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SUPPLY CHAIN
NETWORK:
TRUST AND PRACTICAL
APPROACHES TO LONGTERM SUCCESS

Godefroy KIZABA

SUPPLY CHAIN NETWORK: TRUST AND PRACTICAL APPROACHES TO LONG-TERM SUCCESS

LE RESEAU SUPPLY CHAIN: APPROCHES PRATIQUES ET DE CONFIANCE POUR LA REUSSITE A LONG TERME

Godefroy KIZABA

Résumé – The Supply Chain (SC) falls within the scope of inter-company co-operation and the organizational dynamic of new organizational forms and comprises many activities, processes and systems. It is the duty of each partner (participant) to get to know the key factors to success and how each interacts with the others. The connectors, given that each relationship plays a crucial role, are of equal value in continuously satisfying demand. Trust is the most important connector with a view to success. All the other relationships made are based on trust. Consequently, this paper lays stress on the Supply Chain network as a "network of values" and on the different dimensions of shared trust, the strategies based on trust and the suggestions for using trust as the key factor in the operational, tactical and strategic success of an SC network.

Abstract – La Chaîne d'Offre (Supply Chain) fait partie de la coopération interentreprises et de la dynamique organisationnelle de nombreuses activités, processus et systèmes. C'est le défi pour chaque partenaire d'établir une stratégie de définition des facteurs clés de la réussite et de connaissance sur les façons dont lui et les autres partenaires interagissent. Etant donné que chaque relation joue un rôle crucial, tous les partenaires ont le même poids dans la satisfaction ininterrompue de la demande. La confiance est le connecteur le plus important du point de vue de réussite. Toutes les autres relations sont fondées sur la confiance. Par conséquent, ce papier considère le réseau de la chaîne d'offre comme un réseau de valeurs et met l'accent sur les différentes facettes de la confiance, sur les stratégies fondées sur la confiance et fait de propositions sur l'utilisation de la confiance comme facteur clé dans la réussite opérationnelle, tactique et stratégique d'un réseau de chaîne d'offre.

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INTRODUCTION: THE IMPORTANCE OF TRUST IN A SC NETWORK

Trust, the keystone of all the processes of transaction, organization or interpersonal and interorganizational relationships, has given rise to a great deal of research in management sciences¹. In the marketing field many studies have demonstrated the important role of trust in developing and maintaining relationships among the partners of a distribution network (Anderson and Weitz, 1989; Anderson and Narus, 1990; Andaleeb, 1992; Morgan and Hunt, 1994; Murphy and Gundlach, 1997; Geyskens, Steenkamp and Kumar, 1998). Trust is at the base of most business relationships.

Several research studies have analyzed trust and its importance within an SC network. Nelson et al. (1998) assert that long-term relationships require commitment and trust and that shared understanding grows and is consolidated over the years. Tyndall et al. (1998) add that an efficient SC network is built on the basis of trust and commitment. Trust comes from faith in, from reliance on, from belief in or from confidence in the partners of the chain and can be considered as the will to give up any opportunist behaviour. Poirier (1999) says the biggest obstacle to the smooth running of an SC is the lack of trust among the stakeholders who, moreover, make the most of co-operation to enjoy certain advantages. Finally, Fawcett (2000) notes that shared advantages are attainable by co-operation. The most important key factor in success is the high level of trust that has developed among the different partners.

In a SC network, trust underpins and maintains the relations between customer and supplier. It is the main connector linking all internal and external parties to a company. In-house, transoperational success depends greatly on establishing and maintaining trust. Externally, trust ensures that relationships are excellent between the different partners. The hypothesis, common to these relational approaches, is one of a "logical chain of the relationship B to B or B to C" (Aurier, Benavant and N'Goala, 2001). This chain sets out the existence of a positive correlation as in the following diagram:



In this perspective, conceptual clarifications are necessary to distinguish the different constructs of this complex interconnection. So, for the purposes of this paper we shall approach each of the dimensions of trust within a reticular organization to fully explore the nature of these concepts, the types of behaviour conducive to trust and the factors sustaining it over time and to suggest an antecedent of trust (= ethics). However, trust has an ambiguous theoretical status which, in part, has its source in the processing of information concerning the past. But it is above all a construct oriented towards the future, since it provides a guarantee regarding the motivation of members of

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¹ A special issue of *Economies et Sociétés*, 1998; a special issue of *Organization Studies*, 2001.

the SC network not to change the terms of the exchange. Without trust, there cannot be a stable and lasting relationship. If a participant in an SC network feels he can trust this organization then he resolves the problem of uncertainty that occurs when entering a relationship with the other partners. Basically, trust is an added value crucial to all customer-supplier interfaces. It is the duty of participants in an SC to manage astutely the reserves of trust for as long as possible, for the benefit of logistics in particular and of organization in general. As a highly prized organizational resource, trust should be appreciated, respected, looked after and managed.

Our overall problematic thus proposes, through this work, to participate in the development of concepts. To begin with, our objective is to propose and to justify a conceptualization of trust in a SC network by using articles from social psychology, relationship marketing and inter-company relations while clarifying our theoretical framework. First, as our study is exploratory, we shall be endeavouring to show that a SC is a "network of values" formed of several companies having many relationships. It gives them the opportunity to capture and integrate an intra- and interbusiness synergy in order to best satisfy customers' expectations. To that end, the SC is about the total excellence of a process and represents a new way of controlling and managing business and the relationships of trust with the different links of the chain. Of course, the development of methodological tools, such as scales of measurement, remains a necessary axis of research on the validity of the constituents of the relationship between organizations. To the best of our knowledge, a scale for measuring trust in a SC network does not exist. Various scales have been developed for measuring the degree of trust between close family members, notably in social psychology (Rotter, 1967; Larzelere and Huston, 1980; Johnson-George and Swap, 1928) and between companies (Andaleeb, 1992; Moorman, Zaltman and Deshpandé, 1992; Doney and Cannon, 1997). These scales will be adapted to serve as the bases for specific scales of trust in a SC network. This work will form the second stage of our work on the SC network 'Products from the sea'.

1. SUPPLY CHAIN: VALUES OF A NETWORK AND A NETWORK OF VALUES

Logistics have become more than the sum of the transport and stocking operations on which industrialists, distributors and service providers have focused. This development, still in progress, makes it one of the current "jewels" of research into the logistics network. The implementation of a relationship of cooperation implies different expectations. This will lead us to an analysis of the "SC" concept and of the determiners when creating or participating in a reticular organization.

1.1. From logistics to the Supply Chain

The first references to logistics in its strategic and organizational dimension appeared only towards the mid-1970s in the United States. From 1973 onwards, James Heskett (1973) a Harvard professor, identified logistics as a separate speciality in management because of its strategic challenges and organizational problematic. In 1978, he defined logistics as the process encompassing all the activities which contribute to controlling the physical flow of products, to coordinating resources and outlets while looking to achieve a certain level of service at the lowest cost. Under his impetus, a dynamic of reflection was created and gave rise to a significant output of research and publications.

Logistics later evolved in order to include the circulation of information and to clarify the origins and destination of its movements. It thus became "the management of product flow and information from the buying of materials and components to their use by the customer, aiming to satisfy the final demand under the constraints of time, quality and cost.²" Samii (1997) went on to say that logistics is the management of flow and its acceleration as in a pipe line. The analogy with the circulation of oil in a pipeline corresponds with what all companies wish to do: to maximize production flow and distribution so that there will be almost no shortage or glut. M. Porter (1980) in his work on value chains went even further by identifying logistics as a competitive advantage for companies.

In France, Mathe, Tixier and Colin's book (1996) brought a new perspective by proposing a strategic and organizational approach. This approach came about thanks to the association of three different perceptions that produced a synthesis of their respective approaches to logistics:

- Tixier's approach to marketing which was strongly influenced by the work of Heskett and Shapiro (1985);
- the consultant approach of Mathé who had by that time acquired experience as a consultant; and
- Colin's more academic approach to transport and distribution.

In 1997, "Stratégie Logistique", a professional magazine, declared that logistics had become strategic and concerned all the participants, including the departments and top managers, who were working towards the optimization of the process. This new managerial approach alluded to another concept, very dear to Americans and British people, that of Supply Chain Management.

As competition rules changed, managing time and space became the key variables of competition and performance improvement (Véran, 1991; Stalk, 1988). This led to the notion of logistic performance, taken up by Chow, Heaver and Henriksson (1994) using the phrase logistic efficiency. Therefore, integration continued by integrating even more the upstream and downstream environments of a company in order to cover "all the physical flow (of products), the flow of information and the financial flow from the customers of the customers to the suppliers of the suppliers", thus forming the overall logistics chain (integrated and extensive logistics) also called the Supply Chain. This concept is based on an overall (the "Wide Angle vision", Sodhi, 2003) and not a partial view of the company, so as to obtain overall optimization of the whole chain. The Supply Chain thus stresses, on the one hand, the idea that it is necessary to be interested in the whole chain from the first supplier to the end consumer (or end destroyer) in order to increase overall performance logistics. That is when we realize how complex it is, when suppliers are integrated all the way down to the end-consumer.

For consumer products, the SC can be represented by the following diagram:

² The definition of the CNL (Council of Logistics Management) differs slightly: "Logistics is that part of the supply chain process that plans, implements and constrains the efficient, effective flow and storage of goods, services and related information from the point of origin to the point of consumption in order to meet customers' requirements".

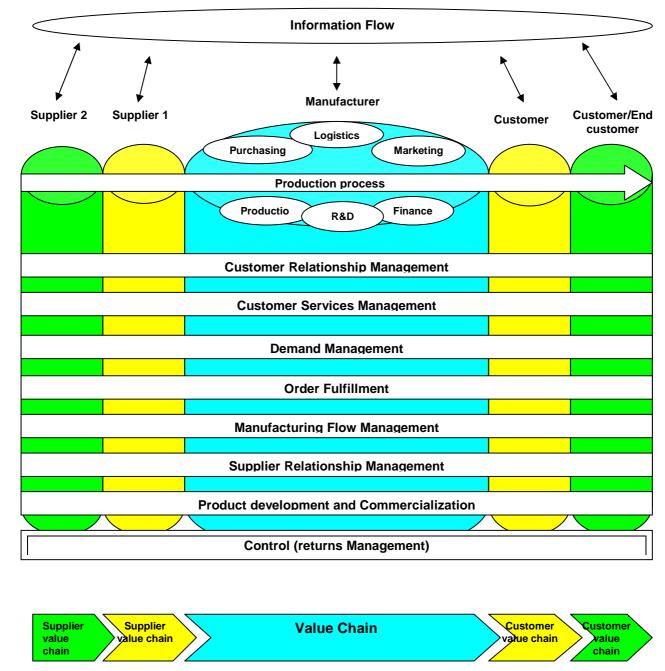
S U Р Р L С Н Α ı Ν В U S ı Ν Ε S S

P R O

C E S S

E S

Figure 1: Integration and Management Processes of the SC



Adapted from Lambert, Cooper and Pagh (1998)

On the one hand, this diagram shows how necessary it is to go beyond a fragmented approach of logistics which deals only with synchronizing the flow of logistics within a given company. It rests on the wide use of NTICs (systems of information management): communication (Internet,

Intranet, EDI), integration (ERP, APS), performance measurement and data analysis (data warehouse, data mining). On the other hand, it puts the end-consumer customer at the center of the debate. One must organize management flow in order to "supply" the customer in the best way possible. This means that even if the flow is not completely "JIT" between the end-customer and the production sites, the SC, supported by the new communication technologies and made possible by Internet, will result in a tighter flow from down- to upstream, rather than push this flow from up- to downstream (Dornier and Fender, 2001). We can envisage the SC as a super pipeline that would integrate all the participants present in a supply chain for creating a product or a family of products.

This super pipeline SC will only be relevant and effective if all the constituent elements are linked in a relationship of trust; in other words if the different links of the chain work in harmony like a troupe of actors. However, not all customers of a company are "equal" vis-à-vis logistics: some order large quantities regularly and others smaller ones, the given deadline may be short (24 hours) or long, the customer may be nearby or at a distance. Thus all the customers do not expect the same service. The constraints, customers or suppliers can be very different. Marketing and business strategies are also specific to the sector and to the company. Therefore, it is important to segment customers according to their particular needs regarding products, sales and merchandising and according to the level of service expected and also to adapt an organization to each product family. We will have for example some unusual combinations: a carrier, a retailer and a chain of hypermarkets. The application of cross-functional processes will be developed according to the basic services expected by all customers and more precisely according to the services required by the different elements of a given segment, knowing that these pooled services must show a profit. This implies that we know those customers likely to show the most profit and those who will generate most profits in the long term.

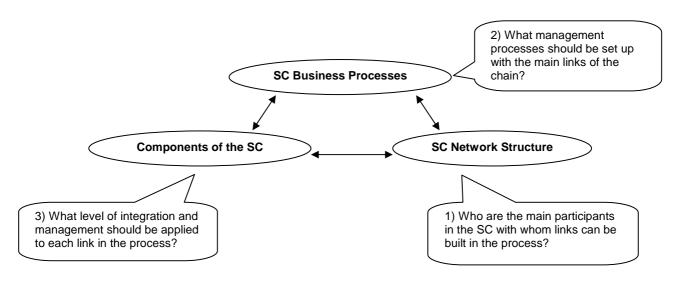
To this segmentation, we must add product differentiation according to the nature of the products to be handled and whether or not they are perishable or dangerous. We will use different organizational methods according to whether we are working with hypermarkets, supermarkets or other customers. Fresh products, for example, because of their perishable nature, require specific storage and delivery and must be managed differently from other products. We work "from stock" for products that can be kept, and "just-in-time" for fresh products. Both competitive pressure, which creates new services linked with the sale of products and whose creation is directly dependent on logistical performance, and the volatility of demand (customers who are hard to please, its erratic nature etc.) which is intensified by peaks of virtual activities (promotional activities of industrialists and distributors), make it more and more difficult to install an accurate forecasting system. Doesn't the most effective solution consist in all the participants (distributors, producers and service providers) making joint forecasts in order to optimize resource allocation? Unfortunately, we still come up far too often against the problem of the way people think: a distributor does not consider he is concerned with a manufacturer's stock control and production planning. He, in turn, does not consider he is concerned with the stock and production of his suppliers. Even so, partnership contacts should be developed with suppliers in order to develop new products, to put in place just-in-time between suppliers' factories and the company's in order to help them to reduce costs while improving processes and therefore help them to recoup part of the savings. This management of the overall chain is only possible with a clear vision of the flow of information; with companies actually exchanging more and more data.

Kamauff, Spekman and Spear (2002) note that innovation within the SC is favoured by joint-development opportunities and by the capacity to transfer skills and abilities from one partner to another.

The SC then becomes the overall process of customer satisfaction by the creation of a value chain that integrates in the best possible way all the participants at the origin of product development or the development of a family of products. This value chain begins with "the supplier of the supplier of the supplier" and ends with "the customer of the customer of the customer". This approach thus consists of putting into practice total management based on adding value to a product or a service. This requires the segmentation of customers according to their expectations, the adaptation of the logistics network to these expectations and to profitability by customer segment, the identification of market signals and subsequent planning, the differentiation of products closer to the consumer, the development of an overall technological strategy of the chain and the measurement of performance throughout the chain. The much sought-after goal is control of suppliers and customers in order to improve the quality of the overall service proposed to the end-consumer. Consequently, one of the primary objectives for the companies in the chain will be to find the means of genuinely working together in an effective way.

The structure of the SC depends on the different links that form it and the connections that are established. For decision-making, three main factors can be emphasized: the structure of the SC, the management process and the components of management.

Figure 2: Supply Chain Management framework: Elements and Key Decisions



Source: D. M. Lambert, M. C. Cooper and J. D. Pagh (1998), "Supply Chain Management: Implementation Issues and Research Opportunities", in *The International Journal of Logistics Management*, Vol. 9, n° 2

Structure of the SC: All the companies participate in the running of the SC, from the supplier of raw materials to the end-consumer. The management of an SC depends on several factors such as the complexity of the product, the number of available suppliers and the availability of raw

materials. The extent of the SC to be considered depends on its length and the number of suppliers and customers at each level. It is rare for a company to participate in only one supply chain. For most companies, the SC is experienced as a logistics network going from the initial supplier to the end-consumer (Cooper, Ellram, Gardner and Hanks, 1997). The closeness of relationships at different levels varies and each participant may have special relationships with other participants. This requires a knowledge of and a clear understanding of the way in which the logistics network is configured.

Management process: good management of the chain requires a change from the individual management of different functions to an integrated management of the main activities of the SC. This way of doing things requires the free flow of information which will enable product circulation and improved knowledge about each customer or market in order to give the customer a service whose result is specific (Daventport, 1993). Dynamic management of such a structure implies products, information, financial flow, knowledge and/or ideas. For this reason, a company's internal operations can affect the internal operations of a carrier which, in turn, will affect, for example, those of a hypermarket and a supermarket. The ability of a company to learn from its partners depends on its ability to draw on information, to integrate it and to transmit it to the different links of the SC.

Components of the SC: they depend on their number and levels extending from the bottom up and from downstream to upstream (Lambert et al., 1996). The literature on re-engineering (Hammer and Champy, 1993; Towers, 1994; Hewitt, 1994), customer-supplier relationships (Ellram and Cooper, 1990 and 1993; Stevens, 1989; Houlihan, 1985) and the SC (Lambert, 1997; Ellram, 1997) puts forward several factors required to manage an SC better. Lambert (1997) identified nine factors for a successful SC. We can classify them into two groups as in the table below:

Essential components of a Supply Chain

Physical and technical components (actual, measurable and easily changed)

${\bf Planning\ and\ control\ methods:}$

make it possible to orient the SC in a particular direction

Structure of work (the task)/equipment: makes it possible to understand the way in which the company carries out its tasks and business. This process must be integrated into an organizational structure

Organization Structure: must conform to the internal organisation of the company and to the structure of the SC.

Structure of the equipment, the circulation of information and communication: must reflect the structure of the network for sourcing, manufacturing and distribution. The streamlining of the network has repercussions on the organization of all the members of the chain. The quality of information, its frequency and its updating have an influence on the SC's effectiveness

Managerial and behavioural components

Management methods:

Management techniques must be integrated from the bottom up and from downstream to upstream of the chain.

Power and leadership Structure:

the exercise of power will affect the shape of the chain and its management can be entrusted to one or two "pivotal" companies. Therefore, the exercise of power or its absence can affect the commitment of the other members of the chain. As soon as participation becomes compulsory, certain associates will look to leave the chain and will behave in an opportunistic way (Ian, 1980).

Risk and reward Structure:

anticipating risk and reward sharing will affect the long-term commitment of members.

Culture and attitude:

they show how employees are assessed and how they have integrated the management mechanisms of their company. Literature on change reveals that physical and technical factors are necessary but are not enough (Dennis and Scott., 1998; Andrew and Stalick, 1994; Hammer, 1990, 1994). Managerial and behavioural factors, less tangible and difficult to assess and change, have to be added. Moreover, if the internal processes, structures and systems of an associate do not encourage the sharing of information; then the SC, which is defined as a network of values ensuring the production, circulation and guaranteed sharing of information (Julien, 1994), will not be able to achieve the optimum result.

1.2. SC: network of values from the short- to the long-term

The SC consists in putting into practice a total management approach based on the contribution of value to a product and in consequence to an organization. An analysis of the status of companies causes us to remark that the term value refers to different horizons and that a short-term/long-term distinction can be made. The idea of value refers to a dimension which is not based on a price model or on any invariable standard. It therefore goes far beyond the means used for measuring it (price). From the moment that we study consumer behaviour, value is relative and must be compared with the quality of products or services marketed by the company.

In essence, value is based on compromise. It differentiates itself from the objective approach which gives prominence to physical measurable properties, from the technical approach which associates quality with the degree of compliance of a product to pre-established specifications, or again from the subjective approach which only integrates the user's preferences. Value corresponds to what customers are ready to pay in order to acquire the product; it is the value of its use, to quote Deroy-Pineau's expression (1992): "One doesn't join a network. One makes use of it. It has the value of its use". Moreover, as Ohmae (1989) notes, the first principle of strategy is not to defeat the competition but to provide the customer with value. Porter (1986) found in the SC a means of involving all the participants who contribute to creating value at the different stages of launching a product or service with the aim of increasing the profitability of the companies. This idea must be complemented by a contribution from Hines (1994) who considers that the value chain can be analysed starting from the product wanted by the end-customer. The whole of the network can then be set up again the other way round and the profit made is only the result of the optimum execution of the process intended to satisfy the end-customer.

Consequently, resorting to a partnership can prove to be a means of accessing a bigger market, of obtaining finance within the framework of producers' associations (PA), of reducing production costs, of accessing freightage etc. Each participant puts forward a particular skill. These various skills complement each other. In the short term, membership of the SC influences the performance of the participants. The network cannot be reduced to the single dimension of the "short" term. Co-operation increases and often companies co-operate in a long-term approach (Mariti and Smiley, 1984; Ingham, 1994). Co-operation is an explicit agreement concluded for a long period between two or more companies. A longer time dynamic introduces the development of specific skills through an organisational and relational learning process. This permits the development of new projects and especially new services within the framework of a logistics network. Having as an object less the sale of goods than the definition of a multi-dimensional link, co-operation accelerates the learning processes relative to technical and commercial know-

how (Urban and Vendemini, 1994). Similarly, a reticular organisation allows the setting up of an "activity plan" (March and Simon, 1979) and has values.

1.3. The values of use of an SC network

What are we looking for in an SC network? Which motivations are linked to the search for cost benefits and which motivations have a strategic impact?

➤ The link between value and cost/expenses benefits: Several current theories (the theory of transaction costs, the theory of agency, etc.) have developed the question of costs. "To do or to get something done" is governed by the differential of transaction costs, since the market has difficulty supplying the information needed to install complex processes. According to Johanson and Mattson (1987), reticular relationships can reduce exchange and production costs and can favour the development of economies of scale external to the company (Bresson and Amesse, 1991). On the other hand, the complete internalization of planned operations risks leading to high management costs. Co-operation between the different links of the SC appears as a particularly interesting solution given that markets are unpredictable and that reducing uncertainty is important.

More generally, recourse to a network shows it can lead to a noticeable reduction in production costs. This will probably depend upon the size of the market for the products or services likely to be outsourced (Margirier, 1990): if the size reaches a critical threshold, recourse to a specialist firm is justified, as its costs are lower than a non-specialist company's. Recourse to this co-contracting can also depend on the strength of the effects of experience: in looking for a competitive advantage, a company can consider the economies of experience that its partners benefit from. If this advantage is very big, then it is better to dis-invest and co-operate (Margirier, 1990). The striking of agreements can be linked to the need to reach an agreement in order to share the means of production. It will be co-operation as far as R&D or trade are concerned.

The company can also implement a strategy of volume avoidance. This can segment the production process, enabling a company to concentrate its operation on its main activities, and entrusting to other producers some of the operations of the SC. This type of behaviour reflects a pursuit of flexibility that is the transfer of some of a contractor's constraints onto sub-contractors in adopting a defensive flexibility (Boyer, 1986). This type of behaviour partially disposes of the constraints of flexibility and notably the question of manpower management. The integration of activities within a network of associates will be accompanied by a reduction of costs which will be all the greater given that it will ensure a stronger physical integration of elements which were until then separated. It will also ensure the development of informational meshing which will integrate the partner subcontractors so that distant skills can be called on without quality standards, time limits being threatened.

➤ The link between value relationship and the reduction of uncertainty: If so many different agreements are established between companies, it is often because we are witnessing a decline in the ability of traditional markets to regulate the running of economies (Galbraith, 1968; Arndt, 1983). This is especially so when the turbulence of environments entails a combined effort on the part of companies to bring information under control and to stabilize relationships with the

different components of the environment. The setting up of long-term relationship structures is a factor in reducing the uncertainty generated by both inadequate information and the opportunistic behaviour of participants in the market. (Joffre and Koenig, 1985). Not only does the network bring a response to uncertainty, it is also a collective response to changes in the environments. Thus, as Friedberg (1993) notes, the setting up of a co-operative organization reduces the uncertainty stemming from the environment by creating a negotiated environment.

- > The link between value and the exploiting of competitive advantages: The setting up of networks prevents firms from having to make the traditional choice between market and hierarchy and forces them to integrate these two forms of organization into closely-linked structures. The setting up of networks can correspond to:
- The search for complementarities: companies agree to share complementary assets, production capacities, knowledge, or product components. This being so, it means organizing production and trade in order to reduce transaction costs or to make economies of scale. Cooperation is the input of the agreement. Companies join forces in uniting all the functions that a complex economic ambition may require. This symbiotic strategy can consist in setting up shared sales networks; in designing production processes in order to better apportion complex roles (Miles and Snow, 1980) and especially to develop activities by putting them to the test of specialization. The objective is to gain economic effectiveness, each member specializing in specific tasks.
- The creation of a market power: agreements can enable participants to influence supply costs or to reinforce "market power" around a strategic center (pivot-company), both because of their influence, their "image" and the reputation of their organization. The consensus, resulting from the participants' solidarity, proves indispensable when launching a new product or brand.
- Building up knowledge any organization must learn in order to increase its understanding of the mechanisms of change, write Guilhon and Gianfoldeni (1990). It will do it the entire better for knowing how to take advantage of the solidarity established among its sub-units which contribute to the creation and expansion of constantly highly-specialized knowledge. Co-operation therefore enables "shared information" to be created. This is the result of lasting relationships between the participants (Imai and Itami, 1984) and results from "common assets", linked to interdependences which create externalities for a group of companies (Dosi, 1988). The alliances can constitute a natural complement to the systematic strategies of valorizing scientific and technical know-how implemented by some companies (Delpierre and Michalet, 1989). The forming of alliances is more and more dictated by the rapidity and complexity of technological change, especially as the information necessary for innovation cuts across organizations.
- ➤ The link between a network and common investments: To go back to Morvan (1991), he writes that cooperation lies less and less in the perspective of costs (transaction, production) in the short term but lies at the very heart of the definition of global strategy and in the long term. For this reason, there is a progressive shift from an exchange process towards a process of creating value. The network consequently appears as a means for companies to implement with partners a project surpassing the abilities of the company, while guaranteeing the organization of exchanges. Thus, the company finds itself confronted with the following dilemma: either to integrate resources in order to ensure its development or to abandon resources outside the company (in the market) in order to minimize any problem of irreversibility.

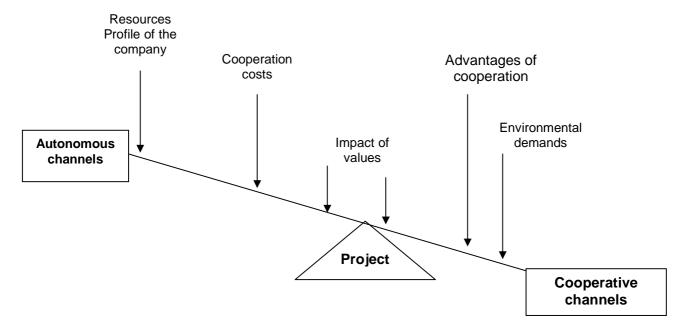
The network thus gives birth to the creation of new resources through combination and association, thus bringing about a leverage effect (Hamal and Phahalad, 1993). It fosters the production of a "quasi-organizational income" caused by a shared use of production assets thanks to a specific method of coordination (Brousseau, 1993). The participants will develop shared skills and organizational learning. This learning will increase flexibility and capacity for reaction notably through a system of effective communication. Under these conditions, the relationships between participants will appear as an investment insofar as they foster mutually-dependent relations (Kirat, 1994).

Finally, an SC network can be understood as an organization likely to best exploit the "quasiorganizational incomes" which spring from transactional advantages, technological advantages and all sorts of markets. However, how stable an agreement is likely to be, depends on:

- the significance which some give to the future, since it is largely because of this that the agreements have been made;
- the number of protagonists and the knowledge they have of each other, because these factors influence the development of trust. Trust enables participants to become more involved in the SC;
- the self-interest which each member will bring to the agreements and the profits they hope to gain from them;
- the frequency and quality of the communications between the partners;
- the style of decision-making which defines the way in which the partners interact;
- the culture of the company which determines the ability of the company to absorb knowledge and to learn.

For the various participants to move easily within a network of alliances, the key activities need to be identified, that is, those which essentially create value for the customer. The other activities will come to support these value-creating activities. This often results in trust and the outsourcing of certain activities to other participants of the network. The SC therefore imposes an overall planning linking all the participants without exception. This planning has to be followed by work both at the strategic and at the tactical and operational levels. The objective is for each link in the chain to identify its problems and solve them in order to prevent them spreading to the others. Optimization of the chain's results does not necessarily lead to optimization of results for each of the links and can lead to problems (internal and external divisions, the predominance of the operational, the absence of a real system of measurement and fear of a radical change in the organization).

Factors in the choice between autonomy and cooperation



Adaptation: Jolly, 2001

2. CONCEPTUAL PERSPECTIVES OF TRUST

To begin with, the network depends on a relationship of trust. Trust is a cross-disciplinary (multi-disciplinary) concept which bridges the gap between social psychology, sociology, philosophy, economics, management and marketing. All these perspectives contribute to a richer and clearer understanding of trust and all its fundamental and relative dimensions. In line with our problematic which is focused on the role of trust in the relationships between the participants of a reticular organization, we have privileged, on the one hand, the research in social psychology which, since the 1950s, has analyzed the building and the role of trust in personal relationships. This approach is coherent because it analyses the exchanges between individuals not only as transactions, but also at the same time, as economic and symbolic relationships within a time perspective. Moreover, research in the marketing sector, which investigates the links between partner companies, appeared important to us. Here, trust is defined as all the activities whose objective is to establish, develop and maintain successful and relational exchanges (Morgan and Hunt, 1994). All in all, these points of view shed light on the way that an SC builds up power.

Conceptualization of trust (in social psychology):

Trust, a social factor affecting co-operation between individuals, appears like a personality trait (Mellinger, 1956; Rotter, 1971). It is characterized by the intertwined intentions and expectations of people involved in exchanges. Two elements appear fundamental: an assessment of the ability of a partner to succeed in completing a task and his intentions and motivations. Therefore, interpersonal trust is defined as the expectation that one can trust in the partner's declarations of

commitment (Rotter, 1967). McAllister (1995) writes that trust is the measurement (the importance, the extent, the degree) on which a person's confidence depends and willingly accepts to act, on the basis of another person's words, actions and decisions.

In the literature to date, there is no consensus on a precise definition of the different facets of trust. It is more the moral aspect of the partner which is given special attention (Giffin, 1967; Schlenker, Helm and Tedeschi, 1973; Ellison and Firestone, 1974). For this reason, the conceptualization of trust in social psychology is criticized (Guibert, 1999): it remains a polymorphous concept which is difficult to integrate into a cognitive explanation of the behaviour of the individual.

Trust in inter-company exchanges:

Trust plays an important role in exchanges despite the fact that its conceptualization and modelling are difficult for many sociologists (Mauss, 1968; Granovetter, 1985; Zucker, 1986). Ring and Van De Ven (1994) give prominence to two approaches to trust: the first is a 'business relationship' orientation based on trust or the risk relative to expectations. The second is based on trust in the other's good will. They have shown the importance of taking into account such subjective elements as the integrity of the partner (the perception that he adheres to all the principles deemed acceptable) and his goodness (the perception that he wishes the best for the other). Trust is therefore a necessary concept in order to understand the processes of the structure of inter-company exchanges. Trust, based on Bonoma and Johnson's work (1978) and on Dwyer, Schurr and Oh's model (1987) of the development process of a relationship and on the theories of exchange and inter-personal phenomena, is conceptualized not only as a belief but also as a behavioural wish or intention. (Moorman, Zaltman and Deshpandé, 1992). It can also be defined as expectation that a partner in the exchange will not engage in opportunist behaviour, even in the presence of short-term compensatory incentives and the uncertainty of long-term profits.

Trust is the state of involving the real positive expectations of the other partners in situations of risk (Boon and Holmes, 1991). Doney (1998) adds that trust is the willingness to rely on another party and to act in those circumstances where an action makes the other party vulnerable. It is based on the partner's competence, a competence defined as his technical capacity to honour his commitments (Möller and Wilson, 1995; Blomqvist, 1997). Morgan and Hunt (1994) have linked trust and commitment describing them as "key variables" in the exchange network of a company with its different partners. They are "key variables" as they encourage companies to invest in a long-term relationship and to withstand alternatives in the short-term. We can then understand the strategic importance of the "trust" and "commitment" variables for maintaining long-term relationships between industrial and commercial partners. They make it possible to understand why some relationships last and others do not.

These definitions, based on objective or subjective criteria, overlap in some way and include some aspects of predictabilty, reliability (Rempel, Holmes and Zanna, 1985), trust and security in the other party. There are also expectations and consequences in the exchange process which are associated with a behaviour of trust between the various parties. All the parties concerned have specific but interdependent objectives. The higher the degree of interdependence between partners throughout the exchange process, the higher their expectations of a type of behaviour are, and the stronger their disappointment is when these expectations are unfulfilled. Each of these approaches to trust has a impact on the running of the SC. Furthermore, McAllister (1995) has observed that

trust has cognitive and affective dimensions. Trust based on knowledge shows a practical skill or a obligation to carry out a given task in a given way. It is based on rationality, reason and logic. Alternatively, the affective dimensions of trust are based more on emotional contexts such as friendship, anxiety or real concern for the well-being of the other. The cognitive and affective dimensions of trust are important in the understanding of the diverse and complex relationships which form the SC. It is vital, based on the literature mentioned above, to identify the managerial implications linked to trust. Nevertheless, it is difficult in practice to distinguish inter-personal trust from inter-organizational trust.

2.1. Building trust within an SC network

It is essential, given the crucial role of trust in the operations of an SC, to know the factors which enable trust to be built up between the various partners. Trust is a multi-faceted construct consisting of different dimensions: "honesty", "altruism" and "reliability" (Hess, 1995). We also find in other research the notion of beliefs (Sirieix and Dubois, 1999; Frisou, 2000), will (Chaudhari and Holbrook, 2001) and finally presumption (Gurviez, 1999). Yuva (2001) in his work on trust in business, and with reference to Maister et al. (2000), deals with four stages in building up trust:

- **Credibility**: Credibility precedes trust. It is an assessment of the partner's abilities to meet the terms of the exchange as regards expected results. Consequently, the supply manager and the supplier must understand each other. They must have common ground on which to base their relationship.
- **Honesty** (seriousness, reliability, integrity): the customer and the supplier must consider themselves as dependents with a regular and predictable relationship. The degree of regularity and of the predictability of the relationship increases, improves and strengthens the depth of trust between the parties concerned.
- **Intimacy**: it entails an understanding of sentiments, emotions and personal transactions in a truly human perspective. People are identified as individuals and not just as representatives of organizations.
- The absence of personal orientation (good will, consideration of the other party's interests): trust demands commitment to the concerns, needs and behaviour of the other participants in the chain. An egotistical attitude of mind destroys the main principles in building up trust.

In fact, trust is a very powerful and creative amalgam of credibility, honesty, intimacy and a lack of self-interest. The way in which the various participants of the SC mix the ingredients is a good indicator of the power of trust. These ingredients are essential for the development and maintenance of trust.

The question of an analysis of trust, characterized by belief, presumption and will, still remains undetermined. Three concepts are proposed:

- the one-dimensional concept (Fournier, 1994; Larzelere and Huston, 1980; Morgan and Hunt, 1994): trust is characterized by benevolent honesty.
- The two-dimensional concept (Ganesan, 1994; Geyskens and Steenkamp, 1995; Kumar, Scheer and Steenkamp, 1995; Doney and Cannon, 1997; Ganesan and Hess, 1997): two dimensions characterize trust: the first is the objective trustworthiness of the partner (which brings together

the assets of competence and honesty and concerns the ability and will to keep one's promises) and the second is good will (motives and intentions directed towards the partner's interests).

- The three-dimensional concept (Hess, 1995; Gurviez, 1999; Frisou, 2000) consisting of a presumption of competence (mastery of knowledge), the presumption of honesty (to make a promise which will be kept) and the ability to take into account the partner's interests (motivation in the long-term).

The third concept is interesting because it allows the different components to be specified theoretically. They are reciprocity (justice and fairness, that is to say having the partner's interests at heart in trading relationships) and truthfulness about the value of the goods exchanged which constitutes the communication object. Consequently, one can distinguish in the communication process two sources of trust, one concerning practical competence, and the other ethical competence (Landowski, 1989). Trust thus reflects an ensemble of accumulated assumptions regarding credibility, integrity and good will which one gives to a relationship of communication. In such a case, Law et al., (1998) suggest putting the construct into a model involving other constructs.

Other literature on trust in the SC focuses on the following five key factors:

- 1. Trust exists only when the two parties consider they must combine their skills, perceptions, minds and hopes. Trust follows when there is a meeting of minds during the exchange process. Suppliers and customers see the same phenomena in a totally different perspective. Even when they have similar variables and situations, slight variations in expectations can be perceived as appalling by the customer company or supplier.
- 2. Treat all the partners in the SC as very important participants. These must be treated as extensions of the "customer/supplier" organization and should behave in such a way as to give prominence to their shared interdependence. This point of view can be illustrated by the following scenario: "we have looked closely at what you are doing for us and what we have to pay. We have assessed what you are doing for us and think we should be charged more. You should increase your rates because we want you to succeed in the long term." Such talk is very rare. It is not very often that a customer invites his supplier to increase his rates just to ensure his long-term success.
- 3. Openly sharing information by putting all one's cards on the table is a necessary prerequisite for completing transactions. Usually, strategic alliances require each organization to invest in the skills of the other and to help each other to achieve the highest levels of performance: shared trust is essential. Sharing information is the key factor which brings the parties closer together and contributes to the success of the SC. Trust is established on the basis of openly-displayed objectives and compatible skills and is supported by open, frequent and honest communication. The partnership's capacity to achieve better results will be strengthened by sharing information about new products, about conquering a market and other strategic initiatives.
- 4. Do what you say at all times. Keeping promises is the essential condition of trust. Permanently respecting promises by both parties is absolutely essential for bringing about and safeguarding real trust.
- 5. Trust, the basis of interpersonal relationships, is personal and not organizational. This reinforces the importance of the affective factor in relationships. For trust to develop and prosper, there has to be a degree of "feeling and emotion" linking the parties in the exchange process. This link is a necessary prerequisite for trust.

2.2. Ethics: a forerunner of trust

If trust determines the level on which each partner can base the integrity of the promise made by the other, other dimensions complementary to trust deserve a mention, notably the role of ethics as a forerunner of trust. Brennan (1991) defines ethics in its widest sense as being the process of good management which consists in delivering to customers high-quality merchandise, at a high value price and at a high level of service and through honest advertising. The much sought-after objective is to develop customer loyalty and to have improved profitability. In opting for an ethical approach to honesty and good management practices, trust can be justified, encouraged, maintained and improved.

Following on from Crosby, Evans and Cowles (1990), Lagace, Dahlstom and Gassenhiemer (1991) have given prominence to ethical behaviour as an indicator of quality ratios. Two perspectives have been proposed:

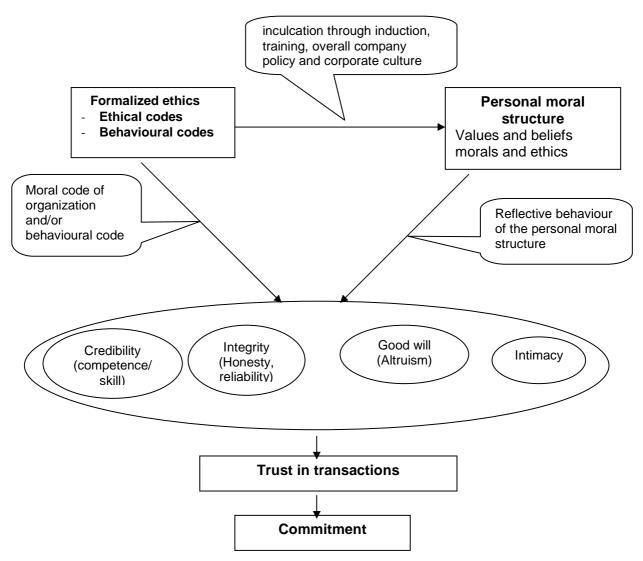
- **the first**: formalized ethics which consist of explicit ethics defined by the company's overall policy and its codes of behaviour.
- **The second**: the personal moral structure which consists of the values and moral beliefs of the organization.

Ethics thus play a preparatory role in the development of trust in the relationships between partners. Callaghan et al., (1995) and Yau et al., (2000) have given prominence to the existence of four complementary dimensions in exchanges: trust, empathy, reciprocity and bonding. Bonding corresponds to commitment as defined by Morgan and Hunt (1994) and refers to relational added value over a long period. It enables the two parties to act in a close way in order to achieve the desired objective (Callaghan, 1995). It results in feelings of friendship and camaraderie.

Work on the customer-supplier relationship (Andeleeb, 1992; Arrow, 1974; Brunner et al., 1989; Hwang, 1987; Moorman et al., 1993; Palmer, 2000; Whiterner et al., 1998) and the quality of service (Gronroos, 1990; Zeithaml et al., 1990) have given prominence to empathy and reciprocity. Empathy is the relational dimension that enables two partners to look at a situation from the perspective of the other partner (Callaghan et al). Reciprocity is the relational dimension which provides or does favours for the other partner with the objective of receiving one in his turn at a later date. When applied to a network, the rule of reciprocity is one of excluding partners who are not worthy of trust. The effectiveness of this rule depends on the one hand on the effect of reputation and on the other hand on complementarity between members which can lead to interdependence thus making any exclusion very expensive. Complementary antecedents can include popularization (Callaghan et al., 1995; Doney and Cannon, 1997; Gundlach et al., 1995; Morgan and Hunt, 1994), sympathy (Doney and Cannon, 1997), social contact, business contact (Doney and Cannon, 1997), the period of contact in terms of frequency, reciprocal actions (Cowles, 1996) and empathetic behaviour.

All these dimensions enable the following model to be developed:

Antecedents and the formal structure of trust



As a non-hierarchical method of organization in which relationships are represented by a cooperative game (Josserand, 2001), the normative antecedents for the running of a network are of two types: reputation and the existence of shared norms and values. The need for trust and the existence of interdependence between partners makes exclusion from the network prejudicial to any member who has made himself untrustworthy.

2.3. Trust in action

Although most customers and suppliers identify how important trust is as an operational and strategic managerial tool unfortunately, when it comes to actually integrating it into their relationships, the failure to do so is obvious. Many are incapable of putting into use practices which create an atmosphere favouring trust. Research, denouncing actions and behaviour incompatible with a sense of trust, has been published (Fawcett et al., 2003). The following points have been noted down:

- Strategic objectives and operational plans remain disparate thus making it difficult to build team spirit within an alliance.
- Managers do not fully understand the forces leading to their partners decision-making. As they are self-oriented, they do not understand the challenges facing their allies.
- Managers do not use information pro-actively to make up for the differences in attitude and behaviour in the SC network. The lack of adequate information can be attributed to inefficient systems, to a poor integration of systems and processes and finally to an unwillingness to share the information required.

Cooperation in that case appears as the result of reflection by participants faced with the dilemma of the suspect in a murder enquiry who does not know where the next question will come from and looks for support (adapted by the translator from Josserand, 2001). In a static version of this "game", the option of non-co-operation is taken. On the other hand, anticipating future transactions with the same partners restricts the actual opportunist behaviour and we enter into a co-operative version of the "game". It is a question of social interaction where individuals are involved in social networks which discourage opportunism and tend to favour trust. A shared past and the existence of social links will inhibit opportunist behaviour and will enable trust to be established. The decision to cooperate is the result both of a rational calculation of expected profits as in the situation of the murder suspect (as mentioned above) and of a sense of trust towards individuals with whom social links are strong.

As we have just mentioned, there is a gap between the theory and practice of trust within shortand long-term relationships between customer and supplier. The network remains a fragile method of organization since there is no systematic monitoring of the validity of trust. It is thus probable that opportunist behaviour can exist and persist. The existence of reputation and its effects plays an essential role in the maintenance of trust and thus of the network. Transactions between partners can only take place according to the network method if all the partners taking part in the transaction share a sense of trust. This means that each enjoys the reputation of being worthy of trust. Therefore, it will create interdependence which is based on the sharing of resources. This can take two forms: specialized or non-specialized entities.

In the first form, a member of a network accedes to the resources held by its other members (Weiss, 1994) and devotes himself to creating value in specific domains (Weiss, 1994 and Paché, 1994). Companies in the network are in that case complementary and highly specialized. Each develops distinctive skills in one particular competitive field. They thus use their resources in limited fields where high value can be derived. Moreover, a much bigger competitive field is covered by all the members; each able to use the other members' resources. Therefore, two forms of complementarity can then exist: horizontal and vertical complementarity. Horizontal complementarity can take the form of specialization by job or geographical zone. In job specialization, each member of the network masters a skill to enable joint projects to be run or carryied out. In specialization by geographical zone, all the members cover a much bigger territory. They can thus propose an overall service using all the local intermediaries. Furthermore, they can build up skills together or pool resources exploited locally. Vertical complementarity corresponds to an upstream-downstream specialization, suppliers and customers (internal or external) bring their specific knowledge to developing a shared project. We find in vertical specialization the possibility of developing resources in a precise field, while benefiting from

access to resources from other units. The second form of sharing resources concerns those members who are not differentiated from each other: there is therefore no specialization within the network. Members have the same role. On the other hand, access to some resources external to the network is ensured by pooling these resources.

The link between interdependence and trust responds in reality to a recursive relation. Sharing resources, complementarity of roles and working together change into interdependence within a climate of trust. Participants accept shared dependence because of the trust they feel for each other. They thus accept to be exposed to the opportunism of the other participants. This interdependence in turn reinforces the trust between individuals who are already linked (Johanson and Mattson, 1992). This recursiveness demonstrates well the importance of the role played by the other incentives for preserving the network. These mechanisms, thanks to their unbroken connection with trust, can then be very effective, even if one of the parties is less involved than the other. They do not however lie at the heart of the cohesiveness of the network: this rests above all on trust and on sharing complementary resources. One of the founding elements of the network is the interdependence between the entities forming it. The need to create or to manage resources in a transversal way will give rise through the network to cohesion. Members within the SC network, must both learn the need to share trust and to transversally take into account their interdependence.

2.4. Finally, what is trust?

Blau (1964), by taking an interest in the exchanges between individuals, gave prominence to two dimensions characterizing social communication: on the one hand, an exchange refers to the commitment of the partners to a voluntary action motivated by the hope of a return; on the other hand, it concerns transactions which are deferred and not fully specified. An unspecified exchange is one where the service one receives is to be understood as a commitment between partners vis-à-vis the provider. This commitment is built on the sense of trust. If the social exchange requires trusting the others as regards the payment of their debt (Blau, 1964), how can we then define trust within an SC network?

We shall adopt the three foundations of inter-company trust as given by Lane (1998): trust based on calculation, trust built on values and norms and cognitive trust. The trilogy of cognitive trust, within an SC network, is given prominence. It is a question on the one hand "of trust through learning. This comprises a progressive building of confidence through a gradual building up of shared knowledge of the other and assumes a degree of stability in the relationships between the companies". By definition, this is the case in networks. On the other hand, "trust, based on social characteristics and with partners from the same social group or the same community, is not deliberately created." Finally, "trust deliberately institutionalized by companies is based on mechanisms (insurance, legal and statutory regulations, routines, institutions) which protect the interests of all the parties." However, institutionalized trust is not directly brought into play by companies but orchestrated by professional bodies such as trade unions and producer organizations which allow either interpersonal relationships networks to be set up or avoid face-to-face relationships. Cognitive trust therefore takes many forms and these are superimposed and intertwined.

Consequently, trust is understood as a process under continuous construction/reconstruction. It is based on learning, and is in part the fruit of experience or the incorporation of regulations and social norms. It reinforces and makes possible forms of action (shared) between the partners of a network. As trust is defined as a process (a dynamic vision) we agree therefore with the proposals of Lorentz (1996) or Karpik (1996). For Lorentz, trust is established through a learning process during co-operative actions. Nevertheless, since a feeling of trust towards a partner in the network encourages greater co-operation, which in turn reinforces trust thanks to acquired knowledge, it is very difficult to distinguish the result of the process. In the same way, when Karpik (1996) suggests that trust enables problematic commitments to become credible commitments, we are brought to believe that trust is not only the result, but is the very process by which the partners of an SC network build up co-operation. Trust creates irreversibility because commitment to co-operation leads to partners giving up opportunist behaviour and orienting their choices towards the types of action which other members of the network expect of them.

CONCLUSION

Trust, which results from many, contextualized, socially embedded complex social constructs, is a fundamental element in all relationships particularly those characteristic of the behaviour of the members of an SC network. Although these recognize the crucial place of trust in the build-up and the continuation of business relationships, there is considerable vagueness when we look at how trust is used as an effective strategic managerial tool. The difference between the understanding of this concept and its practice is even bigger than one thinks. Greater attention must be paid to the means of developing and perpetuating trust, while integrating an understanding of specific management operations, and while amending whatever actions are detrimental to the build-up of trust. As soon as the methods of action within a network are communal and its members are linked by strong economic interdependence, if trust is not partly rooted in the organizations of the various partners, there is not a real base on which to establish solid and tenable relationships. That is why it seems essential to us to consider this work as work-in-progress in the long term and to re-examine it later with variable measurement tools.

BIBLIOGRAPHY

Andaleeb S.S. (1992), The trust concept: research issues for channels of distribution, *Research in Marketing*, 11, 1-34.

Anderson E. et Weitz B. (1989), Determinants of continuity in conventionnal industrial channel dyads, *Marketing Science*, 8, 4, 310-323.

Anderson J.C. et Narus J.A. (1990), A model of distribution firm and manufacturer firm working partenerships, *Journal of Marketing*, 54, 1, 42-58.

Arrow K.J. (1974), The Limits of Organization, New York: W W Norton & Company.

Aurier P., Benavent C. et N'Goala G. (2001), Validité discriminante et prédictive des composantes de la relation à la marque, *Actes du 17^e Congrès International de l'Association Française de Marketing*, éd. Joël Brée, Deauville, Université de Caen, 156-159.

Blau P. (1964), Social exchange in social life, in Willey J., *Exchange social and power*, New York, Sydney.

Blomqvist K. (1997), The many faces of trust, *Scandinavian Journal of Management*, 13, 3, 271-286.

Bonoma B.V. et Johnston W.J. (1978), The social psychology of industrial buying and selling, *Industrial Marketing Management*, 17, 213-224.

Boon S. D. & Holmes J. G. (1991), The Dynamics of Interpersonal Trust: Resolving Uncertainty in The Face of Risk, in R. A. Hinde and J. Grobel (Editions), *Cooperation and Prosocial Behavior*, Cambridge University Press, pp 190 – 211.

Bouayad A. (1996), Les alliances stratégiques. Maîtriser les facteurs clés de succès, Dunod.

Brennan (1991), Remarks on Marketing Ethics, Journal of Business Ethics, 10, 255-258.

Bresson (De) C. et Amesse F. (1991), Networks of Innovators: A review and Introduction to the Issue, *Research Policy*, 20, 5.

Brousseau E. (1993), L'économie des contrats. Technologies de l'information et coordination interentreprises, PUF.

Brunner J.A., Jiwi C.C.S. et Nanping Z. (1989), The Role of Guanxi in Negociations in the Pacific Basin, *Journal of Global Marketing*, 2.

Callaghan M.B., McPhail J. et Yau O.H.M. (1995), Dimensions of a Relationship Marketing Orientation – An Empirical Exposition, Word Marketing Congress, Kent Grant and Ian Walker, éd. Melbourne, Australia: *Academy of Marketing Science*, 7, 2, 1059-1066.

Chaudhuri A. et Holbrook M.B. (2001), The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty, *Journal of Marketing*, 65, 2, 81-93.

Christopher M. G. (1998), Relationships and Alliances: Embracing The Era of Network Competition, *Strategic Supply Chain Management*, Hampshire, Gower Press.

Cooper C. M., Lambert D. M. et Pagh J. D. (1997), Supply Chain Management : More Than a New Name for Logistics, The International Journal of Logistics Management, Vol. 8, n° 1.

Cooper C. M., Lambert D. M. et Pagh J. D. (1998), Supply Chain Management: Implementation Issues and Research Opportunities, *The International Journal of Logistics Management*, Vol. 9, n° 2.

Cooper M.C., Ellram L.M., Gardner J.T. et Hanks (1997), Meshing Multiple Alliances, *Journal of Business Logistics*, Vol. 18, n° 1.

Corbett Ch. J., Blackbum J. –D., Van Wassenhove L.N. (1999), «Partnerships to improve supply chains », *Sloan Management Review*, Summer, p. 71-82.

Crosby L.A, Evans K.R. et Cowles D.L. (1990), Relationship Quality in Services Selling: an Interpersonal Influence Perspective, *Journal of Marketing*, 54.

Daventport Th. H. (1993), *Process Innovation, Reengineering Work through Information Technology*, Harvard Business School Press.

Delapierre M. et Zimmerman (1988), *Grappes technologiques et réseaux d'alliances*, Actes du colloque CGI, Génie Industriel, Nancy.

Dennis T. J. et Scott D. C. (1998), Reengineering in Practice: Where Are the People? Where Is the Learning?, *Journal of Applied Behavioral Science*, vol 34, n° 3.

Deroy-Pineau F. (1992), Réseaux sociaux et mobilisation des ressources, *POUR*, n° 10, 119-128.

Doney P. M. (1998), Understanding the Influence of National Culture on the Development of Trust, *Academy of Management Review*, July.

Doney P.M. et Cannon J.P. (1997), An examination of the nature of trust in buyer-seller relationships, *Journal of Marketing*, 61, 4, 35-51.

Dornier PH.-P. et Fender M. (2001), *La logistique globale. Enjeux - Principes – Exemples*, Paris, Éditions d'Organisation.

Dosi G. (1988), Sources, Procesures and Microeconomic Effects of Innovation, *Journal of Economic Literature*, septembre.

Dwyer F.R., Schurr P.H. et Oh S., (1987), Developing buyer-seller relationships, *Journal of Marketing*, 5, 2, 11-27.

Ellison C.W. et Fireston J.J. (1974), Development of interpersonal trust as a function of self-esteem, target status, and target style, *Journal of Personality and Social Psychology*, 29, 5, 655-663

Fournier S. (1994), *A consumer-brand relationship framework for strategic brand management*, Thèse non publiée, Université de Floride.

Frazellz Ed. H. (2001), Supply Chain Strategy, Mc Graw Hill.

Frazier G.L. (1983), «On the measurement of interfirm power in channels of distribution», *journal of Marketing Research*, May, vol. 20, n° 2, p. 158-166.

Friedberg E. (1993), Le pouvoir et la règle. Dynamique de l'action organisée, Editions du Seuil.

Frisou J.(2000), Confiance interpersonnelle et engagement :une orientation béhavioriste, *Recherche et Applications en Marketing*, 15, 1, 63-80.

Galbraith J. (1968), Le nouvel Etat industriel, Paris, Gallimard.

Ganesan S. (1994), Determinants of long-term orientation in buyer-seller relationships, *Journal of Marketing*, 58, 2, 1-19.

Ganesan S. et Hess R. (1997), Dimensions and levels of trust: implications for commitment to a relationship, *Marketing Letters*, 8, 4, 439-448.

Geyskens I. et Steenkamp J.B. (1995), An investigation into the joint effects of trust and interdependance on relationship commitment, *Actes de la conference de l'EMAC*, 24, éd. M. Bergadaa, ESSEC, Cergy-Pontoise, 351-371.

Geyskens I., Steenkamp J.B. et Kumar N. (1998), Generalizations about trust in marketing channels relationships using meta-analysis, *International Journal of Research in Marketing*, 15, 3, 223-248.

Giffin K. (1967), The contribution of studies of source credibility to a theory of interpersonal trust in the communication process, *Psychologicla Bulletin*, 68, 2, 104-120.

Granovetter M. (1985), Economic action and social structure: problem of embeddedness, *American Journal of Sociology*, 91, 3, 481-510.

Gronroos C. (1990), Relationship Approach to Marketing in Service Contexts: The Marketing and Organization Behaviour Interface, *Journal of Business Research*, 20, 1, 3-11.

Guibert N. (1999), La confiance en marketing : fondements et applications, *Recherches et Applications en Marketing*, 14, 1, 1-19.

Guilhon B. et Gianfoldoni P. (1990), Chaînes de compétences et réseaux, *Revue d'économie industrielle*, n° 51.

Gurviez P. (1999), La confiance comme variable explicative du comportement du consommateur : proposition et validation empirique d'un modèle de la relation à la marque intégrant la confiance, *Actes du Congrès International de l'Association Française de Marketing*, 15, éds J.C. Usinier et P. Hetzel, Université Louis Pasteur, Strasbourg, 301-326.

Gurviez P. et Korchia M. (2002), Proposition d'une échelle multidimensionnelle de la confiance dans la marque, *Recherche et Applications en Marketing*, 17, 3.

Hamel G. et Prahalad C.K. (1993), La stratégie à effet de levier, Havard l'Expansion, 69.

Hess J. (1995), Construction and assessment of a scale to measure consumer Trust, Conférence *AMA Educators, Enhancing Knowledge Development in Marketing*, éds B.B. Stern et G.M. Zinkhan, 6, 20-25.

Hines P. (1994), Creating World Class Supplies: Unlocking Mutual Competitive Adavantage.

Hwang K.K. (1987), Face et Favour: The Chinesse Power Game, AJS, 92, 4.

Ian R. M. (1980), *The New Social Contract, and Inquiry into Modern Contractual Relations*, Yale University Press.

Imai K. et Itami H. (1984), Interpenetration of Organization and Market, *International Journal of Industrial Organization*, n° 2.

Ingham M. (1991), La perception du succès des alliances stratégiques, *Revue Internationale PME*, 4, 2, 43-61.

Joffre P. et Koenig G. (1985), Stratégie d'entreprise, l'antimanuel, Paris, Editions Economica.

Johanson J. & Mattson L.G. (1987), «Interorganizational Relations in Industrial Systems: Network Approach Compared with Transation Coast Approach, *International Stidies of Management and Organization*, 17, 1.

Johnson-George C. et Swap W.C. (1982), Measurement of specific interpersonal trust: construction and validation of a scale to assess trust in a specific other, *Journal of Personality and Social Psychology*, 43, 6, 1306-1317.

Jolly D. (2001), Alliances interentreprises. Entre concurrence et coopération, Vuibert.

Josserand E. (2001), L'entreprise en réseau, Vuibert.

Julien P. A. (1994), L'entreprise partagée : contraintes et opportunités, *Revue Internationale de Gestion*, n° 4.

Kamauff J., Speman E. R. et Spear J. (2002), Supply Chain Competency: Learning as a key component, *Supply Chain Management : An International Journal*, Vol. 7, n° 1.

Karpik L. (1996), La confiance : réalité ou illusion ? Examen critique d'une thèse de Williamson, *Revue Economique*, 49, 4.

Kirat T. (1994), L'organisation, entre statique et dynamique : une revue critique de la littérature économique, Jacot J.H. (dir), *Formes anciennes, formes nouvelles d'organisation*, Presses Universitaires de Lyon, 19 – 72.

Kraft J. (1997), «Concurrence et coopération dans la relation industrie-commerce », *Actes du colloque SFER sur la grande distribution alimentaire*, Montpellier, p. 241-252.

Kumar N., Scheer L.K. et Steenkamp J-B. (1995), The effects of perceived interdependance on dealer attitudes, *Journal of Marketing Research*, 32, 3, 348-356.

Lagace R.R, Dahlstrom R. et Gassenheimer J.B. (1991), The Relevence of Ethical Salesperson Behavior on Relationship Quality: The Pharmaceutical Industry, *Journal of Personal Selling and Sales Management*, 11, 4, 39-47.

Landowski E. (1989), La société réfléchie, Paris, Seuil.

Lane C. (1998), Theories and issues in the study of trust, in Lane C. & Bachamann R., *Trust within and between organizations*, Oxford University Press, New York, p. 1-30.

Larzelere R. et Huston T. (1980), The dyadic trust scale: toward understanding interpersonal trust in close relationships, *Journal of Marriage and the Family*, August, 595-604.

Law K.S., Wong C-S. et Mobley W.H. (1998), Toward a taxonomy of multidimensional constructs, *Academy of Management Review*, 23, 4, 741-755.

Lecoq B. (1989), Réseaux et système productif régional..., IRER, n° 23.

Lorenz E. (1996), Confiance, contrats et coopération économique, Sociologie du travail, 4/96.

Maister D. H., Green C. H. et Galford R. M. (2000), The Trusted Advisor, Simon & Schuster.

March J.C. et Simon H.A. (1979), Les organisations, Dunod.

Margirier G. (1990), L'impact des technologies d'information sur les performances et l'organisation de la firme, *Revue d'Economie Industrielle*, n° 5.

Martin A., landvater D. (1999), Principes et perspectives du réapprovisionnement continu au cœur de la supply chain, Jouenne et Associés.

Mauss M. (1968), Sociologie et anthropologie, Paris, PUF.

McAllister D. J. (1995), Affect – and Cognition – Based Trust as Foundations for Interpersonal Cooperation in Organisations, *Academy of Management Journal*, 38, pp 24 – 59.

Mellinger G. (1956), Interpersonal trust as a factor of communication, *Journal of Abnormal and Social Psychology*, 52, 304-309.

Miles R. et Snow C. (1980), Organizations: New Concept for New Forms, *California Management Review*, Vol. 28, n° 3.

Miles R. et Snow C. (1992), Causes of Failure in Network Organizations, *California Management Review*, Summer.

Möller K.E. et Wilson D.T. (1995), *Business marketing: an interaction and network perspective*, Northwell MA, Kluwer Academic Press.

Moorman C., Zaltman G. et Deshpandé R. (1992), Relationships between providers and users of market research: the dynamics of trust within and between organization, *Journal of Marketing Research*, 29, 314-328.

Morgan R.M. et Hunt S.D. (1994), The commitment-trust theory of relationship marketing, *Journal of Marketing*, 58, 3, 20-38.

Morvan Y. (1991), Fondement d'économie industrielle, Editions Economica, Collection Gestion.

Murphy P.E. et Gundlach G.T. (1997), A typology of trust in business, *New and evolving paradigms: the emerging future of marketing*, conferences *Three AMA Special*, éd. T. Meenaghan, Dublin, 486-598.

Nelson D., Mayo R. et Moody P. E. (1998), *Powered by Honda: Developing Excellence in the Global Enterprise*, John Wiley & Sons, New York.

Ohmae K. (1989), Companyism and Do More Better, Havard Business Review, january-february.

Paché G. et Paraponaris C. (1993), L'entreprise en réseau, PUF, Collection Que sais-je, n° 2704.

Palmer A. (2000), Co-operation and Competition: a Darwinian Synthesis of Relationship Marketing, *European Journal of Marketing*, 34, 5/6, 687-704.

Poirier C. (1999), Advanced Supply Chain Management: How to Build a Sustained Competitive Advantage, Berrett-Koehler Publishers, San Francisco, CA.

Poirier C. C. (1999), Advanced Supply Chain Management: How to Build a Sustained Competitive Advantage, Berret – Koehler Publishers, San Francisco, CA.

Rempel J.K., Holmes J.G. et Zanna M.P. (1985), Trust in close relationships, *Journal of Personality and Social Psychology*, 49, 1, 95-112.

Ring P. S. & Van De Ven A. H. (1994), Developmental Processes of Cooperative Interorganizational Relationships, *Academy of Management Review*, 19, pp 90 - 118.

Rotter J.B. (1967), A new scale for the measurement of interpersonal trust, *Journal of Personality*, 35, 4, 651-665.

Rotter J.B. (1971), Generalized expectancies for interpersonal trust, *American Psychologist*, 26, 443-452.

Samii A.K. (1997), Mutations des stratégies logistiques en Europe, Nathan.

Schlenker B., Helm B. et Tedeschi J. (1973), The effects of personality and situational variables on behavioral trust, *Journal of Personality an Social Psychology*, 25, 3, 419-427.

Shapiro R., (1994), « Les relations producteurs distributeurs aux Etats-Unis », dans L'amourhaine ou les nouvelles relations commerce industrie et leurs traductions logistiques aux États-Unis, en Grande-Bretagne, en Allemagne, en France et aux Pays-Bas, colloque du 14 juin 1994 IHEL/Diagma, édité par Logistique Magazine, Paris.

Sirieix L. et Dubois P.L. (1999), Vers un modèle qualité-satisfaction integrant la confiance ?, *Recherche et Applications en Marketing*, 14, 3, 1-22.

Stadtler H. et Kilger Ch. (2002), Supply Chain management and advanced planning: Concepts, Models, Sofware, and Case Studies, Berlin, New York, Springer.

Szymankiewicz J. (1997), "Efficient Consumer Response, Supply Chain Management for the New Millennium? », *Logistics Focus*, vol. 5, n° 9, p. 16-22.

Thorelli H.B. (1986), Networks: Between Markets and Hierarchies, *Strategic Management Journal*, Vol. 7.

Tordjman A. (1999), « De la confrontation à la coopération », *Revue Française de Gestion*, juin-juillet-août, p. 112-114.

Tyndall G., Gopal C. Partsch W. et Kamauff J. (1998), Supercharging Supply Chains: New Ways to Increase Value Through Global Operational Excellence, John Wiley & Sons, New York, NY.

Tyndall G., Gopal C., Partsch W. et Kamauff J. (1998), *Supercharging Supply Chains: New Ways to Increase Value Through Glabal Operational Excellence*, John Wiley & Sons, New York, NY.

Urban S. et Vendemini S. (1994), *Alliances stratégiques coopératives européennes*, De Boeck Université.

Waldman Ch. (1999), « Efficacité et limites du category management », *Revue Française de Gestion*, juin-juillet-août, p.115-121.

Weiss D. (1994), Les nouvelles frontières de l'entreprise, Revue française de gestion, Septembre-octobre.

Whiterner E.M., Brodt S.E., Korsgaard M.A. et Werner J.M. (1998), Managers as Initiators of Trust: An Exchange Relationship Framework for Understanding Managerial Trustworthy Behaviour, *The Academy of Management Review*, 23, 3, 513-530.

Wilkinson I. F. (1981), "Power, conflict and satisfaction in distribution channel: an empirical study", *International Journal of Physical Distribution & Materials Management*, vol. 11-4, p. 20-30.

Yau O.H.M., McFetridge P.R., Chow R.P.M., Lee J.S.Y., Leo Y.M. et Tse A.C.B. (2000), Is Relationship Marketing for Everyone?, *European Journal of Marketing*, 34, 9/10, 1111-1127.

Yuva J. (2001), Trust and Business Go Hand-in-Hand, *Purschasing Today*, July, pp. 49 – 53.

Zeithaml V.A., Parasuraman A. et Berry L.L. (1990), *Delivering Quality Service*, Toronto, Canada: Free Press.

Zucker L.G. (1986), Production of trust: institutional sources of economic structure, 1840 – 1920, *Research in Organizational Behavior*, ed. B.M. Staw et L.L. Cummings, 8, 53-111.