highest number of possible needs. It is also the advent of digital communication and market-driven management, the competitive approach to the market.

□ Several factors are driving an emphasis on supply chain management. First, the cost and availability of information resources among entities in the supply chain allow easy linkages that eliminate time delay in the network. Second, the level of competition in both domestic and international markets requires organizations to be fast, agile and flexible. Third, customer expectations and requirements are becoming much more demanding. Fourth, the ability of an organization's supply chain to react rapidly by managing risk minimizes disruptions in both supply and downstream product or services to mitigate the impact of lost sales. As customer demands increase, organizations and their supplier must be responsive or face the prospect of losing market share. Competition today is no longer between firms; it is between the supply chain of those firms. The companies that configure the best supply chain will be the market winners and gain competitive advantage (Monczka et al., 2010).

Already since the beginning of the millennium, one of the most significant paradigm shifts of modern business management has been that individual businesses no longer compete as solely autonomous entities, but rather as supply chains (Lambert & Cooper, 2000; Riboldazzi, 2005).

Globalisation draws competition boundaries that modify traditional competitive time and space relationships (Brondoni, 2005b).

Managing time and space become vital for a company operating in global markets, beyond physical and administrative boundaries, and specifically underline the importance of certain distinctive drivers that characterised globalisation (Figure 6), from market to cost, from government to technology and, above all, to competitive environment.

Market Drivers				Cost Drivers
Global Customers Global Sales Channe Global Marketing	comers Channel keting		Economies of Scale Economies of Scope Global Sourcing	
	Co Gl Gl	mpetitive Driv lobal Competit lobal Distribut Global Networl	vers ion ion ks	
Government Driver	S		Те	echnological Drivers
Free Trade Global Standards Laws and Rules		Production Technologies Telecommunication Internet		

Among the five categories of driver, the most important to describe for the purpose of this dissertation is the competitive driver; in particular the elements of global competition and global network.

Competition in global markets shapes a multi-dimensional space so that a given geographical context can imply the simultaneous presence of very different competitors. Moreover, competition practices are further revolutionized, as they must take into account: saturated markets, a situation of 'time-based competition', and finally, communication processes affecting sales and manufacturing (Brondoni, 2002a, 2005b).

The development of network structures is a response to the challenges of globalisation: due to the gradual decrease in the importance of geographical, administrative, political, currency, tax, legislative, linguistic and other barriers networks have allowed companies to access broader and more open markets, with a large number of end customers but also with large numbers of companies operating at all levels of the supply chain (Corniani, 2013).

Likewise, global markets advent brought the competition to a different level, the relevance of supply chain management grew and, most of all, SCM design became more and more important in term of efficiency and relations management. One of the most interesting concept has been that of global sourcing, defined as the integration of purchasing requirements across worldwide locations (Monczka & Trent, 1991). Summarizing the extant literature, the rationale to engage in global sourcing is based on two sources of competitive advantage: first, location-specific advantages, such as access to local supply and labour markets or new technologies and second, company specific competencies. The latter are developed through the exploitation of global synergies, such as pooling of common requirements across sites (Trautmann et al., 2009). Purchasing synergies can be described as "the value that is added when two or more business units (or purchasing departments) join their forces (e.g. combined buying) and/or share resources, information, and/or knowledge in the area of purchasing" (Rozemeijer, 2000).

In the light of these considerations, it appears clearly how complex a supply chain can be and how relevant it is to monitoring its complexity, mainly for two reasons. First, the information obtained results in good knowledge of the global system, and so a clear definition of the causes and effects of problems. Second, it supports the research into the best solutions for a network very effectively by comparing the various possible alternatives to provide objective and quantitative analysis (Allesina et al., 2010). The complexity of supply chain must be seen also with regards to recent trends that have been converging to create an increasingly complex business environment, particularly the move towards green initiatives, the ever growing use of outsourcing practices, and globalization (Mollenkopf et al., 2010).

Not less importantly, supply chains must be analysed with respect to the growing attention form of networks. Although supply chain management is now an established field, the distinction between supply chains and supply networks is relatively immature (see Figure 7): the focus of supply chain management approaches regarding the unit of analysis, namely the chain or the network, has not been consistently addressed. It was suggested that competition took place less

between companies, but instead between entire supply chains, requiring companies to manage supply chains as integrated systems and coordinate their activities. Overall, supply network points to a broader, more complex terrain as opposed to the more focused area associated with SC. (Braziotis et al., 2013).

Figure 7 Differences between Supply Chains and Supply Networks

Dimension	Supply Chain	Supply Network
Focal concept	Products (and services)	Relationships
Design and configuration	Linear and ongoing,	Non-linear and dynamic
	relatively stable structures	structures
Complexity	Low	High
Operations	Predictable and stable	Unpredictable/un-
		solidified
Coordination	Management focuses on the	Management focused on
	coordination of flow	the coordination of
	(information, products and	the web of inter-firm
	finance) and on integration	relationships
Integration	Structured	Ad hoc/unplanned
Means to enhance	Cooperation, collaboration,	Cooperation,
competitiveness	and coordination among SC	collaboration, and
	members involving	coordination among
	competition between these	members of a web of SCs.
	members in some occasions	At the same time, it
		involves conflict and
		competition too

Source: (Braziotis et al., 2013).

1.3 Global Network

1.3.1 Network Design

□ Management attention has moved from competition between firms to competition between supply chains. The capability to establish close and long-term relationships with suppliers and other strategic partners has become a crucial factor in creating competitive advantage (Andersen & Skjoett-Larsen, 2009).

A network is a group of legally independent companies or subsidiary business units that use various methods of coordinating and controlling their interaction in order to appear like a larger entity. In a business context, three main types of network organization are typically seen: (1) internal where a large company has separate units acting as profit centres, (2) stable where a central company outsources some work to others, and (3) dynamic where a network integrator outsources heavily to other companies.

It can be seen one possible type of company structure. We can define five types of company structure, from the least complex to the most organised:

- Simple;
- Functional;
- Divisional;
- Matrix;
- Network;

The simple structure is not formalised; it is typical of family or small businesses and there are no precisely assigned roles. It has an elementary organisation and a strong centralisation of governance. It is also characterised by reduced formalisation in terms of organizational structure, operational procedures and information system. Typical of handicraft businesses or small businesses directed by a single person or a
family, mono-product or with a small range of products, operating on a single market or a niche. The main advantage of this structure is the flexibility of the job, while the worst disadvantage is the lack of specific competences.

The functional structure is based on the principle of specialisation and division of labour. Similar business activities flow into functional groupings under the control of managers who respond directly to the directory board. It is usually adopted by smallmedium enterprises with not much diversified product range, operating in a single market. The functional structure management style is often characterized by hierarchy and top-down processes on the one hand and by strong specialist connotations on the other hand, with consequent benefits in terms of efficiency in the execution of tasks and economies of scale.

The divisional structure is split into product divisions and geographic area. It is typical of complex enterprises, operating in several geographic areas, with many production plants or with different product lines. It is organised in two levels: at the first level, the company is split into divisions (product lines or areas), while at the second level the company is organised for business functions.

Support structures (administrative or sales) are assigned at each division to design, build and market its product line in autonomy. Decentralisation of production and specialization are the main strength of this approach, but duplication of offices and the consequent raise in costs must be taken into account, as well as the loss of unity.

The matrix structure is based on maintaining functional specialisations and creating integration bodies affecting the functions to meet the final result. It is usually chosen by firms carrying out major projects or very focused on products.

The network structure is based on relationships and on the outsourcing of business functions outside the firm's boundaries. It consists in the establishment of close links among several parts of the enterprise and it is supported by information and communication technology. It builds strong ties with both customers and suppliers. Organizational models beneath network structure must take into account the activities of other companies linked by more or less stable agreements (such as licensing or joint venture). The network structure is advantageous for its flexibility, speed and efficiency in the operational management. Network structure and network design derive from the concept of network topology, which can be defined as the schematic description of the arrangement of a network finalised to represent the relationships of physical and logical connection among the elements of the network.

The principal network topologies are:

- Point-to-point: the simplest topology with a permanent link between two endpoints.

- Ring: each node is connected to exactly two other nodes, forming a ring. Can be visualised as a circular configuration.

- Tree: one "root" node connects to other nodes, which in turn connect to other nodes, forming a tree structure. Information from the root node may have to pass through other nodes to reach the end nodes.

- Star: one central note is connected to each of the other nodes on a network. Similar to a hub connected to the spokes in a wheel.

- Mash: employs either of two schemes, called full mesh and partial mesh. In the full mesh topology, each workstation is connected directly to each of the others. In the partial mesh topology, some workstations are connected to all the others, and some are connected only to those other nodes with which they exchange the most data.

- Bus: each node is connected to a central bus that runs along the entire network. All information transmitted across the bus can be received by any system in the network.

Topologies can be adapted from communication network to company network to describe the complex system that overcome the dimensions of space and time and creates global value chains built on a set of competitive relationships on the whole planet. In the past, company relationships were often of exclusive type, because a firm used to buy exclusively and permanently from a selected set of suppliers present in a well-circumscribed local space. In a global context, instead, the increased competition has caused the loss of exclusive relationships and the need for all businesses, present at all levels of the production chain, for competitive strategic alliances. A networking strategy is a cooperative strategy in which several firms are linked by numerous collaborative relationships in order to achieve a common goal. At the same time, through the creation of ever larger organizations, they are able to better govern the competitive dynamics.

The forms of networking can be distinguished into equity and non-equity strategic alliances. The main difference between the two categories is the sharing of control capital: in the equity strategic alliances there is sharing of control capital (for example in alliances such as joint ventures), while the non-equity strategic alliances are based on contractual agreements that don't provide control capital sharing (e. g. co-marketing, outsourcing, supply-chain partnerships, and so on).

Networking allows companies to decentralize some functions and relative powers but to preserve a centralized strategic decision making. At the same time, requiring the coordination of several business activities located in various territories in global competitive space, strategic alliances involve a plurality of organizational costs and risk factors to be monitored. The networking strategies shift the competitive comparison of an action plan in which the competition shift from firm-to-firm to a network-to-network. (Arrigo, 2009, 2010).

In this sense, one of the most important changes in industrial organisation is the transition from multinational corporations (MNCs) to global networks. Multinational corporations were characterised by the focus on stand-alone overseas investment plans. Global networks, on the other side, are characterised by the focus on coordinating and integrating their geographically dispersed supply, knowledge and customer bases into global network business activities (Brondoni, 2014).

Similarly, gone are the days when innovations were the result of the efforts put forth within a single firm; instead, firms need to increasingly rely on the competencies of multiplicity of firms within their supply chain network in order to innovate (Arlbjørn & Paulraj, 2013). With higher degrees of supply network competencies, companies will have stronger beliefs that their supply partners will act and perform in a consistent manner. Companies will be willing to contribute time, money, or other resources to the network because they are confident that their supply partners will also collaborate. The supply network competency reinforces the feelings of ownership of supplier resources and further enhances trust and commitment (Barnes & Liao, 2012).

□ Supply chain network design (SCND) determines the structure of a chain and affects its costs and performance. SCND deals with a variety of decisions such as determining number, size and location of facilities in a supply chain (SC) and may include tactical decisions (such as distribution, transportation and inventory management policies) as well as operational decisions (such as fulfilling customers demand). SCs compete together to capture more market shares. Even if there is not any competitor at the moment, SCs should be prepared for possible future competitive situation at the SCND stage (Farahani et al., 2013).

The business activity is based on the relationship between the different market players: wanting to identify only two for simplicity, these can be identified as "demand" and "supply". In the relations between these two parts, a range of other actors, generically falling under the name of stakeholders (i.e. those who have some interest so that business activities is carried out), and which include suppliers and distributors, investors and co-makers, operate and facilitate the interactions and the relationships. According to a broader definition, also the customers of the company can be classified this way, whether intermediate or final customers, however also falling within the definition of "demand". A particular category of stakeholders is represented by shareholders or holders of capital, whose interest is due to the fact that they have more or less significant shares of firms in the market. The shareholders own shares, but not the company itself. The market, in turn, can be defined as the complex of the exchanges which occur or may occur in relation to a given product and in a certain geographical area. A more precise definition describes it as a dynamic complex of negotiations which concern a class of products, and which occur continuously over time.

It appear therefore very important the concepts of time and space and, specifically, time-based and market-space competition.

The expression "time-based competition" appears for the first time in the late '80s, defined as "a strategy of customer response and rapid introduction of new products, combined with quality and competitive costs [...] businesses expand and the variety and increase innovation, supported by a flexible manufacturing and a rapid response system" (Stalk, 1988).

These words still represent a viable definition of the concept. In other words, time is a competitive factor that change in the cycles of action and reaction of businesses. From a management perspective, the time-based competition is not only meant to reduce the time of operations (time compression), but also to enhance the different activities (time value), which are carried out simultaneously with a circular type organisation, even though under the constraint of time duration, which is the minimum time required to complete a task. The goal of this tool is therefore, in essence, the rationalization and improvement of time to market, i.e. the time required for a product to reach the market. This dimension includes a number of stages, from conception to purchase. The intermediate steps are represented by designing, engineering, creating and distributing the product to the consumer.

On the side of time management, some considerations arises: social and economic relations are linked to a set of functions (knowledge, information, cultural harmony, adaptability to diversity, times of action/reaction, mobility) that go beyond the scope of belonging to a physical space (geographic area, nation, ethnic settlement, administrative, etc.), organized on the protection of specific and exclusive rights and duties. In global markets, companies compete therefore according to the logic of "market-space competition", characterised by boundaries of competition where the space is no longer a given, which is a known and stable element of the decision-making process, but rather a competitive factor whose profile configures and changes as a result of the actions/reactions of companies and governments (Brondoni, 2002b).

The issues related to time and space competitive management are both essential to fully understand the concept of competitive intensity, which identifies the significance of the relationships that a company develop with the other players of the market: suppliers, customers, competitors, economic and political environment. The importance of the competitive intensity can be seen in the number, complexity and structure of the two-way relationship developed in a context of no-space competition. When the work of a company depends to a large extent on the system of relationships with the indicated stakeholders, the level of competitive intensity is high. When, on the other hand, the firm has a lower dependence on the system above the competitive intensity is low.

With regard to competition, the focus has shifted from the concept of competitive environment to that of competitive landscape, whose two main characteristics are, on the one hand the absence of boundaries (intrinsic characteristic of environment) and, on the other hand, the dynamic dimension that distinguishes the landscape, always changing, from the environment which is rather static and stable. Open markets, because of the interconnections that link them to other markets, are constantly changing, both at the hands of those who traditionally work in and for the interactions that connect them to other markets with different characteristics and different degrees of dynamism. The competitive analysis must then carried out by examining the competitive intensity focusing on the global business system (network) and not on the industry (Brondoni et al. 2010).

The aim of a network is to share resources: (1) that the partners hold and intend to implement; (2) that one or more partners do not have and want to develop.

A network provide a competitive advantage compared to individual firms and put a focus on information needs, coordination and communication.

Network communication is a set of information flows which develop within the network with organizational objectives aimed at ensuring the functioning of the network and the circulation of knowledge between partners on the one hand, as well as induce the development of a specific network culture on the other hand.

Two fundamental pressures have begun to act on business: to govern as effectively and efficiently as possible the flow of goods in the supply chain and at the same time to control the flow of information originating from the interaction between supply and demand. The overall view of the supply network collides with the boundaries of the enterprise and with the opportunity for participating companies to maintain control over their information. Global markets highlight important competitive network experiences in which we observe the presence of at least one dominant company, which is capable of governing the reticular system as a whole and make sure that no opportunistic behaviors are developed by its actors (Corniani, 2009).

A market-driven company is aware of the fact that the opportunities embodied by globalisation are not limited to a mere advantage in terms of reduced costs, but generate conditions for a competitive approach to the market (Gnecchi, 2009).

The criticality of corporate culture is particularly evident with regard to the manufacturing location decisions. Market-space management tends to generate big corporations consisting of complex business networks with a very strong top management power.

Those global networks operate valuing and leveraging corporate intangible assets, represented by corporate identity, corporate culture and corporate information system.

Business can no longer rely only on their own resources, knowledge and skills: global competition has radically changed the role of strategic alliances, imposing a logic of collaborative network between groups of rival companies.

1.3.2 Supply Network

A supply chain design problem comprises the decisions regarding the number and location of production facilities, the amount of capacity at each facility, the assignment of each market region to one or more locations, and supplier selection for sub-assemblies, components and materials (Chopra & Meindl, 2007). Global supply chain design extends this definition to include selection of facilities at international locations, and the special globalization factors this involves.

Following the classification proposed by Chopra & Meindl, we can organise these issues in four groups and analyse each one of them:

- Facility role;
- Facility location;
- Capacity allocation;
- Market and supply allocation.

The first problem is about the facility role, i.e. what processes are performed at each facility. Decisions concerning the role of each facility are significant because they determine the amount of flexibility the supply chain has in changing the way it meets demand.

□ For example, Toyota has plants located worldwide in each market that it serves. Before 1997, each plant was capable of serving only its local market. This hurt Toyota when the Asian economy went into a recession in the late 1990s. The local plants in Asia had idle capacity that could not be used to serve other markets that were experiencing excess demand. Toyota has added flexibility to each plant to be able to serve markets other than the local one. This additional flexibility helps Toyota deal more effectively with changing global market conditions (Chopra & Meindl, 2007).

Facility location decisions have a long-term impact on a supply chain's performance because it is very expensive to shut down a facility or move it to a different location. A good location decision can help a supply chain be responsive while keeping its costs low.

□ Toyota, for example, built its first U.S. assembly plant in Lexington, Kentucky, in 1988 and has used the plant since then. The Lexington plant proved very profitable for Toyota when the yen strengthened and cars produced in Japan were too expensive to be cost competitive with cars produced in the United States. The Lexington plant allowed Toyota to be *responsive to the U.S. market while keeping costs low* (Chopra & Meindl, 2007).

Facility location decisions are also influenced by the competitive conditions a business operates in: from the relationship between demand and supply to the importance of time and to environment instability. As shown by Garbelli (2002), localisation can be either static or dynamic. Static localisation is the manufacturing localisation strategy adopted mainly by businesses for which the demand and competition context does not appear to be likely to change in the short term. Priority is standardisation to minimise costs and it is a long-term localisation choice. Product volumes are constrained by plant manufacturing capacity for the processes involved and the skill level of the workforce employed. Competitive advantage based on manufacturing ability emphasizes the efficiency of tools and machinery, the principle of economies in the purchasing and use of raw materials and other resources, and the explicit pursuit of the law of experience for the implementation of processes. On the other hand, businesses adopting a dynamic localisation strategy face a competitive environment that is fundamentally different from the environment that allows for static localisation. In this context, priority is both on standardisation and variety and it is a short-term localisation choice. Manufacturing capacity increases with decreasing costs due to innovations aimed at process optimisation. Manufacturing is closely tied to the requirement for flexibility inspired by the market. It evolves incessantly to generate products that meet demand needs in ever better ways at the most beneficial time, in the best way and at the best cost.

The third point is about capacity allocation decisions, that also have a significant impact on supply chain performance. Whereas capacity allocation can be altered more easily than location, capacity decisions do tend to stay in place for several years. Allocating too much capacity to a location results in poor utilization, and as a result, higher costs. Allocating too little capacity results in poor responsiveness if demand is not satisfied, or high cost if demand is filled from a distant facility.

Finally, it is importance to consider the allocation of supply source and market to facilities. This decision has a significant impact on performance because it affects

total production, inventory, and transportation costs incurred by the supply chain to satisfy customer demand.

Network design decision are influenced by several factors, both strategic and environmental. Global supply chain networks, in particular, can best support their strategic objectives with facilities in different countries playing different roles. For this purpose, Ferdows (1997) identified six types of plants, organised through a strategic matrix (see Figure 8):

Figure 8 Ferdows' Strategic Matrix of Foreign Factories



Source: (Ferdows, 1997).

This matrix is based on site competence on one side strategic reason for the site and on the other. Site competence is measured from low to high, while the strategic reason for the site presents three levels: access to low-cost production, access to skills and knowledge and proximity to the market. The combination of these variables results in six types of plants, labeled:

- 1. Offshore facility: low-cost facility for export production;
- 2. Source facility: low-cost facility for global production;
- 3. Server facility: regional production facility;
- 4. Contributor facility: regional production facility with development skills;
- 5. Outpost facility: regional production facility built to gain local skills;
- 6. Lead facility: facility that leads in development and process technologies;

In the easiest case, a factory is in a low position – an offshore, an outpost, or a server – and remains there. Almost every foreign factory starts in the lower part of the matrix. And some companies, for sound reasons, keep many of their factories in those positions. Moving a plant horizontally across the matrix usually requires a substantial overhaul of its organization, control systems, and equipment. Moving a plant up the matrix means giving it a broader, upgraded strategic role in the company's network of factories. Superior manufacturers have a larger portion of their global factories in the higher source, contributor, and lead positions than average manufacturers do. The challenges involved in upgrading a plant are substantial. But the rewards are substantial, too. Indeed, it often takes years and a tremendous investment of resources for factories to ascend to these positions; but these plants ultimately provide their companies with a formidable strategic advantage (Ferdows, 1997).

Factors influencing facility decisions are not only strategic, but also environmental, both internal and external to the firm. First of all, technological factors must be taken into account: characteristics of available production technologies have a significant impact on network design decisions. If production technology displays significant economies of scale, a few high-capacity locations are most effective. In contrast, if facilities have lower fixed costs, many local facilities are preferred because this helps lower transportation costs.

As for factors outside the firm, macroeconomic factors include taxes, tariffs, exchange rates, and other economic factors that are not internal to an individual firm. In the same category, we can count also political factors and infrastructure factors.

The goal when designing a supply chain network is to maximize the firm's profits while satisfying customer needs in terms of demand and responsiveness. To design an effective network a manager must consider all the factors described below as well as customer response time and, very important, logistics and facility costs.

Global network design decisions are made in four phases as shown in Figure 9.

Figure 9 Framework for Network Design Decision



Source (Chopra & Meindl, 2007).

- Phase I: Define A Supply Chain Strategy. The objective of the first phase of network design is to define a firm's broad supply chain design. This includes determining the stages in the supply chain, and whether each supply chain

function will be performed in-house or outsourced. Phase I starts with a clear definition of the firm's competitive strategy and then specifies what capabilities the supply chain network must have to support the competitive strategy. Next, managers must forecast the likely evolution of global competition and whether competitors in each market will be local or global players. Managers must also identify constraints on available capital and whether growth will be accomplished by acquiring existing facilities, building new facilities, or partnering.

- Phase II: Define The Regional Facility Configuration. The objective of the second phase of network design is to identify regions where facilities will be located, their potential roles, and their approximate capacity. An analysis of Phase II starts with a forecast of the demand by country. Such a forecast must include a measure of the size of the demand as well as a determination of whether the customer requirements are homogenous or variable across different countries. The next step is to identify whether economies of scale or scope can play a significant role in reducing costs, given available production technologies. Next, managers must identify demand risk, exchange-rate risk, and political risk associated with different regional markets. They must also identify regional tariffs, any requirements for local production, tax incentives, and any export or import restrictions for each market. Moreover, managers must identify competitors in each region and make a case for whether a facility needs to be located close to or far from a competitor's facility. The desired response time for each market and logistics costs at an aggregate level in each region must also be identified. Based on all this information, managers identify the regional facility configuration for the supply chain network using network design models discussed in the next section. The regional configuration defines the approximate number of facilities in the network, regions where facilities will be set up, and whether a facility will produce all products for a given market or a few products for all markets in the network.
- Phase III: Select A Set of Desirable Potential Sites. The objective of Phase III is to select a set of desirable potential sites within each region where facilities

are to be located. Sites should be selected based on an analysis of infrastructure availability to support the desired production methodologies. Hard infrastructure requirements include the availability of suppliers, transportation services, communication, utilities, and warehousing infrastructure. Soft infrastructure requirements include the availability of skilled workforce, workforce turnover, and the community receptivity to business and industry.

- Phase IV: Location Choices. The objective of Phase IV is to select a precise location and capacity allocation for each facility. Attention is restricted to the desirable potential sites selected in Phase III. The network is designed to maximize total profits taking into account the expected margin and demand in each market, various logistics and facility costs, and the taxes and tariffs at each location.

Chapter 2

Global Sourcing, Outsourcing and Relationship Management

2.1 Global Sourcing

2.1.1 Intra-firm supply vs Outsourcing

 \Box As Western companies come under increasing pressure to cut expenses and improve their return on assets, the dilemma of whether to keep key functions in-house or outsource them has taken center stage. Manufacturing units are identified most often with "make or buy" decisions because third-party suppliers in Eastern Europe, China, and other low-cost regions hold out the promise of significant advantages that many brownfield plants in developed nations can't offer. But other critical activities — such as human resources, information technology, maintenance, and customer relations — can gain (or lose) just as much from outsourcing and shouldn't be neglected when the options are considered (Schwarting & Weissbarth, 2011).

Sourcing decision-making is multifaceted and entails both contractual and locational implications. From a contractual point of view, the sourcing of major components and products by multinational companies takes place in two ways: (1) from the parents or their foreign subsidiaries on an "intra-firm" basis and (2) from independent suppliers on a "contractual" basis. The first type of sourcing is known as intra-firm sourcing. The second type of sourcing is commonly referred to as outsourcing. Similarly, from a locational point of view, multinational companies can procure components and products either (1) domestically (i.e., domestic sourcing) or (2) from abroad (i.e., offshore sourcing). Figure 10 shows the four possible types of sourcing strategy identified.

Figure 10 Types of Sourcing Strategy



Source: (Kotabe & Helsen, 2010)

A firm that chooses to keep the production of an intermediate input within its boundaries can produce it at home or in a foreign country. When it keeps it at home, it engages in standard vertical integration. And when it makes it abroad, it engages in foreign direct investment (FDI) and intra-firm trade. Alternatively, a firm may choose to outsource an input in the home country or in a foreign country. When it buys the input at home, it engages in domestic outsourcing. And when it buys it abroad, it engages in foreign outsourcing or offshore outsourcing (Antràs & Helpman, 2003). This decision, i.e. the one whether or not to outsource, falls into a make-vs-buy dilemma, as shown by Figure 11 and Figure 12.

Figure 11 The Strategic Make-vs-Buy Decision



Source: (Benton, 2009).

On the other hand, sourcing decisions in a global network scenario generate and configure strategic alliances that can eventually result into some transformation of the firm's structure. Strategic alliances indeed can be divided in three main categories on the basis of capital sharing: joint ventures, equity and non-equity alliances. In joint ventures, two or more companies decide to form a new company. The main reason for joint ventures creation can be exploitation of symmetrical skills, development of asymmetrical skills or even creation of new skills An example of equity alliances, characterised by capital sharing, is equity participation. Equity participation is when a company owns some shares in other companies in order to exercise control activities or actions of influence. The opposite case, where there is no capital sharing, is typical of non-equity alliances, such as co-makership, supply chain partnership and outsourcing, but also licensing and franchising.

Figure 12 Weighing the Make-or-Buy Decision

	Make	Buy
Business Strategy	 In-house process differentiates the product or service Capability has synergies across the business Supply market is hostile or controlled by competitors Need to "push the technology or capability envelope" 	 Process/business is unattractive (e.g., hard to find workers, strict regulatory environment) Materials or processes are not critical to end products or marketing efforts Supply market is suitable for building close partnerships Suppliers are willing and able to meet innovation needs
Risks	 Few or no alternative sources of supply High supply market risks Imperative to couple supply and usage (real-time/short lead time) for quick response or quality Sensitive intellectual property involved in process/product 	 Holdup risk is low or sufficiently managed through contract of broader business relationship Low switching costs and easily accessible alternative sources of supply Uncoupling the supply chain has little impact No sensitive intellectual property involved
Economic Factors	 Internal cost advantage or cost parity, high quality Significant recent investment in process technology that cannot be recovered Investments meet required return on invested capital Company has strong, defensible skills base 	 Suppliers have lower costs or better quality Major new investments are required Suppliers have lower ROI targets Insufficient or weak in-house skills/capabilities; skills are difficult to acquire

Source: (Schwarting & Weissbarth, 2011).

2.1.2 Sourcing Strategy

□ Growing competition and choice in the offshore outsourcing field has gradually altered the way organisations select and approach outsourcing contracts. In declining economic conditions organisations are even more concerned than before about the value proposition and risk involved in signing over their information systems and technology activities to third party organisations (Weerakkody & Irani, 2010).

The problem many firms have to face in the management of the outsourcing relation is that, as we already pointed out, outsourcing itself has become a norm rather than a truly competitive advantage. On the other hand, already since the first phase of globalisation, and even more with the diffusion of the phenomenon, the competition has moved to a global level and so the supply chain. In the first phase of the globalisation, firms adapted their competitive policies to operate in open markets, with diminishing physical, administrative and political boundaries, in a global system, linked by spreading digital information & communication technologies (Brondoni, 2014). As the focus of this dissertation is on the supply side of the chain, it is useful to analyse the concept of global sourcing, which has received growing attention by the literature in the recent decades.

A company's need for a supply strategy depends on two factors: (1) the strategic importance of purchasing and (2) the complexity of the supply market (see Figure 13, Kraljic, 1983).

Figure 13 Stages of Purchasing Sophistication

Importance of purchasing Criteria: cost of	High	ll Materials management		IV Supply management	
oost, volue oost, volue added profile, profile, and so on.		Procurement focus Leverage items (e.g., electric motors, heating oil, EDP hardware) Key performance criferia Cost/price and materi- als flow management Typical sources Multiple suppliers, chiefly local	Time horizon Varied, typically 12 to 24 months Items purchased Mix of commodifies and specified materials Supply Abundant Decision authority Mainly decentralized	Procurement focus Strategic items (e.g., benzol cyclo- hexane, scarce metals, high-value components) Key performance criteria Long-term availability Typical source Established global suppliers	Time horizon Up to ten years; governed by long-term strategic impact frisk and contract mix) Items purchased Scarce and/or high- value materials Supply Natural scarcity Decision authority Centralized
		Purchasing management Procurement focus Noncritical items (e.g., steel rods, cool, office supplies) Key performance criteria Functional efficiency Typical sources Establish local suppliers	Time horizon Limited; normally 12 months or less Items purchased Commodities, some specified materials Supply Abundant Decision authority	U Sourcing management Procurement focus Bottleneck items (e.g., electronic parts, catalyst materials, out- side services) Key performance criteria Cost management and reliable shortterm sourcing	Time horizon Variable, depending on availability vs. short-term flexibility- trade-offs Items purchased Mainly specified materials Supply Production-based
	Nol ▲	≺	Decentralized	Typical sources Global, predominantly new suppliers with new technology	scarcity Decision authority Decentralized but centrally coordinated
		Low			Hig
		Complexity of supply market	Criteria: supply, monopoly or eligopoly conditions, pace of technological advance, eatry barriers, logistics costs and complexity, and so on.		

Source: (Kraljic, 1983).

The strategic importance of purchasing can be estimated in terms of the value added by product line, the percentage of raw materials in total costs and their impact on profitability, and so on; on the other hand, the complexity of the supply market is gauged by supply scarcity, pace of technology and/or materials substitution, entry barriers, logistics cost or complexity, and competitive conditions.

Monczka and Trent (1991) offer one of the most cited definitions of the term which states that global sourcing is "... the integration and coordination of procurement requirements across worldwide business units, looking at common items, processes, technologies and suppliers".

Nevertheless global purchasing literature suffers from a lack of consistency due to the diversity in the terminology and definitions of the phenomenon. Quintens (2006) analyses many definitions and conclude that we can define global purchasing as the "activity of searching and obtaining goods, services and other resources on a possible worldwide scale, to comply with the needs of the company and with a view to continuing and enhancing the current competitive position of the company".

There are three main ideas underneath this definition. First, global sourcing is perceived as something more than mere "physical" sourcing. It includes not only the operative task of buying but also more strategic responsibilities such as the development of suppliers and the generation of purchase synergies worldwide. Global purchasing may be the result of a reactive and opportunistic decision to lower purchasing costs but can also be a strategic and coordinated effort to improve the competitive position of the company. It includes all the stages of the buying process, from before the establishment of the list of specifications, to the selection of suppliers and the purchase until the follow-up and assessment stages.

Secondly, not all global research activities should necessarily lead to make purchases abroad. If a company claims that a product is better to be purchased locally after having evaluated also potential foreign suppliers, also this decision fits within the strategy of global sourcing. The sourcing is global not only on the final result, but also on the process. As a result, the degree of globalization of the purchases of a business cannot be grasped by measuring merely the ratio of foreign purchases / total purchases.

As a third element, the definition refers to the "ambitions" of a firm. It is believed that the global purchasing emerge because of the possible competitive advantages that it can generate for the company. Compared with this, not only strategy formulation but also organizational alignment and implementation processes are part of the global sourcing research (Baldassarre, 2013).

Global sourcing can bring many benefits to organisations, but it can also expose them to a number of risks. Global sourcing trends are making supply chains longer and more fragmented and this is exposing firms to greater costs and risks (Christopher et al., 2011).

Hultman identified three streams of research particularly interesting within the field of global sourcing: the process, the driver and the design and management of global sourcing. The first stream of research has looked into the process leading to global sourcing, often separating this into several identifiable stages. The contributions of Monczka and Trent have been particularly influential and resulted in a five-level global sourcing process (see Figure 14).



Figure 14 Stages of Sourcing

Source: (Hultman et al., 2009).

The second stream is focused on the drivers of, or motivations for, global sourcing: the main motivations for global sourcing resulted to be the comparative advantage on the one hand, usually coming from lower prices, and the competitive advantage, such as quality or technology, on the other hand. The third and final stream of research pays particular attention to the organizational design and management of global sourcing, especially global sourcing strategy development. This literature focuses on defining and conceptualizing global sourcing, and uncovering the relationships between purchasing organization and purchasing performance; issues of standardization, centralization and adaptation feature. An important contribution in this stream is paid by Quintens et al. (2006) that conceptualized four dimensions of global purchasing strategy: 1) purchasing process configuration; 2) standardization of global purchasing process; 3) standardization of product-related characteristics and 4) standardization of personnel-related characteristics. Thus, they identified a close link between global marketing strategy and global purchasing, and stated that many of the decisions are the same i.e. issues of adaptation, centralization and configuration.

A key distinction made by the authors (R. M. Monczka & Trent, 1991) is the difference between 'international purchasing' and 'global sourcing'. International purchasing involves simply buying from suppliers outside the firm's country of manufacture, and is primarily a reaction to increased worldwide competition. However, there is a lack of coordination of requirements between worldwide business units. Global sourcing, on the other hand, requires the integration of requirements, in order to identify common purchases, processes, technologies and suppliers that can be coordinated. This strategy requires the implementation of centralized global commodity management teams and an information system that can track requirements and performance worldwide.

Furthermore, firms that engage in global sourcing are larger and more likely to have multi-regional or global competitors, they develop their strategies mainly at the executive management level and they perceive performance improvement opportunities more available compared with firms that engage in international purchasing. At the same time, they face more rapid changes to product and process and rely on a wider array of communication tools.

Firms [...] should be aware to compete in a global space characterised by multiple opportunities of selling, sourcing and collaborating, where proactiveness and innovativeness refer to the capacity to create value before and better than competitors, through effective combinations involving the global value chain (Majocchi & Zucchella, 2008).

2.2 Outsourcing

2.2.1 Theoretical Basis

Outsourcing is "a conscious business decision to move internal work to an external supplier" (Elliott and Torkko, 1996). The traditional rationales for this practice have been cost reduction and efficiency gain on the one hand, together with the focus on core-business processes on the other hand. The theoretical basis for outsourcing can be found in the economic transaction costs theory (Coase, 1937; Williamson, 1981; Aubert et al., 1996) and in the analysis of the relationship between transaction costs and make-or-buy decisions (Walker & Weber, 1984). Indeed outsourcing falls within a class of 'make-versus-buy' decisions in an organization (Loh & Venkatraman, 1992), as long as it is intended to reduce costs (Bryce & Useem, 1998; Vining, 1999; Van Laarhoven et al., 2000). On the other hand, outsourcing is a way to let the firm focus on its core competences (Prahalad & Hamel 1990; Quinn & Hilmer, 1995; Fischli, 1996). By the turn of the millennium, the popularity of outsourcing had led to the situation where outsourcing as such no more was a competitive differentiator it had become a norm rather than an exception (Arnold, 2000; Lawton & Micheals, 2001; Kremic et al., 2006) so that the management of the relationships with key suppliers has become increasingly important (Kadabase & Kadabase, 2005; Brondoni, 2010).

The provision of production service to companies, that can be considered as an early form of outsourcing, dates back to the '60 (Electronic Data System, 1962), but the term 'outsourcing' itself has been first used only in 1982 (Van Mieghem, 1999). The first items to be contracted out was indeed services, especially regarding information and communication technology (Loh & Venkatraman, 1992). But outsourcing is not only – or no longer – about services, but also about business process, and more and more often also about production. Furthermore, it covers both non-core and core business processes. In this regards, it appears very important the management of the relationships with outsourcing providers, in order to avoid, or at least reduce, typical risks, especially when we talk about offshore outsourcing, from operational to strategic risks, from economic to organisational ones.

The theories of transaction-cost economics, the resource-based view and the core competencies approach have been extensively used to justify the rationale behind strategic decisions on outsourcing. Some of the companies have clearly underestimated the necessary control mechanisms for managing outsourcing, even though they have followed implicitly or explicitly the three theories for strategic decision making (Bustinza et al., 2010; Dekkers, 2011).

A transaction cost is a cost incurred in making an economic exchange or, as is has been defined by Coase, "the cost of using the price mechanism" (Coase, 1937; 1988).

Transaction costs arise because of three problems: bounded rationality: it is not possible to foresee all possible cases that may arise and their outcome; information asymmetry: the contractors do not have the same information; moral hazard: the contractors are inclined to pursue their own interests above all else (even to the detriment of the other party).

It encompasses all the costs other than the money price, and can be divided into: search and information costs, bargaining costs and policing and enforcement costs (Dahlman, 1979). The first category, search and information costs, include costs whose existence is a consequence of information asymmetry (Akerlof, 1970) and imperfection about the quality of the product or service and about the existence or location of trading opportunities and alternatives between the part involved in the exchange.

A central thesis of economics of information research is that buyers search for information until the marginal cost of search exceeds the marginal benefit (Smith et al., 1999).

In his work Smith divide search costs into external and internal. Summarising in a few words his studies, we can notice that external costs are determined or influenced by factors that are beyond consumers' direct control, such as monetary costs to acquire information or the opportunity cost of time spent the search, while internal costs reflect the cognitive effort buyers must engage in to direct search inquiries. Furthermore he put three research hypotheses that, according to him, influence the decision whether to collect information and to what extent, related to the overall search level, the search source and the search pattern.

A more specific dissertation of the problem is not the main objective of this part but we can use his results to validate the following statement: the search and information costs vary depending on the type of the actors, especially of the buyer, and of course on the type of good or service. As a general rule, the more complex and expensive the product is, the higher the search and information costs will be. At the same time, type of product and type of good/service act similarly: an industrial buyer involved in a business-to-business exchange will put a great effort and rigour in the due diligence of a product, not only on the characteristics of the product itself but also on the existence of alternatives substitute both with another product or another producer. On the other hand, if we think about a less 'structured' buyer and/or about a more common product, e.g. supermarket customers buying a fastmoving-consumer-good, we can easily figure out that the effort they make in looking for information – which results in the search and information costs – will be less with respect to the previous case. We could conclude arguing that search and information costs are linked with the nature of the transaction and, of course, must not exceed the value of the product/service in terms of money, time and energy.

The second category of transaction costs is the bargaining costs one. Once the search for information is over, bargain to come to an acceptable agreement between the actors starts. Once again, also this category of costs depend on the nature of the transaction, first of all because bargaining is not always a part of the exchange process.

On the other hand, "if one assumes rationality, no transaction costs, and no legal impediment to bargaining, all misallocations of resources would be fully cured in the market by bargains" (Calabresi, 1968). The scope of bargaining negotiations is not only the price of the product/service but also the other conditions of the exchange, such as contract, terms and requirements.

The last category, policing and enforcement costs, includes the costs that happen after the exchange process to ensure that all the conditions of the exchange itself are respected by the parts and nevertheless the costs of taking action in response to a misconduct. Transaction costs economics is directly linked with Coase's theory of the firm. The reasoning starts from two main consideration: firms transform input in output and are made of employers and employees. However, also individuals are able to do the transformation job and market transaction can be seen as employers-employees relation as well. So the question is why do firms exist and what do they add to the individuals and market functioning.

The second main theory behind outsourcing is the so-called resource based view. The question Wernerfelt (1984) asked was: 'Under what circumstances will a resource lead to high returns over longer periods of time?'. He first exemplified what resources are; e. g. brand name, technology, skilled personnel and so on and then used Porter's five competitive forces model (Porter, 1985b) to analyse them. An analysis of bargaining power of supplier and buyers as well as the threat of substitute is provided.

Finally, the last of the theories object of analysis: core competence approach. A core competence may be defined as the main strengths or strategic advantages of a business; a company's unique characteristic or capability that provides it a competitive advantage in the marketplace, allows it to deliver value to its customers, and contributes to its continued growth (Prahalad & Hamel, 1990).

Both resource based view and core competence approach find a complete explanation and make sense together with the concept of competitive advantage, first introduced by Porter (1985), who started by the assumption that the competition is critical to the success of failure of a business.

The choice of a competitive strategy, i.e. the research of a favourable competitive position in the market, is driven by two main elements: the attractiveness of a market on the one hand and the characteristics of the relative competitive position on the other. None of these two elements is sufficient on its own: they both have to work together to provide a valid strategy for the firm.

According to Porter, there are two main alternative sources of competitive advantage: cost leadership and differentiation. Cost leadership is when a company is able to produce the same product or service at lower costs and thus offer it at a lower price with respect to competitors'. On the other hand, differentiation is offering a differentiated product or service at a higher price. The fundamental condition to apply this strategy is the recognition by the customer of the greater value added.

Outsourcing is traditionally associated with the cost leadership strategy: the cost reduction can be achieved in fact by innovation of the production process, by eliminating useless costs or by outsourcing. Differentiation, on the other hand, requires investments in marketing and communication.

There is actually also a third strategy, the so-called focus, which can be both cost focus or differentiation focus, that is different from the first two above because is based on the choice of a defined competition area, a segment of the market.

Once chosen the strategy, it is important to protect the competitive advantage from competitors' innovation and imitation policies.

2.2.2 Benefits and Costs

As every aspect of business management, outsourcing has its own benefits and costs, that can be translated into advantages and risks in managerial economics.

In a context of global supply chain competition, any single point of failures will cause problems in the entire network. Hence, it is the important for any organisation involved in the network to adopt effective risk assessment methods to manage and mitigate all possible risks. Outsourcing is a popular option for the firms as it keeps cost down and leans the supply chain. High responsiveness together with cooperation efforts with partners can help to formulate a good risk assessment strategy (Lee et al., 2012).

Advantages of outsourcing are numerous. We can divide them into three groups: strategic and organisational, economic and financial, and operational, as shown in the figure below (Figure 15).

Figure 15 Outsourcing Advantages

Strategic and	Economic and	Operational
Organisational	Financial	
Core business	Costs	Product/Service
Flexibility	Fixed \rightarrow variable	Efficiency
Stakeholders	Economies of scale	Human Resources

The first and most cited strategic and organisational advantage of outsourcing is the possibility for the company to focus on the "core business". Outsourcing, indeed, decreases by definition the number of activities directly managed by the firm, and, at the same time, avoid the need to invest in secondary activities.

Another advantage that falls into the strategic advantages category is flexibility, i.e. a greater capacity to cope with sudden changes in volume in sales, as the partner, thanks to its specific organization, is able to compensate the peaks of a customer with others to contrary seasonality.

Several authors over the years have identified flexibility as an advantage, not only thanks to the partner specificity, but also to the ability to redefine the organisation of the firm itself (Downey, 1995; Akomode et al., 1998).

Nevertheless, a company may have image advantages, especially on how the operation looks to the stakeholders (Embleton & Wright, 1998; Lonsdale & Cox, 2000).

On the side of economic and financial advantages, the most important and common one is without any doubt the cost reduction. One of the main reason for outsourcing, coming directly from the make-or-buy dilemma, is that to buy (outsource) a product or service as a lower cost with respect of the alternative of making it in-house. This is possible because the company relies on specialized partners that have as their primary business the activity that the company outsources. Another aspect linked with costs is that outsourcing make possible to transform some fixed costs into variable costs, since, for example, the costs of personnel and equipment (amortisation) involved are externalized together with the activity.

On the other hand, the larger economies of scale of the external supplier which brings together the activities of different companies in the same sector can lead to cost savings and therefore price reductions.

Finally, some operational advantages are involved: first of all, with outsourcing it is possible to improve the level of a product or service through the use of specialized partners. More generally, many authors have shown a greater efficiency and an improvement of operational performance, including costs, speed , quality and flexibility (McFarlan & Nolan, 1995; Embleton & Wright, 1998; Akomode et al., 1998; Lonsdale & Cox, 2000).

Some benefits are reported also for human resources: outsourcing allows to enhance the personnel, as they are no longer engaged in routine work, and they can focus more on the aspects of firm's focal activities, improving professionalism.

Outsourcing is not only about advantages and benefits: also some risks and disadvantages are involved. The main disadvantages are summarised in the Figure below, presented in three categories: strategic, relational and operational. (Figure 16).

Figure 16 Outsourcing Disadvantages

Strategic	Operational	Relational
Flexibility	Human Resources	Dependence
Variety	Customer	Control
Know-How	Costs	Assessment

Flexibility can be one of the benefit of outsourcing but, at the same time, also a disadvantage falling into the category of the strategic disadvantages: outsourcing means in fact losing over time the skills necessary for the outsourced tasks, and the subsequent dependency on the vendors reduce the flexibility of the company. For the same reason, there is a risk of losing the opportunity to re-engineer, since, once any activity is outsourced, the priority in-house tends to focus on retained activities. The reduction of the variety is itself a bad thing: for example it reduces the economies of scope. More generally, a risk may be seen in the loss of the specific know-how, in the event that a member of staff to be absorbed by the service provider or in any case be transferred to another area of the company.

From the operative point of view, internal to the firm, a problem can be the demotivation of the staff, following the gradual demobilization of the internal structure; problems can emerge at the level of the workforce and there could be a potential negative impact on human resources, where outsourcing creates redundancies or limits careers.

On the other hand, some issues may occur because of the difficulty in controlling the level of service offered to end customers, due to the need for an adequate system of performance measurement of the supplier and internal interface of the company and, more generally, because of the loss of direct contact with the end customer.

Not less important, even though outsourcing is traditionally meant to reduce costs, a cost escalation is not unlikely to happen, due to management overhead and vendor profit margin.

Relational risks involve the management of the relationship with the outsourcing partner. Some disadvantages may occur if the dependence of the company to its partner is too strong: this may leads to opportunistic behavior by the partner itself.

Furthermore, one of the most frequently mentioned disadvantage concerns the loss control (in terms of quality, production technology, market, etc.). implicit in decentralization outside a certain activity; and, connected to the previous issue, the possible passage of important internal skills to competitors through the external supplier and also the disclosure of confidential information about the company. Finally, it is clear that to obtain adequate results from decentralization is not always simple: frequently complex relations systems and assessment are needed.

Risks involved in outsourcing are not only from client's point of view but also from vendor's one. These risks are further identified at organization, sector, and national level (Agrawal, 2010).

Increased intensity in the management of global supply networks has resulted in the adoption of outsourcing strategies by a growing number of organisations. However, as an organisation's dependency on outsourced materials increases, it becomes more susceptible to the risk profiles associated with their suppliers. Supplier risk profiles are comprised of risk events which are associated with the supply network, internal operations, or external factors (Lockamy & McCormack, 2010). Supply chains have proven instrumental in improving efficiency within many industries, But supply chain organizations involve many risks. A key process involved in supply chains is a priori evaluation of potential partners, not only in terms of expected cost (which includes exchange rate risk), but also in terms of other risks. These risks can include product failure, producing company failure (such as bankruptcy), and even political risk. Internal sources of supply chain uncertainty include capacity availability, information delays, and regulatory compliance. External sources include competitor actions, political environment, market price fluctuations, uncertain costs, and supplier quality. Outsourcing increases some external uncertainties for core supply chain entities (for instance reliability of supply, compliance with quality) and reduces others (outsourcing will be expected to yield lower costs, which reduces the probabilities of losing customers in all likelihood) (Olson & Wu, 2011).

Several motivations (e.g. cost reduction, flexibility, access to new technologies and skills, access to new markets, focus on core activities) encourage companies to source processes outside of their organisational boundaries (outsourcing) or abroad (offshoring). This choice determines relevant risks, including data and knowledge expropriation. As far as the relocated processes are concerned, it is possible to

distinguish between information technology sourcing (ITS), business process sourcing (BPS) and knowledge process sourcing (KPS) (Nassimbeni et al., 2012).

Failure to effectively manage outsourcing risks could result in losses that outweigh expected benefits. While mainstream outsourcing literature has documented an extensive range of outsourcing strategies, few have examined in what circumstances a particular outsourcing strategy would be most suitable, let alone those with a distinct focus on strategies dealing with outsourcing risks (Kam, et al., 2011).

2.2.3 Competitive Outsourcing

Transaction costs economics, resource-based view and core competencies approach have been the theoretical basis for the classic conceptualisation of outsourcing relations. In the analysis of outsourcing evolution, an interesting classification has been proposed by Ricciardi (2000), who classified it based on the proximity of the activity to the core business and the managerial complexity of the activity outsourced. Combining these two dimensions, we can identify four outsourcing typologies: traditional, tactical, strategic and solution (Figure 17).

Figure 17 Outsourcing Classification



Source: Ricciardi based on Accabi & Lopez, 1995

In traditional outsourcing, support activities are externalised. Because of them being not too close to core business nor too complex to manage, the relationship between the firm and its supplier is not strategic. Tactical outsourcing regards more complex activities, but still far from the core business of the company (e.g. personnel training or IT system). Solution outsourcing concern low-complexity processes that are on the other hand close to the core business: this situation calls for a common vision of the firms involved in order to achieve shared results. Strategic outsourcing, finally, can be seen not only as a buyer-supplier relations, but also as a true partnership where the outsourced activity is both complex and close to the core business at the same time.

However, together with transaction costs and resource-based/core competencies, another theoretical basis can fully explain the rationales for outsourcing specifically in a global context: the market-driven management.

Market-driven management is a policy of long-term corporate development that constitutes a market-oriented business management, dominated by customer value, proposing a direct and continuous confrontation with competitors.

Already in the beginning in the millennium (Lambin & Brondoni, 2001), in a market characterised by the dominance of over-supply, the strategies of 'hyper-competition' were based on the assumption that a business is highly profitable only for firms that shape innovation and create 'demand bubbles', rapidly coming to meet them and abandoning them at the right time, leaving to competitors-imitators the residual portion of the bubble.

Day (1994) classifies the distinctive capabilities of the management of market-driven organisations, distinguishing between:

- Outside-in capabilities, concentrated primarily outside the company. Marketsensing capabilities have the goal of linking the processes so as to enable the business to anticipate events within the market and the reactions of the competition; other capabilities are relational in character and regard links with the customers and channel bonding.
- Inside-out capabilities, which include transformation processes, financial management, logistics, technological development and human resources

management, make it possible to respond to external opportunities. These capabilities express what a firm is capable of but only acquire value when they are seen in relation to an external opportunity and/or threat.

- And finally, spanning capabilities, which must allow the integration between inside-out and outside-in capabilities, and regard the development of strategies and of new products and services, pricing, order management and deliveries (Sciarelli, 2008).

In the lights of these considerations, we can propose a classification of outsourcing based on five indicators: motivation, perspective, activity outsourced, level of relationship, and duration (see Figure 18). Alongside traditional and strategic outsourcing, we can define a typology of competitive outsourcing.

	Traditional	Strategic	Competitive
Motivation	Cost-driven	Strategy-driven	Relation-driven
Perspective	Economic	Organisational	Sharing
Activity	Non-core	Core	Core/Non-core
Level of relationship	Dyadic	Chain	Network
Duration	Short	Long	Long

Figure 18 Traditional – Strategic – Competitive Outsourcing

Source: (Cesarani, 2014).

Before entering into the details of the three typologies showed, it is useful to better define the five describing indicators. The first indicator is the motivation, the main rationale, that justify the choice to outsource. It represents the major benefit or advantage wanted by the company. Of course it is just the leading objective and not the only one. The second indicator, the perspective, is the reason behind the action and the point of view that clarify the meaning of the choice. The third indicator is the activity outsourced and more specifically the relevance of the activity in term of its
distance from the core business of the company. The fourth indicator is the level of relationship that stand for the structure of the relationship itself in terms of partners involved. The fifth and last indicator is the duration of the relationship, not only in terms of time, but also with respect to frequency and easiness to change partner.

Once defined the indicators, we can easily proceed to describe the typologies. Traditional and strategic outsourcing are well known in the scientific literature, while competitive one represents an emerging issues in management.

Traditional outsourcing is cost-driven: the main reason to externalise an activity is to reduce costs, as a consequence of a make-vs-buy dilemma suggesting that is the cheapest alternative to buy a product or service from an external supplier rather than to make it in-house. The perspective behind this choice is therefore economic and the activity object of outsourcing are most of the time non-core. The level of relationship is usually dyadic, involving only two parts, and the duration is short, limited to unique activities.

Strategic outsourcing is instead strategy-driven and based on an organisational perspective. Since it normally involves core business activities, the main objective is not merely to reduce costs: outsourcing may be an useful strategy to gain quality for products or services and to better organise the activity of the firm. The level of the relationship can still be dyadic, but it is more likely to be of a chain form, involving a more complex set of actors and organisations.

The list of differences between traditional outsourcing and strategic outsourcing must not be seen as exhaustive and the evolution from one form to the other does not mean that traditional form is antiquate and no longer used. Contemporary examples of traditional outsourcing may be found in standard supply contract, original equipment manufacturing, some form of IT outsourcing and so on. On the other hand, strategic outsourcing looks more like a real partnership of collaboration, although is not compulsorily set on a network base. One of the main aspects that calls for the definition of a contemporary outsourcing typology is indeed today's network predominance and the current phase of globalisation of the market.

Competitive outsourcing, unlike traditional and strategic, has a relation-driven motivation. Competitive outsourcing, in other words, is the expression of marketdriven orientation focused on outside-in management, articulated in (Brondoni, 2007):

- Identification of offers with higher value with respect to competitors' to force a meeting with the demand;
- Creating the maximum value *pro tempore* by designing and delivering goods to specific demand bubbles;
- "Time-based" acquisition of market knowledge.

Leaving untouched the cost and the strategy dimensions, a need for relationship joins as a consequence of the network structure of nowadays companies. The perspective underneath is of sharing and collaborating. Activities involved can be core or non-core, this is not a characterising feature of this typology. The level of the relation is the network level, where firms exchange with supplier as well as with competitors. The duration of the relationship is rather long, despite the instability of the global markets that leads to considerable competitive intensity. For the same reason, there is a relatively elevated easiness to change partner, considering the concurrent reduction of the supplier base.

2.3 Outsourcing Relationship Management

2.3.1 Supplier Selection

□ Many companies face the challenge of outsourcing to low-cost countries. Still, many managers seem to be uncertain about (1) which inputs should be selected for this exercise; (2) which countries are preferred; and (3) whether to deal directly with suppliers or through a local distributor or agent. In all cases, companies became aware of the difference between low prices and low cost in terms of total cost of operations, total life cycle costs or total cost of ownership. (Kamann & Van Nieulande, 2010).

Supplier selection is the process by which firms identify, evaluate, and contract with suppliers. Several factors make new suppliers important. First, there may exist new suppliers that are superior in some way to a firm's existing suppliers. Second, existing suppliers may go out of business, or their costs may be increasing. Third, the buyer may need additional suppliers simply to drive competition, reduce supply disruption risks, or meet other business objectives such as supplier diversity (Beil et al., 2010).

Supplier selection research has traditionally focused on the firm-level impacts of supplier characteristics, evaluation frameworks and metrics, selection criteria, and means of cost reduction. Evidence from the contemporary popular press suggests that firms are increasingly taking interest in the socially responsible activities of their suppliers. Socially Responsible Supplier Selection is a firm's capabilities for and/or orientation toward selection of suppliers that embrace sustainability and CSR principles when conducting normal operations (Thornton et al., 2013).

Supplier selection factors can be classified into three subgroups: (i) the empirical evaluation of vendor selection criteria; (ii) the strategic importance of supplier

selection as well as the trade-offs between cost, quality and delivery; and (iii) the importance of single criteria. For the latter studies, (Lienland et al., 2013) additionally distinguish between (a) general factors and (b) reputation in detail and differentiate between the reputation's effect on the supplier's direct buyer and its implication on the final customer. Both the buyer and the final customer are relevant stakeholders.

Depending on the type of purchase, the selection process can be more or less articulated and can be analysed according to the degree of novelty of the product or service to buy (Hutt & Speh, 2012):

- New Task: the purchasing department must provide for the supply of a new product or, for which they have no historical data or any sort of benchmarks. In this situation, the company has no available suitable suppliers and the uncertainty regarding their characteristics and the product or service is relatively high;
- Modified rebuy: in this case the buying process involves a new product or service from known suppliers or buying known products from unknown suppliers. In this case the terms of the benchmark is limited to similar products/services or suppliers, but this reduces the inherent uncertainty over the previous situation;
- Straight rebuy: recurring purchase of a product or service already purchased before from already known and qualified suppliers. In this case, the purchasing office has at its disposal any form of benchmarks and historical information and the level of uncertainty is thus minimised.

Such a decision can be defined as a part of business buying process, the process where business buyers determine which products and services are needed to purchase and then find, evaluate, and choose among alternative brands (Kotler et al., 2013).

Business markets differ from consumer markets in terms of market structure and demand, nature of the buying unit and types of decision and decision-making process. Business markets, fist of all, are characterised by fewer and larger buyer, usually geographically concentered in certain parts of the world. When dealing with suppliers, a firm must consider not only the buying side, but also the selling one, i.e. its customers. In this sense, elasticity of the derived demand is very important in the process of supplier selection, especially with regards to costs and prices.

Costs of acquisition and quality of the input are thus the most important feature to consider, together with other conditions such as shipping and various transaction costs. On the other hand, together with these tangible aspects, is becoming nowadays more and more import to consider some other features linked with the corporate social responsibility.

□ There is an increasing realisation by managers that their company's social and environmental accountabilities do not fall solely under the control of any individual organization; multiple entities across supply chains must be involved to efficiently and effectively fulfil these societal responsibilities. As a result, managers are looking to identify ways to successfully meet these responsibilities, develop relevant tools that they can use to assist their efforts, and establish mechanisms for pursuing their sustainability goals in coordination with other members of their supply chain in an economically viable manner (Winter & Knemeyer, 2013).

 \Box A company is no more sustainable than the suppliers from which it sources – that is, a company is no more sustainable than the suppliers that are selected and retained by the company. (Krause et al., 2009). This puts purchasing and supply management in a central position on the road to achieving sustainability. However, fully understanding a company's sustainability profile requires a view of not only the company's direct suppliers but also its extended supply chain or even the wider network in which it operates (Miemczyk et al., 2012).

2.3.2 Collaboration and Assessment

□ In today's highly competitive, global operating environment, it is impossible to produce low cost, high quality products successfully without satisfactory suppliers (Vokurka et al., 1996).

The selection of supplier is completed by the assessment and evaluation of the partners, not only for outsourcing processes, but also for every relation established by a company. Assessment is the systematic collection, analysis and interpretation of information related to a particular outcome and is a long-term process. On the other hand, evaluation occurs at one moment in time and involves both quantitative and qualitative analysis of information.

The global context of competition has especially brought about profound changes to the role of strategic alliances and made necessary the introduction of collaborative networks between groups of companies of similar size and profile (Brondoni, 2003). The design of a business network include relationships not only with same level companies but also with partners and suppliers, in order to gain and keep competitive advantages. The first step of design a network is building alliances. A strategic alliance indeed can adopt many configurations: vertical alliance (when the partners are on different phases of supply chain), horizontal alliance (among direct competitors) and cross-industry partnership (among partners operating in different industries) (Arrigo, 2012).

Strategic sourcing decisions are generally related with evaluating and selecting the potential strategic suppliers that can effectively meet the long-term expectations of companies, developing and implementing the strategic partnership with these suppliers. In today's global and open innovation economy where concurrent product and supplier development are often the rule, strategic supplier selection and evaluation decisions must not be solely based on traditional selection criteria, such as cost, quality and delivery. In strategic sourcing, many other criteria should be

considered with the aim of developing a long-term supplier relationship such as quality management practices, long-term management practices, financial strength, technology and innovativeness level, suppliers' cooperative attitude, supplier's co-design capabilities, and cost reduction capabilities (Araz & Ozkarahan, 2007).

As we already pointed out, supplier selection process is completed by the assessment procedures. For this purpose, Huang & Keskar (2007) identify some metrics that can be useful for the assessment and evaluation of supplier (see Figure 19).

Figure 19 Hierarchy of Supplier Selection Metrics



Source: (Huang & Keskar, 2007).

- Reliability regards the performance of a supplier in delivering the ordered components to the right place, at the agreed upon time, in the required condition and packaging, and in the required quantity.

- Responsiveness is related to the velocity at which a supplier provides products to the customer.
- Flexibility regards the agility of a supplier in responding to OEM demand changes.
- Cost and Financial regards cost and financial aspects of procuring from supplier.
- Assets and Infrastructure regards the effectiveness of supplier in managing assets to support OEM demand.
- Safety regards occupational safety at the supplier's facility.
- Environment regards a supplier's effort in pursuing environmentally conscious production.

As companies are increasingly outsourcing more and more activities to suppliers in order to focus their core competences, the suppliers are pushed to co-operate (Choy et al., 2005). Many businesses, however, fail to complete necessary due diligence work before the outsourcing relationship begins and neglect to take sufficient care of the relationship, adopting an "out of sight, out of mind" approach once outsourcing begins. Successful outsourcing is no different from any other business relationship it requires nurturing and management so that the needs of all parties are met. It is critical that both the purchaser and the supplier of outsourced processes understand each other's expectations and dependencies, as well as focus on maintaining a strong communication channel. Regular monitoring and reporting, for example, provide valuable information on the health of the relationship. Moreover, the organization needs to consider carefully any risks involved in the outsourcing engagement and perform necessary up-front planning in advance of vendor selection. Internal auditors play an important role in making sure risks have been addressed and verifying that the necessary steps have been taken to ensure the outsourcing relationship is successful (Mosher & Mainquist, 2011).

A case of interest nowadays is the collaboration and assessment of supplier from a corporate social responsibility point of view (Figure 20).

□ To make their supply chains more socially responsible, two different governance mechanisms or approaches to greening suppliers and improving sustainable performance have been identified: supplier assessment and collaboration with suppliers. Assessment may be the first step to identify what actions are needed; however, firms need to engage in collaborative practices with the firms in their supply networks to improve sustainability (Gimenez & Tachizawa, 2012; Igarashi et al., 2013)



Figure 20 Extending Sustainably to Suppliers

Source: (Gimenez & Tachizawa, 2012).

2.3.3 Relationship Management

Buyer-supplier relationships refer to commercial transactions between organizations for the purchase and supply of goods or services. Although interorganizational transactions have always been important in purchasing and marketing practice, it is only comparatively recently that interest in buyer-supplier relationships has spread across a range of management disciplines—reflecting global changes in production methods and work organization in the late 20th century that have made the management of external relationships central to understanding contemporary organizational practices and performance (Bresnen, 2008).

The supply chain management process is based on the idea of efficient resource coordination and teamwork. Buyer and supplier relationships have become increasingly important for a number of reasons. First of all, there is a trend toward specialisation away from manufacturing an entire product and to more contract manufacturing and purchasing. In some market segments, it is estimated that 80 percent or more of total product revenue often passes directly to supplier as payment for labour, materials and equipment. This significant transfer of value downstream emphasises the importance and significance of supply chain relationship management. For any buying organisation to stay competitive in today's aggressive market sectors, it is essential that they maintain strong relationships with their best contract manufacturers and suppliers. Buying firms experiencing a great deal of pressure from customers and competitors to keep their edge and stay in business by reducing costs, improving products, improving services and enacting continuous improvement. With the decreasing number of suppliers used by buying firms, it is more important than ever to maintain strong buyer-supplier relationships (Benton, 2009).

 \Box An interesting parallelism can be made between supplier involvement and collaboration with stakeholders. As shown by Romenti (2010) in the analysis of the collaboration with stakeholders for reputation development purposes, putting stakeholder engagement at the centre of a model of corporate reputation development offers two important opportunities. First, stakeholder engagement acts as lever that can propel and translate corporate identity into concrete organizational behaviour. Second, it allows the organization to be consistent and maintain a temporal alignment between stakeholders' expectations and organizational behaviour (Romenti, 2010).

Hsiao et al. (2002) explored five prominent dimensions of the buyer-supplier relationship:

- Trust
- Communication
- Interpersonal relationship
- Cooperation
- Power-dependence

Trust is a crucial factor in sustaining the complex business network and contributing to the success of a firm. Building trust in business relationship brings some benefits, not only in terms of decreasing the transaction costs in the exchange relation reducing the risk of opportunistic behaviour but also facilitating cooperative transaction and thus increasing long-term orientation.

Effective communication in channel relationships can enhance levels of channel member coordination, satisfaction, commitment levels, and performance.

In the same way, personal relationships play a significant role and thus building and maintaining personal networks is key to achieving long-term success.

Cooperation can be defined as "similar or complementary coordinated actions taken by firms in an interdependent relationship to achieve mutual or singular outcomes with expected reciprocation over time" (Anderson & Narus, 1990). Cooperation between the exchange parties reflects the expectations of working together to achieve mutual and individual goals jointly.

The issue of power is closely associated with the nature of dependency in business relationships.

The combination of supplier and buyer competences lead to joint capabilities based on a unique strategic combination. The buyer's competitive positions rely on the suppliers' resources and capabilities as well as the chosen inter-firm relationship. Basing competitive advantage on the suppliers' competences requires the buyer to build and maintain appropriate routines and processes and to work with suppliers possessing complementary competences (Dyer & Singh, 1998).

A more recent analysis by Brandes et al. (2013), identifies four types of supplier relationship (Figure 21):

- Selected Supplier Strategy
- Partnership Strategy
- Cooperation and Outsourcing Strategy
- Global Sourcing Strategy

Collaborative relationships require partners to contribute some of their managerial and technical expertise to the relationship. This transfer of knowledge can be a valuable source of ideas for improvement because both parties are required to prepare and organize operations in which they are highly skilled to match the type of relationship.

Figure 21 Types of Supplier Relationship

Strategy	Key Driver	Re	elationship Characteristics
Selected Supplier	Covering shortages in own	-	Long-term
	R&D capacity	-	Different contracts for R&D
			and delivery of products
		-	Limited integration (not
			shared responsibility)

Partnership	Shorten time-to-market	-	Relationship established for
	Integration of R&D,		the product lifetime
	production and delivery of	-	Intensive integration and
	subsystems		shared meetings between
			OEM and supplier
Cooperation and	Acquiring and utilizing	-	OEM focused more on
Outsourcing	supplier knowledge		getting high technical
			solution than on a unique
			subsystem
		-	Supplier increases its
			knowledge through projects
			with several OEMs and
			shared solutions
Global Sourcing	Cost and volume of	-	R&D handled in a
	components of higher value		contractual way with IPR.
	than technical novelty		Separate contracts for R&D,
			production and delivery

Source: (Brandes et al., 2013).

The classification proposed by Brandes et al. (2013) underestimate the importance of inside-out and outside-in management.

Firms adopting an outside-in management go far beyond a simple observation of rivals and understanding of consumers' desires, they remodel the supply chain by eliminating and inserting partners depending on the conditions of the markets, or they give new tasks to actual partners in relation to the firm's requirements On the contrary, with an inside-out management, the corporate strategy begins internally and looks outside the firm. Firms need to build and integrate their skills from a vantage point in order to be on the alert to the opportunities and threats present on the environment (Arrigo, 2012).

The inside-out and outside-in orientations place differing levels of emphasis on internal versus external resources and capabilities as sources of competitive advantage. While the inside-out orientation primarily considers organizational resources, followed by competitors and customers (implicitly), the outside-in orientation appears to reverse the order by first examining customers and competitors and then the degree to which the firm responds to them, implicitly addressing organizational resources (Saeed et al., 2015).

Refereeing specifically to outsourcing supplier relationships, it is possible to better define the typologies presented in the previous paragraph with respect to management orientation (see Figure 22).

Figure 22 Outsourcing Strategy and Orientation

Typology	Orientation	Focus
Traditional Outsourcing	Inside-out (non-core)	Internal core competences
Strategic Outsourcing	Inside-out (core)	Internal and external competences
Competitive Outsourcing	Outside-in	Competences sharing

Vincent (2008) have observed much unnecessary confusion around the terms competence and capability. Since the 1991 Harvard Business Review article on "core competencies," and with the more recent phrase from David Teece and others of "dynamic capabilities," it may be useful to distinguish briefly and precisely between these two notions. Competence is the quality or state of being functionally adequate or having sufficient knowledge, strength and skill. On the other hand, capability is a feature, faculty or process that can be developed or improved. Capability is a collaborative process that can be deployed and through which individual competences can be applied and exploited. With an outside-in approach, this exploitation is not limited to a company's own competences but it rather involves partners' competences too, at a network level.

Such collaboration process do not entirely fall under the outsourcing type, but are more generally identified as strategic alliances. Strategic alliances for competitive collaboration highlight the common feature of the 'competitive network' with which companies engaged in global markets. Beside International Joint Ventures and equity participation, whereby a company owns a capital stock in other companies in order to be in a position to either control or influence actions and activities, strategic alliances which are not based on share-holding (non-equity alliances, see Figure 23) set out different forms of contractual arrangements (Brondoni, 2003).

Alliance	Description
Co-Production	Several businesses work together to manufacture a certain product. If each participating company specializes in producing specific parts of an asset or in developing processes geared towards minimising costs or differentiating a product, the joint development of production process aims to achieve a final product with superior features
R&D Partnership	Companies allocate defined resources and distinct skills in order to share the costs of a specific and particularly expensive research project, or combine human resources and technological capabilities to introduce or develop precise innovations

Figure 23 Non-Equity Alliances

Outsourcing	Initially aimed at simple reducing
	production costs, they are also
	becoming a competition-related factor,
	involving suppliers' R&D capacities
	and expanding the operational
	framework to a network level
Supply Chain Partnership	Long-term relations with a selected
	number of suppliers who undertake to
	punctually deliver parts and
	components of a predetermined quality.
	motivated by benefits gained from just-
	in-time
Cooperative Marketing	Joint marketing programs are carried
	out when companies from different
	countries sign reciprocal marketing
	agreements relating to the introduction
	and/or business development of given
	products for a defined period of time
Licencing	Provides a means of entering a new
	market without substantial investment
	and testing a foreign market with a new
	product launch
Franchising	The franchisor grants a franchisee, via
	contractual agreement, the opportunity
	to use a trademark, a sales system and
	other proprietary rights, in exchange for
	an amount calculated on sales volume

Source: Adapted from Brondoni, 2003.

The capability to establish close and long-term relationships with suppliers and other strategic partners has become a crucial factor in creating competitive advantage. At the same time, various stakeholders are showing an increasing interest in environmental and social issues related to international business (Andersen & Skjoett-Larsen, 2009). Even if sustainability could be implemented step by step, there is no doubt that we need to have perspectives outside the mother factory for a truly sustainable manufacturing strategy. This means that other structural decisions of the manufacturing strategy become important: what should be our position in the value chain?; where should facilities and partners be located? (Rolstadås et al., 2012). Indeed outsourcing is an important strategic decision in manufacturing, whereby a competitive advantage may be gained when products or services are produced more effectively and efficiently by outside suppliers.

Traditional outsourcing and offshoring decisions mainly emphasise outsourcee (supplier) selection problems, with their focus upon economic factors. Furthermore, additional and integrated facility location factors need to be included into the offshoring decision process (Dou & Sarkis, 2010). Firms embarking on offshore outsourcing create value by effectively managing their internal and external resources in accordance with a changing global environment. Anyways, it is noteworthy that most prominent offshoring destinations (e.g., India, China, Philippines, and Russia) are emerging economies, with relatively weak institutional frameworks, inefficient legal systems, poor intellectual property right protections, and weak contract enforcement. The externalization and creation of value in such environments thus requires the effective management of resources by client firms (Mukherjee et al., 2013). Due to increasing competition and changing business environment, corporations are pursuing different supply chain management strategies to fulfil a variety of customer requirements and improve profits. Generally, enterprises pursue performance improvement through better use of supplier capabilities and technology to create a seamless co-ordinated supply chain. For example, adaptability, capability and flexibility in suppliers are crucial indices for outsourcing in supplier management (Wee, Peng, & Wee, 2010).

□ A particular case is when a company outsource knowledge and innovation activities: in fact, this type of outsourcing offer cost savings and superior performance, but can also put a firm's unique resources and capabilities at risk. Characterizations of outsourcing as a make-orbuy decision do not fit well with decisions on knowledge process outsourcing (KPO). KPO is a make-or-ally decision, as firms seek a governance structure that will both protect and leverage their strategic knowledge assets, with the final decision often coming down to a choice between different alliance forms (Mudambi & Tallman, 2010).

Outsourcing is a key supply chain practice that is on the agenda of many organisations. In many instances outsourcing was initially implemented in non-core activities and then diffused into almost every function, even the core of a business. An extensive amount of outsourcing research has been conducted on the management of outsourcing initiatives (Kroes & Ghosh, 2010). Especially, researchers have focused their attention on outsourcing related governance practices and mechanisms such as contracts, relationships and sanctions (Goo et al., 2009). These practices are supposed to increase the likelihood of a successful outsourcing initiative. The governance of the outsourcing initiative can be viewed as a key to its success factor (Wiengarten et al., 2013).

Outsourcing performance is significantly influenced by extensive strategic evaluation and proactive relationship management practices. A more complete contract positively impacts outsourcing performance in two ways; first, through reducing risk and uncertainty by way of more detailed specifications of obligations and procedures and, second, through enhancing inter-firm resource efficiency through coordination provisions. Furthermore, the success of outsourcing contracts might be complemented through legally binding monitoring and enforcement practices or trust building relationships (Handley & Benton Jr., 2009).

Chapter 3

Outsourcing and Global Network: the IKEA Case

3.1 Corporate Structure

Ikea is a Sweden-based global company that design and sells ready-to-assemble furniture and home accessories.

The IKEA name combines the initials of IKEA founder, Ingvar Kamprad, (IK) with the first letters from the names of the farm and village where he grew up - Elmtaryd and Agunnaryd (EA).

Ingvar Kamprad founded IKEA in 1943, when he was 17 years old. It originally sells pens, wallets, picture frames, table runners, watches, jewellery and nylon stockings - meeting needs with products at reduced prices. Only some years later, in 1948, furniture was added into the IKEA range, produced by local manufacturers in the forests close to Ingvar Kamprad's home. In 1951 the first IKEA catalogue was published and, a couple of years later, the first furniture showroom opened in Älmhult, Sweden, the same place where, five years later, in 1958, the first IKEA store was opened. By the end of the '50s, 100 co-workers were employed by the company. The expansion of IKEA outside Sweden started in 1963, when a store was established in Norway. The first store outside Scandinavia was established in Switzerland ten years later, in 1973.

According to the latest figures available (IKEA, 2014), IKEA operates through 315 stores (owned or operated under franchise agreements with Inter IKEA Systems plus 46 stores operated by franchisees outside the IKEA Group) in 42 countries, employing around 147,000 co-workers (more than 110,800 in the retail area). The range of products offered include about 9,500 references that are all principally the same in the IKEA stores around the world and provide a total sales volume of 28.7 billion of Euros. On the supply side, IKEA has 1,002 home furnishing suppliers in 51 countries, including IKEA Industry production which accounts for 12% of the total

purchase value. Figure 24 shows the distribution of selling and purchasing activities, organised by regions and countries.

Top Selling	5			Top Purchas	ing		
Regions		Countries		Regions		Countries	
Europe	69%	Germany	14%	Europe	59%	China	25%
North America	15%	USA	12%	Asia & Australia	35%	Poland	18%
Asia & Australia	9%	France	8%	North America	3%	Italy	7%
Russia	4%	Russia	6%	Russia	3%	Sweden	5%
		UK	6%	South America	1%	Lithuania	4%

Figure 24 Top Selling and Purchasing Regions and Countries

Souce: IKEA, 2014.

IKEA vision is "to create a better everyday life for the many people".

The business idea is "to offer a wide range of well-designed, functional home furnishing products at prices so low that as many people as possible will be able to afford them". This idea can be explained though the concept of "Democratic design", that brings good design to the many people by combining a just-right mix of form, function, quality and sustainability at an affordable price. Furthermore, IKEA visit thousands of homes every year to see how people live. "Meeting people in their homes is the best way for us to learn more about their needs, dreams and living situations". Nevertheless, it is remarkable that more than half or the world's population lives in cities: as people continue to move into urban centres, living spaces get smaller and the need for smarter living solutions grows. The IKEA Group of companies (INGKA Holding B.V. and its controlled entities) has an ownership structure that ensures independence and a long-term approach.

Stichting INGKA Foundation based in the Netherlands is the owner of INGKA Holding B.V. (and The IKEA group) and its funds can only be used in two ways, either reinvested in the IKEA Group or, donated for charitable purposes through the Stichting IKEA Foundation. The IKEA Group operates throughout the whole value chain from range strategy and product development to production, distribution and retail. This includes manufacturing units, trading offices, customer distribution centers and stores. The IKEA Group franchises the IKEA retail system and methods from Inter IKEA Systems B.V. in the Netherlands. Inter IKEA Systems B.V. is the owner of the IKEA Concept and the worldwide IKEA franchisor (see Figure 25).

Figure 25 The IKEA Group

Stichting INGKA Foundation Owner of the IKEA Group			Charity Stichting IKEA Foundation Management of financial assets Stichting IMAS Foundation	
	The (INGKA Holding B Chairman of the superv President a	IKEA Group .V. and its controlled of isory board, Lars-Johan ind CEO, Peter Agnefjäll	e ntities) Jarnheimer*	
Production	Range & Supply	Retail & Expansion	Group Functions Business Navigation & Finance	
44 Production Units	9,500 Products	315 IKEA Group Stores	HR IT	
20,100 Co-workers27 Trading Service Offices110,4 Co-wo Co-wo13 Customer Distribution	110,800 Co-workers	Legal Risk Management & Compliance Strategy & Process Sustainability		
	Centres 34 Distribution Centres		Contros	
	16,100 Co-workers		Shopping centres	

Source: IKEA Website, 2015

Inter IKEA Group is through Inter IKEA Systems B.V. the holder of the intellectual property assets under which the IKEA retailers operate.

The business is organised into three divisions, with the Franchise Division as the core (see Figure 26).

The Franchise Division with Inter IKEA Systems B.V., the owner of the IKEA Concept, franchises systems, methods and solutions to franchisees worldwide for marketing and sale of IKEA products under the IKEA trademarks. The division has the overall responsibility to safeguard the continued success of the IKEA Concept, in order to benefit the many people over generations. Inter IKEA Systems B.V. ensures that IKEA Concept know-how is continuously developed, transferred, and made available to all IKEA franchisees. The Property Division strives to create long term value through property investments. The cornerstones of the operations are management of portfolio properties and development of commercial real estate. The Finance Division includes investment activities as well as treasury management. The asset management in the Property and Finance divisions aim to ensure financial stability and create long term value. The Property and Finance divisions are however not directly associated to any IKEA retail operations.



Figure 26 IKEA Group Structure

Source: Inter IKEA Group Website, 2015.

3.2 Supply and Production

IKEA's supply chain is organised in three parts: production, supply, and retail. Strategic, long term decisions concerning the sourcing network and the supply chain, as well as concerning the marketing of the products, are taken at IKEA head office (Deligonul et al., 2013). IKEA's networking capability involves building relationships with a number of key actors in the countries where the firm operates (Elg et al., 2008), but its global sourcing network is an especially important source of strategic advantage. Supplier relationships serve the firm to cut costs but also to develop new products, find new materials and new production solutions. This also means that most supplier relationships have a long term orientation and that the majority of the purchases are made within deep and established relationships (Baraldi, 2008).

Industrial networks and business relationships play key roles for the strategy of IKEA and of most firms. Therefore, firms need a "network strategy", that is, they need to consider and use the external network in order to accomplish their own goals (Baraldi, 2008). In order for a firm to implement a network strategy and achieve its own goals, the focal firm's resources must be combined with those of external actors through some interaction processes facilitated if the goals and resources of the various parties match each other. Therefore, evaluating the goal and resource matching with specific counterparts can help in choosing from the beginning partners with more attuned resources and goals and in supporting the negotiations necessary to increase the goal congruence with specific partners. Therefore, business relationships with key partners need to be carefully handled to establish strong outposts in the network. On the other hand, the external network cannot compensate for the gaping weaknesses of unprepared firms. In fact, forming the network by attracting counterparts and continuously interacting with them requires that a firm is capable and prepared to "meet the network" in three main ways:

- by possessing extensive and specialised competences;
- by creating appropriate inter-organizational interfaces;

- by promoting a network-oriented culture that favors a long-term approach and the creation of mutual trust instead of the abuse of power over partners.

Nevertheless, being flexible enough to change internal competences and interorganizational interfaces to better interact with a changing network is also a key factor.

The relevance of IKEA's network is primarily due to the contribution of the same to the objective of getting and keeping the costs at the lowest possible level.

According to Arrigo (2005), IKEA's low cost policy is based on:

- economies of scale (large volumes reduce the unit cost of production);
- economies of transport (large orders of products permit to IKEA to transfer transport costs to suppliers);
- low running costs inside the stores (for example, the group uses buildings that are easy to build and inexpensive to manage, and it also has a 'dress-down policy', with all employees wearing the same uniforms, which are very simple and practical);
- purchases of unassembled products from suppliers with a consequent reduction of costs (taxes are lower for components than for finished products).

IKEA states that 59% of the production takes place in Europe (IKEA, 2014); however, it is not specified if this percentage is calculated with respect to value or to volume. For this reason, it is interesting to analyse the contribution of China, that represents the first country for purchasing, in the firm's supply chain and activities. In the top 5 of purchasing countries, after China that counts for 25% of the total level, we can find Poland (18%), Italy (7%), Sweden (5%) and Lithuania (4%).

IKEA started its retail operations in China in 1998. To meet local laws, it formed a joint venture that served as a good platform to test the market, understand local needs, and adapt its strategies accordingly. It understood early on that Chinese apartments were small and customers required functional, modular solutions. The company made slight modifications to its furniture to meet local needs, as shown in Figure 27.

Europe	China		
Value Proposition			
Good quality, stylish furniture at low	Good quality, western-styled aspiration		
and affordable prices	brand for the middle-class population		
Valued	Network		
Pro	duct		
Stylish, functional products and home	Slight modifications to products to suit		
furnishings	the local market and reflect Chinese		
	apartment sizes		
Store Location			
The suburbs, next to highways so that	The outskirts of cities, next to rail		
access by car is easy	networks as most customers use public		
	transport		
Pr	ice		
Low price	Affordable prices		
Promotion			
IKEA catalogue is the main marketing	Advertising on Chinese social media and		
tool	micro-blogging website Weibo has been		
	popular		
Logistics			
Products are sourced and made in	Raw material and products are sources		
developing nations like China and	locally. IKEA also built two factories in		
Malaysia and then shipped to Europe	Shanghai to avoid high import taxes		

Source: (Chu et al., 2013).

One of the main problems for IKEA was that its prices, considered low in Europe and North America, were higher than the average in China. Prices of furniture made by local stores were lower as they had access to cheaper labour and raw materials. IKEA built a number of factories in China and increased local sourcing of materials. About 65 per cent of the volume sales in the country come from local sourcing (Chu et al., 2013). These local factories resolved the problem of high import taxes in China. The company also started performing local quality inspections closer to manufacturing to save on repair costs. High prices were one of the biggest barriers in China for people to purchase IKEA products. The company realised this and started targeting the young middle-class population. This category of customers has relatively higher incomes, is better educated and is more aware of western styles. IKEA also had to tweak its marketing strategy. In most markets, the company uses its product catalogue as a major marketing tool. In China, however, the catalogue provided opportunities for competitors to imitate the company's products. Indeed, local competitors copied IKEA's designs and then offered similar products at lower prices. IKEA decided not to react, as it realised Chinese laws were not strong enough to deter such activities. Instead, the company is using Chinese social media and micro-blogging website Weibo to target the urban youth. IKEA also adjusted its store location strategy. In Europe and the US, where most customers use personal vehicles, IKEA stores are usually located in the suburbs. In China, however, most customers use public transportation. So the company set up its outlets on the outskirts of cities which are connected by rail and metro networks.

3.3 Partner Selection and Involvement: the IWAY Code of Conduct

□ The supplier relationships are not just long term buyer-seller relationships, based upon trading products, but strategic commitments where IKEA places a major effort into making the suppliers understand and support the firm's business model and brand values (Ghauri et al., 2008).

IWAY is the IKEA code of conduct, first introduced in 2000. It specifies the requirements for suppliers of products and services and details what they can expect in return from IKEA.

A code of conduct can be considered a tool of corporate governance because it identifies corporate responsibilities towards stakeholders and obliges top managers to comply with certain guidelines when exercising their authority, both inside and outside the company. We must distinguish between the code of conduct and the code of ethics: the former, which is 'rules based', aims to offer a solution to every possible situation and helps to outline corporate strategies, i.e. the behaviours to adopt when specific problems emerge; the latter, which is 'value based', provides a set of ethical principles and corporate values4. The code of conduct is therefore closely linked to the code of ethics because the behaviour to adopt in specific situations depends on the strategic mission principles, and may even incorporate a code of ethics (Arrigo, 2006).

IWAY standards set the minimum requirements for environment and social/working conditions when purchasing products, materials and services.

The document, based both on international and internal references, is organised into 14 sections, each of them dealing with a specific topic of sustainability and corporate responsibility. By taking on these social responsibilities, IKEA undertakes social and environmental activities that are close to its corporate values. Respect of the code is guaranteed by systematic monitoring undertaken in part directly by the organisation, through specialist inspectors, and in part, indirectly by impartial independent auditing companies. The first section includes the so-called IWAY Must, the start-up requirements that must be complied with before signing a business contract. It is focused on 6 main points, shown in Figure 28.

Title	Description
Prevention of child labour	IKEA does not accept child labour. All
	measures to prevent child labour shall be
	implemented taking into account the best
	interests of the child
Forced and bonded labour	The IKEA supplier shall not make use of
	forced, prison, bonded or involuntary
	labour
Severe environmental pollution	The IKEA supplier shall prevent severe
	environmental pollution
Severe safety hazard	The IKEA supplier shall prevent
	workers from exposure to severe safety
	hazards
Records on working hours and wages	The IKEA supplier shall maintain a
	transparent and reliable system for
	records on working hour and wages
Workers' accidents insurances	The IKEA supplier shall provide
	accident insurance covering medical
	treatment for work related accidents to
	all workers

Figure 28 IWAY Must

Source: (IKEA, 2008).

Chapter two deals with the general conditions, from compliance commitment and responsibility to communication to sub-suppliers and workers, and from internal audits to the update of laws and regulations.

The rest of the document analyses the aspects pointed out in the first section. More particularly, it talks about:

- Environment: this section begins with the environmental classification of laws and regulations regarding environmental protection together with the reporting rules and the inspection system of the authorities in charge. It then goes into the details of outdoor air and noise pollution on the one hand and of ground and water pollution on the other. A section is dedicated to the reduction of energy and environmental impact from production and operations.
- Chemicals: chemicals include substances and products such as oil, glue, paints, solvents etc. In this section there is a list of requirements applicable for all chemicals used in production, operations and maintenance, encompassing every aspect from procedure to competence and training, from storage and transportation to labelling.
- Waste: as for the previous section, a list of requirement is available for both hazardous and non-hazardous waste.
- Fire prevention: this chapter specify same of the safety procedures useful in case of fire, such as fire-fighting equipment, escape routes, emergency exits and evacuation drills.
- Worker health & safety: this part deals not only with accidents and safety training and devices but also with first aid equipment and workplace conditions.
- Housing facilities: this point states that the IKEA supplier shall ensure reasonable living space, cleanliness, privacy, quietness, safety, personal hygiene and access to drinking water.
- Wages, benefits and working hours: specifications about contracts, working hours and days off, wages and benefits are provided.
- Prevention of child labour: the policy about child labour is presented in a very concise but precise way, stating that IKEA does not accept child labour at any

level, including sub-contractors. On the other hand, IKEA supports the legal employment of young workers.

- Forced and bonded labour: as for the child labour, also forced and bonded labour are forbidden. Several instructions are given, from the prohibition to use prison workers and military personnel to that of delaying payments of workers' salary for more than one month or withhold wages, document, or other personal belongings.
- Discrimination: The IKEA supplier shall not discriminate with regards to workers based on race, religion, beliefs, gender, marital or maternal status, age, political affiliation, national origin, disability, sexual orientation or any other basis.
- Freedom of association: freedom of association and collective bargaining are permitted and guaranteed.
- Harassment, abuse and disciplinary actions: any form of forms of mental or physical coercion is prohibited, as well as harassment or abuse in the workplace.

International References

- The Universal Declaration of Human Rights (UN 1948)
- Convention on the Rights of the Child (UN 1989)
- Minimum Age Convention and Worst Forms of Child Labour Conventions (ILO Conventions 138 and 182)
- Fundamental Principles and Rights at Work (ILO 1998)
- Forced Labour Convention and Abolition of Forced Labour Conventions (ILO Conventions 29 and 105)
- Equal Remuneration Convention and Discrimination (Employment and Occupation) Convention (ILO Conventions 100 and 111)
- Freedom of Association and Protection of the Right to Organise, Right to Organise and Collective Bargain Convention (ILO Conventions 87 and 98)
- Occupational Safety and Health Convention (ILO Convention 155)
- The Ten Principles of the UN Global Compact Framework (UN 2000)

- The Rio Declaration on Environment and Development (UN 1992)
- The Johannesburg UN World Summit on Sustainable Development (UN 2002)

IKEA References

- The IKEA Way on Purchasing Home Furnishing Products
- The IKEA Way on Distributing Home Furnishing Products
- The IKEA Way on Purchasing Materials and Services
- The IKEA Way on Purchasing Food
- The IKEA Way on Preventing Child Labour
- Rules on Prevention of Corruption

Conclusions

The objective of this dissertation was an analysis of global network relation, in particular with regard to production outsourcing and management of the relationship with the partner.

The highly dynamic environment in which businesses operate, especially on a global scale, has made it necessary to rethink widely used management tools, such as networking and outsourcing.

These two practices put together calls for a better understanding of business relationships management, especially with respect to open market economy, which exceeds the classification for market forms to adopt a new one based on competitive conditions. The emerging configurations appear as alternatives, and not as subsequent to each other.

An original outsourcing model is thus proposed: the competitive outsourcing. Based on the classic advantages of reducing costs and focus on the core business, as every form of outsourcing, the competitive outsourcing add a dimension of sharing. The instability of competitive conditions regards not only rivalry with competitors but also and most importantly the interactions with all the actors of the market, including the same competitors, buyers and suppliers, co-makers and customers. One of the most effective way to beat this instability is to rely on the stability of business relations. In this context, competitive outsourcing results in a strategy more similar to an alliance than a simple externalisation, although respecting the basic rules of cost effectiveness of the decision.

With all these necessary premises, the model of competitive outsourcing is approached together with two models already well-known in the literature: the traditional and the strategic outsourcing.

While traditional outsourcing is based primarily – if not exclusively – on cost reduction and thus presents a short-term orientation, competitive outsourcing, as well as strategic one, rather adopt a long-term orientation, even though with different perspectives. The perspective of strategic outsourcing is organisational and aimed at setting the most convenient allocation of resources inside and outside the firm. In the

case of competitive outsourcing, instead, there is an important sharing of costs, risk, advantages and benefits with the partners. So the main point of interest of the competitive outsourcing is the level of relationship, which moved from the dyadic of the traditional outsourcing to the chain one in the strategic and finally to the network. The network form, both in terms of design and complexity of interactions, represents the prerequisite for an effective implementation of competitive outsourcing relations. By the way, the network structure itself is not sufficient to justify the shift from the strategic outsourcing model to the competitive one. The other main fundamental pillar of this model is to be found in the principles of sharing economy, such as collaboration, mutuality and peer-to-peer.

To sum up, in the light of instability and hyper-competition on open global markets, the model of competitive outsourcing represent the synthesis of business network and collaborative economy and provides an original meaning of relationship management and value co-creation, overcoming the classic concepts of power and dependence in an industrial relationship.

Of course, the model has just been conceptualised and seen with a single example, so it need more testing, both through qualitative and quantitative researches.

In conclusion, it can be interesting for further research to investigate whether this competitive model can be valuable not only in this specific relation with outsourcing partners but also with other suppliers or even with actors on the demand side, such as distributors or customers.

References

- Accabi, R., & Lopez, L. (1995). Outsourcing estremo per situazioni complesse. L'Impresa, (10).
- Agrawal, S. (2010). Outsourcing Risks. Amity Global Business Review, 5(1), 94–108.
- Akerlof, G., A. (1970). The Market for "Lemons": Quality Uncertainty and the Market Mechanism. *The Quarterly Journal of Economics*, 84(3), 488–500.
- Akomode O. Joseph, Lees Brian, and Irgens Christopher. (1998). Constructing customised models and providing information to support IT outsourcing decisions. *Logistics Information Management*, 11(2), 114–127. http://doi.org/10.1108/09576059810209973
- Allesina, S., Azzi, A., Battini, D., & Regattieri, A. (2010). Performance measurement in supply chains: new network analysis and entropic indexes. *International Journal of Production Research*, 48(8), 2297–2321. http://doi.org/10.1080/00207540802647327
- Andersen, M., & Skjoett-Larsen, T. (2009). Corporate social responsibility in global supply chains. Supply Chain Management: An International Journal, 14(2), 75–86.

http://doi.org/10.1108/13598540910941948

Anderson, J. C., & Narus, J. A. (1990). A Model of Distributor Firm and Manufacturer Firm Working Partnerships. *Journal of Marketing*, 54(1), 42– 58.

http://doi.org/10.2307/1252172

Antràs, P., & Helpman, E. (2003). *Global sourcing*. National Bureau of Economic Research.

- Araz, C., & Ozkarahan, I. (2007). Supplier evaluation and management system for strategic sourcing based on a new multicriteria sorting procedure. *International Journal of Production Economics*, 106(2), 585–606. http://doi.org/10.1016/j.ijpe.2006.08.008
- Arlbjørn, J. S., & Paulraj, A. (2013). Special Topic Forum On Innovation In Business Networks From A Supply Chain Perspective: Current Status and Opportunities for Future Research. *Journal of Supply Chain Management*, 49(4), 3–11.

http://doi.org/10.1111/jscm.12034

- Arnold, U. (2000). New dimensions of outsourcing: a combination of transaction cost economics and the core competencies concept. *European Journal of Purchasing & Supply Management*, 6(1), 23–29.
- Arrigo, E. (2005). Corporate Responsibility and Hypercompetition. The IKEA Case. Symphonya. Emerging Issues in Management, (2), 37–57. http://doi.org/10.4468/2005.2.04arrigo
- Arrigo, E. (2006). Code of Conduct and Corporate Governance. Symphonya. Emerging Issues in Management, (1), 93–109. http://doi.org/10.4468/2006.1.07arrigo
- Arrigo, E. (2009). Market-Driven Management, Global Competition and Corporate Responsibility. Symphonya. Emerging Issues in Management, (1), 54–70. http://doi.org/10.4468/2009.1.06arrigo
- Arrigo, E. (2010). Networking, concorrenza globale e Coporte Governance Communication. In S. M. Brondoni, *Market-Driven Management, Corporate*

Governance e spazio competitivo d'impresa (Vol. 24). Milano: G. Giappichelli.

- Arrigo, E. (2012). Alliances, Open Innovation and Outside-in Management. Symphonya. Emerging Issues in Management, (2), 53–65. http://doi.org/10.4468/2012.2.05arrigo
- Aubert, B. A., Rivard, S., & Patry, M. (1996). A transaction cost approach to outsourcing behavior: some empirical evidence. *Information & Management*, 30(2), 51–64.
- Baldassarre, F. (2013). La sfida manageriale del global sourcing: concetti, letteratura ed evidenze empiriche.
- Baraldi, E. (2008). Strategy in Industrial Networks: Experiences from IKEA. *California Management Review*, 50(4).
- Barnes, J., & Liao, Y. (2012). The effect of individual, network, and collaborative competencies on the supply chain management system. *International Journal* of Production Economics, 140(2), 888–899.

http://doi.org/10.1016/j.ijpe.2012.07.010

- Beil, D. R., Cochran, J. J., Cox, L. A., Keskinocak, P., Kharoufeh, J. P., & Smith, J. C. (2010). Supplier Selection. In *Wiley Encyclopedia of Operations Research and Management Science*. John Wiley & Sons, Inc.
- Benton, W. C. (2009). Purchasing and Supply Chain Management. McGraw-Hill Education.
- Brandes, O., Brege, S., & Brehmer, P.-O. (2013). The Strategic Importance of Supplier Relationships in the Automotive Industry. *International Journal of Engineering Business Management*, 1.
http://doi.org/10.5772/56257

Braziotis, C., Bourlakis, M., Rogers, H., & Tannock, J. (2013). Supply chains and supply networks: distinctions and overlaps. *Supply Chain Management: An International Journal*, 18(6), 644–652.

http://doi.org/10.1108/SCM-07-2012-0260

- Bresnen, M. (2008). International Encyclopedia of Organization Studies. In S. R. Clegg & J. R. Bailey (Eds.), *International Encyclopedia of Organization Studies* (Vols. 1–4). Thousand Oaks, CA: SAGE Publications, Inc.
- Brondoni, S. M. (2002a). Global Markets and Market-Space Competition. Symphonya. Emerging Issues in Management, (1), 28–42. http://doi.org/10.4468/2002.1.03brondoni
- Brondoni, S. M. (2002b). Ouverture de "Market-Space Management." Symphonya. Emerging Issues in Management, (1), 1–6.

http://doi.org/10.4468/2002.1.01ouverture

- Brondoni, S. M. (2003). Network Culture, Performance & Corporate Responsibility. Symphonya. Emerging Issues in Management, (1), 8–24. http://doi.org/10.4468/2003.1.02brondoni
- Brondoni, S. M. (2005a). Ouverture de " Over-Supply and Global Markets 1". Symphonya. Emerging Issues in Management, (1), 1–13. http://doi.org/10.4468/2005.1.01ouverture
- Brondoni, S. M. (2005b). Managerial Economics and Global Competition. Symphonya. Emerging Issues in Management, (1), 14–38. http://doi.org/10.4468/2005.1.02brondoni

Brondoni, S. M. (2007). *Market-Driven Management concorrenza e mercati globali*. Torino: G. Giappichelli.

Brondoni, S. M. (2010). Ouverture de "Intangible Assets & Global Competition". Symphonya. Emerging Issues in Management, (2), 1-5. http://doi.org/10.4468/2010.2.01ouverture

Brondoni, S. M. (2014). Global Capitalism and Sustainable Growth. From Global Products to Network Globalisation. Symphonya. Emerging Issues in Management, (1), 10-31.

http://doi.org/10.4468/2014.1.02brondoni

- Brondoni, S. M., Corniani, M., & Riboldazzi, S. (2010). Mercati globali, intensità competitiva e sistema degli immateriali corporate e di prodotto. In L. Marchi & S. Marasca, *Le risorse immateriali nell'economia delle aziende*. Bologna: Il Mulino.
- Bryce, D. G., & Useem, M. (1998). The Impact of Corporate Outsourcing on Company Value. *European Management Journal*, *16*(6), 635–643.
- Bustinza, O. F., Arias-Aranda, D., & Gutierrez-Gutierrez, L. (2010). Outsourcing, competitive capabilities and performance: an empirical study in service firms. *International Journal of Production Economics*, 126(2), 276–288. http://doi.org/10.1016/j.ijpe.2010.03.023
- Calabresi, G. (1968). Transaction Costs, Resource Allocation and Liability Rules–A Comment. *Journal of Law and Economics*, 67–73.
- Cesarani, M. (2014). Competitive Dimension of Outsourcing Relations in Global Networks. *Journal of Management Policies and Practices*, 2(4). http://doi.org/10.15640/jmpp.v2n4a5

- Chopra, S., & Meindl, P. (2007). *Supply chain management: strategy, planning, and operation*. Upper Saddle River, N.J.: Pearson Prentice Hall.
- Choy, K. L., Lee, W. B., Lau, H. C. W., & Choy, L. C. (2005). A knowledge-based supplier intelligence retrieval system for outsource manufacturing. *Knowledge-Based Systems*, 18(1), 1–17.

http://doi.org/10.1016/j.knosys.2004.05.003

Christopher, M., Mena, C., Khan, O., & Yurt, O. (2011). Approaches to managing global sourcing risk. Supply Chain Management: An International Journal, 16(2), 67–81.

http://doi.org/10.1108/13598541111115338

Chu, V., Girdhar, A., & Sood, R. (2013, July 21). How IKEA adapted its strategies to expand and become profitable in China. *Business Today*.

Coase, R. H. (1937). The Nature of The Firm. *Economica*, 4(16), 386–405.

- Coase, R. H. (1988). *The Firm, the Market, and the Law*. Chicago: University of Chicago Press.
- Corniani, M. (2009). Market-Driven Management, gestione delle scorte e relazioni di fornitura. Torino: G. Giappichelli.
- Corniani, M. (2013). Business Networks and Local Partners in Global Competition. Symphonya. Emerging Issues in Management, (2), 1–19. http://doi.org/10.4468/2013.2.04corniani
- Cox, J. F., Blackstone, J. H., & Spencer, M. S. (1995). *APICS Dictionary* (8th ed.).Falls Church, VA: American Production and Inventory Control Society.
- Dahlman, C. J. (1979). The Problem of Externality. *Journal of Law and Economics*, 22(1), 141–162.

- Day, G. S. (1994). The Capabilities of Market-Driven Organizations. Journal of Marketing, 58(4), 37–52. http://doi.org/10.2307/1251915
- Day, G. S. (2001). Market-Driven Winners. Symphonya. Emerging Issues in Management, (2), 12–22.

http://doi.org/10.4468/2001.2.02day

Dekkers, R. (2011). Impact of strategic decision making for outsourcing on managing manufacturing. International Journal of Operations & Production Management, 31(9), 935–965.

http://doi.org/10.1108/01443571111165839

Deligonul, S., Elg, U., Cavusgil, E., & Ghauri, P. N. (2013). Developing strategic supplier networks: An institutional perspective. *Journal of Business Research*, 66(4), 506–515.

http://doi.org/10.1016/j.jbusres.2011.12.003

- Department of Defense. (2010, August 11). Dictionary of Military and Associated Terms. Joint Publication 1-02.
- Dou, Y., & Sarkis, J. (2010). A joint location and outsourcing sustainability analysis for a strategic offshoring decision. *International Journal of Production Research*, 48(2), 567–592.

http://doi.org/10.1080/00207540903175145

Downey Jane Marie. (1995). Risk of outsourcing – applying risk management techniques to staffing methods. *Facilities*, *13*(9/10), 38–44. http://doi.org/10.1108/02632779510095617

- Dyer, J., H., & Singh, H. (1998). The Relational View: Cooperative Strategy and Sources of Interorganizational Competitive Advantage. Academy of Management Review, 23(4), 660–679.
- Elliott, L. T., & Torkko, D. E. (1996). World Class Outsourcing Strategies. *Telecommunications*, 30(8), 47–49.
- Embleton Peter R. and Wright Phillip C. (1998). A practical guide to successful outsourcing. *Empowerment in Organizations*, 6(3), 94–106. http://doi.org/10.1108/14634449810210832
- Farahani, R. Z., Rezapour, S., Drezner, T., & Fallah, S. (2013). Competitive supply chain network design: An overview of classifications, models, solution techniques and applications. *Omega*.

http://doi.org/10.1016/j.omega.2013.08.006

- Ferdows, K. (1997). Making the Most of Foreign Factories. *Harvard Business Review*, (March), 73–88.
- Fischli, I. R. (1996). Outsourcing: A New Management Tool of Just a Fad? *Bullettin* of the American Society for Information Science, 20–21.
- Forrester, J. W. (1958). Industrial Dynamics--A Major Breakthrough for Decision Makers. *Harvard Business Review*, 36(4), 37–66.
- Gandolfo, A., & Sbrana, R. (2008). Reverse Logistics and Market-Driven Management. Symphonya. Emerging Issues in Management, (2). http://doi.org/10.4468/2008.2.03gandolfo.sbrana
- Garbelli, M. E. (2002). Over-Supply and Manufacturing Localization. Symphonya. Emerging Issues in Management, (1), 112–126. http://doi.org/10.4468/2002.1.10garbelli

Ghauri, P. N., Tarnovskaya, V., & Elg, U. (2008). Market driving multinationals and their global sourcing network. *International Marketing Review*, 25(5), 504– 519.

http://doi.org/10.1108/02651330810904062

Gibson, B. J., Mentzer, J. T., & Cook, R. L. (2005). Supply Chain Management: The Pursuit of a Consensus Definition. *Journal of Business Logistics*, 26(2), 17–25.

http://doi.org/10.1002/j.2158-1592.2005.tb00203.x

Gimenez, C., & Tachizawa, E. M. (2012). Extending sustainability to suppliers: a systematic literature review. Supply Chain Management: An International Journal, 17(5), 531–543.

- Gnecchi, F. (2009). Market-Driven Management, Market Space and Value Proposition. Symphonya. Emerging Issues in Management, (2), 33–45. http://doi.org/10.4468/2009.2.04gnecchi
- Goo, J., Kishore, R., Rao, H. R., & Nam, K. (2009). The Role of Service Level
 Agreements in Relational Management of Information Technology
 Outsourcing: An Empirical Study. *MIS Q.*, *33*(1), 119–145.
- Gordini, N. (2010). Market-Driven Management: A Critical Literature Review. Symphonya. Emerging Issues in Management, (2), 97–109.
- Handley, S. M., & Benton Jr., W. C. (2009). Unlocking the business outsourcing process model. *Journal of Operations Management*, 27(5), 344–361. http://doi.org/10.1016/j.jom.2008.11.002

Hearnshaw, E. J. S., & Wilson, M. M. J. (2013). A complex network approach to supply chain network theory. *International Journal of Operations & Production Management*, 33(4), 442–469. http://doi.org/10.1108/01443571311307343

Hsiao, M. J., Purchase, S., & Rahman, S. (2002). The impact of buyer-supplier

- relationship and purchasing process on the supply chain performance: a conceptual framework. In *Paper published at the 18th IMP-conference in Perth, Australia*. Citeseer.
- Huang, S. H., & Keskar, H. (2007). Comprehensive and configurable metrics for supplier selection. *International Journal of Production Economics*, 105(2), 510–523. http://doi.org/10.1016/j.ijpe.2006.04.020
- Hutt, M., & Speh, T. (2012). Business Marketing Management: B2B. Cengage Learning.
- Igarashi, M., de Boer, L., & Fet, A. M. (2013). What is required for greener supplier selection? A literature review and conceptual model development. *Journal of Purchasing and Supply Management*, *19*(4), 247–263.

http://doi.org/10.1016/j.pursup.2013.06.001

- IKEA. (2008). IWAY Code of Conduct.
- IKEA. (2015). IKEA Group Yearly Summery FY 2014.

Jayachandran, S., Gimeno, J., & Varadarajan, P. R. (1999). The Theory of Multimarket Competition: A Synthesis and Implications for Marketing Strategy. *Journal of Marketing*, 63(3), 49–66.

http://doi.org/10.2307/1251775

- Kadabase, A., & Kadabase, N. (2005). Outsourcing: Current and Future Trends. *Thunderbird International Business Review*, 47(2), 183–204.
- Kamann, D.-J., & Van Nieulande, V. (2010). A Four-Filter Method for Outsourcing to Low-Cost Countries. *Journal of Supply Chain Management*, 46(2), 64–79. http://doi.org/10.1111/j.1745-493X.2010.03190.x
- Kam, B. H., Chen, L., & Wilding, R. (2011). Managing production outsourcing risks in China's apparel industry: a case study of two apparel retailers. *Supply Chain Management: An International Journal*, 16(6), 428–445. http://doi.org/10.1108/13598541111171147
- Kotabe, M., & Helsen, K. (2010). *Global marketing management* (5th ed). Hoboken, NJ: Wiley.
- Kotler, P., Armstrong, G., Harris, L., & Piercy, N. F. (2013). Principles of Marketing European Edition. Pearson Education Limited.
- Kraljic, P. (1983). Purchasing Must Become Supply Management. *Harvard Business Review*.
- Krause, D. R., Vachon, S., & Klassen, R. D. (2009). Special Topic Forum on Sustainable Supply Chain Management: Introduction and Reflections on the Role of Purchasing Management. *Journal of Supply Chain Management*, 45(4), 18–25.

http://doi.org/10.1111/j.1745-493X.2009.03173.x

Kremic, T., Tukel, O. I., & Rom, W. O. (2006). Outsourcing Decision Support: A Survey of Benefits, Risks and Decision Factors. Supply Chain Management: An International Journal, 11(6), 467–482. Kroes, J. R., & Ghosh, S. (2010). Outsourcing congruence with competitive priorities: Impact on supply chain and firm performance. *Journal of Operations Management*, 28(2), 124–143.

http://doi.org/10.1016/j.jom.2009.09.004

- Kurt Salmon Associated Inc. (1993). Efficient Consumer Response Enhancing Consumer Value in the Grocery Industry. Washington, DC: Food Marketing Institute.
- Lambert, D. M., & Cooper, M. C. (2000). Issues in Supply Chain Management. Industrial Marketing Management, 29(1), 65–83.
- Lambin, J.-J. (2000). Market-Driven Management: Strategic and Operational Marketing. London: MacMillan.
- Lambin, J.-J., & Brondoni, S. M. (2001). Ouverture de "Market-Driven Management." Symphonya. Emerging Issues in Management, (2), 1–11. http://doi.org/10.4468/2001.2.01ouverture
- Larson, P. D., Poist, R. F., & Halldórsson, Á. (2007). Perspectives on Logistics Vs.
 Scm: A Survey of Scm Professionals. *Journal of Business Logistics*, 28(1), 1–24.

http://doi.org/10.1002/j.2158-1592.2007.tb00230.x

- Lawton, T. C., & Micheals, K. P. (2001). Advancing to the Virtual Value Chain: Learing from the Learn Model. *The Irish Journal of Management*.
- Lee, C. K. M., Yeung, Y. C., & Hong, Z. (2012). An Integrated Framework for Outsourcing Risk Management. *Industrial Management & Data Systems*, 112(4), 541–558.

- Lienland, B., Baumgartner, A., & Knubben, E. (2013). The Undervaluation of Corporate Reputation as a Supplier Selection Factor: An Analysis of Ingredient Branding of Complex Products in the Manufacturing Industry. *Journal of Purchasing and Supply Management*, 19(2), 84–97. http://doi.org/10.1016/j.pursup.2013.04.001
- Lockamy, A., & McCormack, K. (2010). Analysing Risks in Supply Networks to Facilitate Outsourcing Decisions. *International Journal of Production Research*, 48(2), 593–611.

http://doi.org/10.1080/00207540903175152

- Loh, L., & Venkatraman, N. (1992). Diffusion of Information Technology Outsourcing: Influential Sources and the Kodak Effect.
- Lonsdale Chris and Cox Andrew. (2000). The Historical Development of Outsourcing: The Latest Fad? *Industrial Management & Data Systems*, 100(9), 444–450.

- Lummus, R. R., & Vokurka, R. J. (1999). Defining Supply Chain Management: A Historical Perspective and Practical Guidelines. *Industrial Management & Data Systems*, 99(1), 11–17. http://doi.org/10.1108/02635579910243851
- Majocchi, A., & Zucchella, A. (2008). Global Entrepreneurship and Market-Driven
 Management. Symphonya. Emerging Issues in Management, (2), 41–49.
 http://doi.org/10.4468/2008.2.04majocchi.zucchella
- McFarlan, F. W., & Nolan, R. L. (1995). How to Manage an IT Outsourcing Alliance. *Sloan Management Review*, *36*(2), 9–23.

Miemczyk, J., Johnsen, T. E., & Macquet, M. (2012). Sustainable purchasing and supply management: a structured literature review of definitions and measures at the dyad, chain and network levels. *Supply Chain Management: An International Journal*, 17(5), 478–496.

http://doi.org/10.1108/13598541211258564

- Molinary Fernandez, G. (2000). The Evolution of Inventory Management in Manufacturing and Services Companies. *Forum Empresarial*, 5(2), 75–90.
- Mollenkopf, D., Stolze, H., Tate, W. L., & Ueltschy, M. (2010). Green, lean, and global supply chains. *International Journal of Physical Distribution & Logistics Management*, 40(1/2), 14–41.

- Monczka, R. M., Handfield, R. B., Giunipero, L. C., & Patterson, J. L. (2010). *Purchasing and Supply Chain Management* (5th Edition). Cenage Learning.
- Monczka, R. M., & Trent, R. J. (1991). Global Sourcing: A Development Approach. International Journal of Purchaing and Materials Management, 27(2), 2–8.
- Monks, J. G. (2004). *Theory and Problems of Operation Management* (2nd ed.). Tata McGraw-Hill Publishing Company Limited.
- Mosher, R., & Mainquist, D. (2011). The Outsourcing Relationship. *Internal Auditor*, 68(3), 35–39.
- Movahedi, B., Lavassani, K. M., & Kumar, V. (2009). Transition to B2B e-Marketplace Enabled Supply Chain: Readiness Assessment and Success Factors. *The International Journal of Technology, Knowledge and Society*, 5(3), 75–88.

Mudambi, S. M., & Tallman, S. (2010). Make, Buy or Ally? Theoretical Perspectives on Knowledge Process Outsourcing through Alliances. *Journal of Management Studies*, 47(8), 1434–1456.

http://doi.org/10.1111/j.1467-6486.2010.00944.x

Mukherjee, D., Gaur, A. S., & Datta, A. (2013). Creating value through offshore outsourcing: An integrative framework. *Journal of International Management*, 19(4), 377–389.

http://doi.org/10.1016/j.intman.2013.03.015

Nair, A., & Filer, L. (2003). Cointegration of firm strategies within groups: a longrun analysis of firm behavior in the Japanese steel industry. *Strategic Management Journal*, 24(2), 145–159.

http://doi.org/10.1002/smj.286

- Nassimbeni, G., Sartor, M., & Dus, D. (2012). Security risks in service offshoring and outsourcing. *Industrial Management & Data Systems*, 112(3), 405–440. http://doi.org/10.1108/02635571211210059
- Ohno, T. (1988). Toyota Production System: Beyond Large Scale Production. Portland, OR: Productivity Press.
- Oliver, K., & Webber, M. D. (1982). Supply-Chain Management: Logistics Catches Up with Strategy. In M. Christopher, *Logistics: The Strategic Issues* (1992nd ed., pp. 63–75). London: Chapman Hall.
- Olson, D. L., & Wu, D. (2011). Risk management models for supply chain: a scenario analysis of outsourcing to China. Supply Chain Management: An International Journal, 16(6), 401–408. http://doi.org/10.1108/13598541111171110

- Pinna, R. (2006). L'evolizione nella dimensione organizzativa della Supply Chain.Dalla gestione di un flusso alla gestione di una rete. Franco Angeli, Milano.
- Porter, M. E. (1985a). Competitive Adavantage. Creating and Sustaining Superior Performance. New York, NY: Free Press.
- Porter, M. E. (1985b). Competitive Advantage: Creating and Sustaining Superior Performance. New York, NY: Free Press.
- Prahalad, C. K., & Hamel, G. (1990). The Core Competence of the Corporation. Harvard Business Review.
- Quinn, J. B., & Hilmer, F. G. (1995). Strategic Outsourcing. *The McKinsey Quarterly*, (1), 48–70.
- Quintens, L., Pauwels, P., & Matthyssens, P. (2006). Global purchasing: State of the art and research directions. *Journal of Purchasing and Supply Management*, 12(4), 170–181.

http://doi.org/10.1016/j.pursup.2006.10.006

- Riboldazzi, S. (2005). Global Retailers and Competitive Customer Value. Symphonya. Emerging Issues in Management, (2), 77–87. http://doi.org/10.4468/2005.2.07riboldazzi
- Ricciardi, A. (2000). L'Outsourcing strategico. Modalità operatuive, tecniche di controllo ed effetti sugli equilibri di gestione. Franco Angeli.
- Ritter, T., Wilkinson, I. F., & Johnston, W. J. (2004). Managing in complex business networks. *Industrial Marketing Management*, 33(3), 175–183. http://doi.org/10.1016/j.indmarman.2003.10.016
- Rolstadås, A., Henriksen, B., & O'Sullivan, D. (2012). *Manufacturing Outsourcing*. Springer.

Romenti, S. (2010). Reputation and stakeholder engagement: an Italian case study. *Journal of Communication Management*, *14*(4), 306–318. http://doi.org/10.1108/13632541011090428

Rozemeijer, F. (2000). How to manage corporate purchasing synergy in a decentralised company? Towards design rules for managing and organising purchasing synergy in decentralised companies. *European Journal of Purchasing & Supply Management*, 6(1), 5–12.

http://doi.org/10.1016/S0969-7012(99)00034-9

- Saeed, S., Yousafzai, S., Paladino, A., & De Luca, L. M. (2015). Inside-out and outside-in orientations: A meta-analysis of orientation's effects on innovation and firm performance. *Industrial Marketing Management*, 47, 121–133. http://doi.org/10.1016/j.indmarman.2015.02.037
- Schwarting, D., & Weissbarth, R. (2011). *Make or buy: Three Pillars of Sound Decision Making*.

Sciarelli, M. (2008). Resource-Based Theory and Market-Driven Management. Symphonya. Emerging Issues in Management, (2), 66–80. http://doi.org/10.4468/2008.2.06sciarelli

- Smith, G. E., Venkatraman, M. P., & Dholakia, R. R. (1999). Diagnosing the search cost effect: Waiting time and the moderating impact of prior category knowledge. *Journal of Economic Psychology*, 20(3), 285–314. http://doi.org/10.1016/S0167-4870(99)00010-0
- Stalk, G. (1988). Time-the next source of competitive advantage.
- Suri, R. (1998). Quick Response Manufacturing: A Companywide Approach to Reducing Lead Times. Productivity Press.

- Taylor, F. W. (1911). *The Principles of Scientific Management*. New York, NY: Harper & Brothers.
- Thornton, L. M., Autry, C. W., Gligor, D. M., & Brik, A. B. (2013). Does Socially Responsible Supplier Selection Pay Off for Customer Firms? A Cross-Cultural Comparison. *Journal of Supply Chain Management*, 49(3), 66–89. http://doi.org/10.1111/jscm.12014
- Trautmann, G., Bals, L., & Hartmann, E. (2009). Global sourcing in integrated network structures: The case of hybrid purchasing organizations. *Journal of International Management*, 15(2), 194–208.

http://doi.org/10.1016/j.intman.2008.09.001

Ulf Elg, Pervez N. Ghauri, and Veronika Tarnovskaya. (2008). The role of networks and matching in market entry to emerging retail markets. *International Marketing Review*, 25(6), 674–699.

- Van Laarhoven, P., Berglund, M., & Peters, M. (2000). Third-party logistics in Europe–five years later. International Journal of Physical Distribution & Logistics Management, 30(5), 425–442.
- Van Mieghem, J. A. (1999). Coordinating investment, production, and subcontracting. *Management Science*, 45(7), 954–971.
- Vincent, L. (2008). Differentiating competence, capability and capacity. *Innovating Perspectives*, *16*(3), 1–2.
- Vining, A. (1999). A conceptual framework for understanding the outsourcing decision. *European Management Journal*, *17*(6), 645–654.

Vokurka, R. J., Choobineh, J., & Vadi, L. (1996). A prototype expert system for the evaluation and selection of potential suppliers. *International Journal of Operations & Production Management*, 16(12), 106–127.

http://doi.org/10.1108/01443579610151788

- Walker, G., & Weber, D. (1984). A transaction cost approach to make-or-buy decisions. *Administrative Science Quarterly*, 373–391.
- Wee, H.-M., Peng, S.-Y., & Wee, P. K. P. (2010). Modelling of outsourcing decisions in global supply chains. An empirical study on supplier management performance with different outsourcing strategies. *International Journal of Production Research*, 48(7), 2081–2094.

http://doi.org/10.1080/00207540802644852

Weerakkody, V., & Irani, Z. (2010). A value and risk analysis of offshore outsourcing business models: an exploratory study. *International Journal of Production Research*, 48(2), 613–634.

http://doi.org/10.1080/00207540903175160

- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180. http://doi.org/10.1002/smj.4250050207
- Wiengarten, F., Pagell, M., & Fynes, B. (2013). The importance of contextual factors in the success of outsourcing contracts in the supply chain environment: the role of risk and complementary practices. *Supply Chain Management: An International Journal*, 18(6), 630–643.

http://doi.org/10.1108/SCM-03-2013-0071

Williamson, O. E. (1981). The Economics of Organization: The Transaction Costs Approach. *The American Journal of Sociology*, 87(3), 548–577. Winter, M., & Knemeyer, A. M. (2013). Exploring the integration of sustainability and supply chain management: Current state and opportunities for future inquiry. *International Journal of Physical Distribution & Logistics Management*, 43(1), 18–38.