WHERE IS THE PLACE TO TRUST THE SUPPLY CHAIN MANAGEMENT?

Vojko Potocan, Ph. D.
Matjaz Mulej, Ph. D., D.
Faculty of Economics and Business; UM
Razlagova 14, SI-2000 MARIBOR
Phone: +386 2 22 90 255
Fax: +386 2 25 16 681
E-mail: vojko.potocan@uni-mb.si

Summary

In the global competitive environment, enterprises can only survive in the long term by permanently improving their business. They have limited resources and they face very harsh conditions, therefore they can significantly improve their business results, if they improve the organization of their work. The important element of organizing (especially all relations in the organizations) is trust between all organizational members in their work and behavior in all important areas and fields of business. This is especially important for supply chain management, as an area of integrated work in the frame of organization and/or as integrated cooperation between different organizations. Supply chain management can be defined as “managing the entire chain from raw material supply, manufacture, assembly and distribution to the end customer”. One of the main interest based dilemmas in supply chain management is how much of the supply chain should be owned by each business. This is called the extent of vertical integration. But in the modern business environment vertical integrations alone are not enough. The alternatives to vertical integration are some other forms of relationship, not necessarily ownership. The relationship between the links of the supply chain will be examined more detailed in terms of the flows between the operations involved. The basic dilemma of modern organization of relations in supply chain management is how to assure appropriate level of trust, if we understand trust as necessary capacity and ability for appropriate work and behavior of all its members. This contribution discusses two theses: 1) How to define the role and importance of trust in supply chain management, and 2) How to improve the level of trust among supply chain management members.
Key words: ability, members of supply chain, relations, supply chain management, trust.

1. INTRODUCTION

A dominant logistics philosophy throughout the 1980s and into the early 1990s involved the integration of logistic with other functions in organizations in an effort to achieve the enterprise’s overall success (Nigel, 1996; Rushton et al., 2001; Murphy and Wood, 2004; etc.).

The early to mid-1990s witnessed a growing recognition that there could be value in coordination of the various business functions not only within single organizations but across organizations as well – what can be referred to as a supply-chain (SC) management philosophy (Nigel, 1996; Rushton et al., 2001; Waller, 2003; Christopher, 2005; Slack et al., 2006).

For research supply chain management (SCM) is important to have a common understanding of what is meant by supply chain and supply-chain management (Blanchard, 2006; Christopher, 2005; Hugos, 2006; Slack et al., 2006). But supply chains are not a totally new concept: organizations traditionally depend on suppliers and organizations traditionally served customers. Some supply chains (SCs) can be much more complex than others. Coordinating complex SCs is likely to be more difficult than for less complex relations.

SCM can be defined as “the systemic, strategic coordination of the traditional business functions and the tactics of these business functions within a particular company and across businesses in the supply chain, in order to improve the long-term performance of companies and the entire supply chain” (Nigel, 1996; Handfield and Nichols, 2002; Cohen and Roussel; 2004).

When we talk about supply chain, the modern organizational approach suggests that companies must recognize the interdependencies of major functional areas within, across, and between firms. In turn, the objectives of individual supply chain participants should be compatible with the objectives of other participants. To what degree objectives are realistically defined and attained, depends on the level of holism of thinking, decision making and action.

The important questions of modern discussion about SCM presents trust (Potocan, 2002; Potocan, 2006). Trust is important for modern SCM, because it presents a necessary base for the division of work and formation of new ways to accompany and direct (and connected) work of organizational members in the frame of SCM. In our contributions we
define (and research) trust as a value and as a competence. The contribution discusses two questions about trust and SCM. First, we discuss the role and importance of trust for appropriate work and behavior of all members of SCM. Second, we discuss how management use trust for their work in SCM and for managing other members of SC.

2. THE SUPPLY-CHAIN AND SCM

In general, “the SC concept originated in the logistic literature, and logistics has continued to have a significant impact on the SCM concept” (See: Heitzer and Rendel, 2003; Anklesaria, 2007; Bolstorff and Rosenbaum, 2007).

Since the early to mid 1990s there has been a growing body of literature focusing on SCs and SCM, and this literature has resulted in a number of definition for both concepts (Rushton et al., 2001; Handfield and Nichols, 2002; Potocan et al., 2004 – 2007; Bolstorff and Rosenbaum, 2007). It’s important that we have a common understanding of what is meant by SC and SCM.

A SC “encompasses all activities associated with the flow and transformation of goods from the raw material stage (extraction), through to the end user, as well as the associated information flow. In reality, several types of SCs exist and it’s important to note several key points. First, SCs are not a new concept in that organizations traditionally have been dependent upon suppliers and organizations traditionally have served customers. SCs can be much more complex (in terms of the number of participants parties) than others, and coordinating complex SCs is likely to be more difficult than doing so for less complex SCs. Moreover, complex SCs may include “specialist” companies, to provide coordination among various SC parties.

SCM can be defined as “the systematic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses in the SC, for the purpose of improving the long-term performance of the individual companies and the SC as a whole” (Waller, 2003; Christopher, 2005; Blanchard, 2006; Slack et al., 2006; Bolstorff and Rosenbaum, 2007).

Successful SCM requires companies to accept an enterprise-to-enterprise point of view, which can cause organizations to accept practice and adopt behaviors that haven’t traditionally been associated with buyers-seller interactions. Moreover, successful SCM requires companies to apply the systems approach across all organizations in the
When applied to SCs, the systems approach suggests that companies must recognize the interdependence of major functional areas within, across, and between firms. In turn, the goals and objectives of individual SC participants should be compatible with the goals and objectives of other participants in the SC. For example, a company that is committed to a high level of customer service might be out of place in a SC comprised of companies whose primary value proposition involves containment.

How SCM changes relations between companies (Potocan, 2004; Potocan et al., 2004 – 2007)? Conventional wisdom suggests that company-versus-company competition will be superseded in the twenty-first century by supply-versus-supply-chain competition. While this may occur in a few situations, such competition may not be practical in many instances because of common or overlapping suppliers or the lack of a central control point, among other reasons. Rather, a more realistic perspective is that individual members of a SC will compete based on the relevant capabilities of their supply network, with a particular emphasis on immediately adjacent suppliers or customers.

A number of key attributes are associated with SCM, including e.g.: customer power, a long-term orientation, leveraging technology, enhanced communication across organizations, inventory control, and interactivity, inter-functional, and inter-organizational coordination (Handfield and Nichols, 2002; Cohen and Roussel, 2004; Hugos, 2006; Blanchard, 2006; Slack et al., 2006). Although each of these is discussed in literature as discrete entities, interdependencies exist among them.

3. SCM AND INTEGRATION

An individual firm can be involved in multiple SCs at the same time, and it’s important to recognize that expectations and required knowledge can vary across SCs (Potocan et al., 2004 – 2007; Blanchard, 2006; Hugos, 2006; Potocan and Kuralt, 2007).

SCs are integrated by having various parties enter into and carry out long-term mutually beneficial agreements. These agreements are known by several names, to include partnerships, strategic alliance, third-part arrangements, and contract logistics. Whatever they are called, these agreements should be designed to reward all participants when cooperative ventures are successful, and they should also provide incentives for all parties to work toward success.

Broadly speaking, organizations can pursue three primary methods when attempting to integrate their SCs. One method is through vertical
integration, where one organization owns multiple participants in the SC. The most common examples of vertical integration today are some lines of paint and automotive tires. It’s important to recognize that may be (in particular industries) regulatory limitation as to the degree of vertical integration.

A second possible method of SC coordination involves the use of formal contracts among various participants. One of the more popular uses of contracts is through franchising, which attempts to combine the benefits of tight integration of some functions along with the ability to be very flexible while performing other functions.

A third method of SC coordination involves informal agreements among the various organizations to pursue common goals and objectives, with control being exerted by the largest organization in the SC. Very popular method is also a third-party logistics (known also a logistic outsourcing or contract logistic).

While integration of SCM may sound attractive from a conceptual perspective, a number of barriers block its effective implementation. A number of barriers block are associated with SCM, including e.g.: regulation and political considerations, lack of top management commitment, reluctance to share relevant data, incompatible information systems, incompatible corporate cultures, trust between organizational members, etc.

4. WHERE IS PLACE TO HAVE TRUST IN SCM

The field trust is the subject in many different researches in theory and practice of an organization of SC and/or SCM. Researchers distinguish in used starting points, accessions and basic understanding of the content of the term trust (Misztal, 1995; Warren and Warren, 1999; Ciancunatti and Steding, 2000; Hardin, 2002; Robbins, 2002; Bracey, 2003; Salomon and Flores, 2003; Kovac, Rozman, 2006; Potocan and Kuralt, 2007).

According to the intention and aims, we are able to classify researches basically into two basic groups (Abst, 1997; Nicholson, 1998; Potocan, 2002; Alvares et al., 2003; Ward and Smith, 2003; Agnes, 2004; Potocan, 2004; Potocan et al., 2004 – 2007; Wall and Patton, 2005; Potocan, 2006):

- The central field of discussion of the first group represents trust as a value. Trust as a value (e.g. credibility) is reflected for example in expectation of honesty, frankness, sincerity and respect. Its reaching and constant assuring is based on high ethic
standards as for example suitable mutual relations, agreements about co-working and disclosure of information, and assurance of shared activity.

- Trust as competence is reflected in ability of reliable behavior and working. Trust as ability is reflected for example in certainty and reliability in behavior and work. To perform a certain work, each single participant of must trust, that his/her partner is going to perform his/her part of obligation and responsibility very well. Trust as competence of behaving and working is based on the holistic and up-dated competence of all participants, which cooperate directly or indirectly in an organization or between them.

The organization can define the role and the meaning of trust in its working and behavior on the basis of cognition and definition of characteristics (Warren and Warren, 1999; Room, 2002; Potocan et al., 2004 – 2007; Lorsch et al., 2005; Bibb and Kourdi, 2006; Mulej, 2006):

- Key relations in an organization and between an organization and surrounding for example between the owners, managers and employees, between the organization and its business partners, between the organization and other partners in its environment.
- Level of trust, that the environment has toward behavior and work in an organization.
- Level of trust of an organization into its environment.

Irrespective of the way of understanding and dealing with trust, the organization is in front of a dilemma, how to assure the needed and sufficient level of trust of SC/SCM.

5. ASSURING TRUST IN A SCM

Assuring trust in SC/SCM is reasonable (and needed) to be researched from the professional and political viewpoint – they define to a high extent the characteristics and possible level of reaching trust in an organization (Fichman, 2003; Braithwaite and Levi, 2003; Cook, 2003; Potocan, 2004; Gilbert, 2005; Wall and Patton, 2005; Mulej, 2006; Potocan, 2006).

The professional viewpoint is focused on the needs for a requisitely holistic definition of the basic characteristics of trust from the viewpoint of content and methodology. The political viewpoint arises from the need for understanding interests, which reflect the starting points and assure conditions for implementation of trust in the organization.
Both viewpoints depend on the requisitely holistic values, knowledge, experience, interests and norms as well as circumstances (Misztal, 1995; Ciancunatti and Steding, 2000; Potocan, 2002; Robbins, 2002; Salomon and Flores, 2003; Ward and Smith, 2003; Potocan, 2006; Potocan and Mulej, 2007).

The professional viewpoint is focused less on the values and more on knowledge, experiences, and professional rather than subjective interests. Therefore it is relatively objective and rational, if the participants act ethically and work professionally. The political viewpoint depends on various kinds, types and forms of interests in the discussed period (for example short-term, long-term). This makes trust relatively subjective and irrational, often quite one-sided rather than holistic.

How can we explain the role and meaning of norms by assuring trust? The norms can be defined with an interval, which is on one side limited with total professional defined norms and on the other side with totally political defined norms. Each single norm can be positioned with a defined point on this interval – according to their specific characteristics.

When we deal with trust in an organization from the political point of view, we mean different (formal and informal) institutions (associations, groups, etc.), which try to form and expend the viewpoints for the mutual cooperation on the basis of trust (for example BASD, WCED, etc.) (Potocan, 2002; Mulej, 2006; Potocan and Mulej, 2007). Professional access is supported (formal and informal) by agreements (for example principle, rules, codex, documents), which are formed by different organizations, associations and groups (such as interest-based association, professional associations, international professional organizations, groups of single people, etc.) (Potocan, 2002; Mulej, 2006; Potocan and Mulej, 2007).

Numerous examples of good practices of organizations in various organizational fields, such as units, processes, or process steps, show, that the basis of trust can be reached by considering the interdependence of persons/organizations involved (Potocan et al., 2004 – 2007; Mulej, 2006; Potocan, 2006):

- Political viewpoints of trust should assure considering interests in the frame of trust related to the topic and its background; if the feel independent, they try to dominate and impose their own partial interests as they are the only ones that deserve attention; if they feel dependent, they will allow the others to dominate; if
they feel interdependent, they will negotiate for an acceptable synergy; and

- Professional viewpoints define content and methodological starting points for implementation of trust on all levels and fields of the organization and assure the synergy of organizational interests; if professionals differ they from each other and know that they are complementary and therefore need each other, trust each other better than the ones feeling no need for each other, or even having a bad experience.

Examples from the work of different organizations prove that by assuring trust, it is reasonable to use a combination of:

- political viewpoint, which should assure considering wider interests in the frame of trust enforcement, and
- professional viewpoint, which assures contextual and methodological starting points for the implementation of trust on all levels and field of an organization.

6. UNDERSTANDING INTERESTS AND TRUST IN SCM

What do we understand under total understanding, forming and implementation of trust of interest into SC/SCM? When we try to define interest, which is important for the formation of trust, we are confronted with numerous questions as for example: definition of basics for definition of interests, content of interests and definition of methods for a total dealing with interests.

The organization can be defined as an interest-based cooperation of participants aiming to reach their chosen objectives. That’s why the behavior and working of the organization has to be investigated from the viewpoint of interests, which represent a possible partial viewpoint of trust (Misztal, 1995; Barney and Hansen, 1997; Hersey et al., 2000; Ward and Smith, 2003; Robbins, 2002; Gilbert, 2005; Mulej, 2006; Potocan, 2006).

The background of interests and capacity to trust can be detected on the basis of cognition of (potential) partners’ starting points made of knowledge, values, and circumstances (Mulej, 1987; Mulej et al., 2000; Potocan, 2006; Potocan and Mulej, 2007).

The definition of viewpoints to discuss interests is based on a system of needs, abilities and values, as well as single knowledge of a person. The organization in SCM tries to satisfy all the needs of the inner and outer environment, because of which it has been established.
On the other hand, the interests depend on (no matter the field and/or level of their discussion): 1) individual values, which are formed on the basis of needs, knowledge and possibilities, 2) culture, which represents values of a social group and/or high systems, 3) ethics, which defines the moral changeability of dealing in a social group and/or higher systems, and 4) norms, which direct, what is right and what is wrong in a social group.

The stated facts uncover new questions, connected with the discussion of trust, as: professional needs and interests, interests of whole and interests of their parts, joint and single interests, and political defined and professional planed interests.

The definition of the content of interests connected with trust, demands understanding the role and importance of interests in an organization, as single viewpoint of discussion, and one of the synergy viewpoints of the whole discussion.

With that, we opened the basic question of discussion about the relation between the totality and single parts. The level of suitability, totality and precision of the definition of content is namely importantly depended from cognition of characteristics of this relation. Joint interests namely unite, specific interests separate and individual interest divide.

The third group of opened questions refers to methodology needed for the discussion of the role and importance of interests by trust. In this frame, we have to assure total methodology, and total base of interest characteristics - this means total system of political and professional interests of organizational participants, which have influence on an organization.

7. IMPLEMENTATION OF INTEREST-BASED TRUST IN AN ORGANIZATIONAL SC/SCM

A discussion about implementation of interest-based trust in an organizational SC/SCM is very complicated and complex; it exceeds boundaries of this work. We are limiting our-selves to measuring and evaluation of the level of trust of SC/SCM and to suggestions for its improvement.

Researchers deal with many questions while defining the level of trust and its measuring and evaluation (Abs, 1997; Barney and Hansen, 1997; Hatch, 1997; Nicholson, 1998; Alves et al., 2003; Agnes, 2004; Potocan et al., 2004 – 2007; Lorsch et al., 2005; Wall and Patton, 2005; Mulej, 2006; Potocan, 2006).
What ever is the viewpoint and the level of the trust under discussion, important elements of measuring and evaluation are needed, which influence trust. This supposes the usage of a methodology, which suitably enables measuring and evaluation of all objective and subjective elements of trust (factors, relations, and synergy). But in theory and practice, there are not enough solutions to fulfill all indicated requirements.

We better focus on real and possible solutions in the business practice about SC/SCM (Potocan, 2004; Potocan et al., 2004 – 2007; Mulej, 2006; Potocan, 2006). A large group of researchers measures and evaluates “the synthetic criteria of trust”, as for example the level of trust in an organization. The problem of such approach is the further analytic discussion of the gained results. It is very hard to define all elements objectively. In the other group, there are researchers, which try to learn and investigate “analytic (single) criteria of trust”, as for example honesty, frankness, sincerity etc. in the frame of understanding trust as a value. For the further discussion the partial results needs definition from the viewpoint of shared criteria by defining trust’s role and meaning.

The additional problem by both approaches open additional problems: the subjective character of most criteria of trust, as the “soft organizational factors”. The objectiveness of trust depends on the subjective evaluation (understanding and discussion) of the researcher/s concerning the role and the meaning of the analytic elements of trust in the frame of synthetic elements of trust.

To improve the level of trust the organization can use many different solutions. On the basis of understanding the discussed topics it can try to influence elements of trust and their synergy directly (trust in the whole and/or single viewpoints, factors, inner relations, outer relations, synergy etc.) or indirectly (influence of the environment, relation to the environment, synergy of the environment etc.).

On the basis of the requisitely holistic understanding of trust one can suppose, that its factors, relations and synergies can be improved. But one must consider that characteristics of the process of forming new solutions depend on understanding trust, the chosen approach to its discussion and manner of discussion. At the same time trust in a single organization depends on its specific organizational characteristics of behaving and working (activity, size, business situation and trends, work force, governors, managers, etc.). Hence, the general solutions, which would suit a larger field of organizational working (for different types, kinds and forms of organizations), can not be formed.
The known solutions how to improve trust can be placed in two groups – on the basis of its characteristics. In the first group are solutions suggesting basic elements of trust for different organizations. It intends to form generally valid bases of solutions. Many of them are valid, but its content is mostly too general (not thorough and adjusted to different forms of organizations). Single organizations use them especially as a starting point to develop specific solutions by considering behavior and working of the organization at stake.

In the second group there are solutions, which suggest more analytically oriented solutions for the improvement of the single elements of trust. Considered are specificities of trust in behaving and working of single kinds, types or forms of the organization. This can be an advantage and disadvantage at the same time. It is an advantage in equal organizations; then they are adjusted and suitable for use. At the same time it is a disadvantage, because trust’s specificities limit its area of use to one organization (different kind, types and forms of organizations).

Thinking about the possible solving of the problem of the level of trust and its possible solutions can be concluded with a general statement, that most known solutions for improvement of trust can be placed on the interval, which is limited by two extremes:

- Absolutely general solutions, which can be used as improvement of general elements of trust. That’s why they are less usable for solving concrete problems of trust in a single organization.
- Completely specific solutions, which are narrowly usable and very specific in content. That’s why they are suitable for solving problems in similar or equal organizations, but not in general.

Both theory and practice face open questions about the ways of forming solutions, which would be requisitely both specific and general to assure the needed solving of the problem and to improve trust in organizations.

In the framework of our discussion about trust we must take into account, that organizations face two important challenges, at least: How to satisfy needs of demanding (potential) customers, requiring the best possible/total quality of supplies, and How to make their own business requisitely innovative to make customers happier with it than with competitor's supplies – and gain trust therefore.
8. SOME CONCLUSIONS ABOUT TRUST IN SC/SCM

When dealing with the role and meaning of trust in SC/SCM we are confronted with various questions, which refer to forming and working of SC/SCM.

The role of trust is very important when we plan and form SC/SCM. In this frame, the organization has to investigate and recognize the level of trust as values of potential partners. When forming SC the organization derives from the presentation about the future organization of SC (for example: to formalize, not to formalize; centralize, decentralize, etc.) and in accordance with this, the suitability of partners is estimated – according to the value of trust. The business partner, who appreciates trust, is very much welcome and suitable for future cooperation. Also from economic point of view, such partner is much more suitable, then the costs of the future cooperation with him are much lower – result of his value of trust.

The second group of questions refers to understanding and using knowledge as ability by forming and planning SC/SCM. The organization, which forms SC/SCM, has to investigate, what are the abilities of the potential partners for a trust worth cooperation. But the organizations are in a dilemma: How should they recognize this ability by potential partners? There are many ways to define the level of trust by potential partners (for example various advantages, opinions of different business partners about the potential partners, etc.), but the majority of organizations estimates this ability on the basis of its past experiences by a cooperation. When the organization doesn’t have enough information about the level of trust of the potential partners, they usually decide at the beginning of the cooperation for a less intensive cooperation and/or more formal form of cooperation. From the economical point of view, is the potential partner which is more worth trusting, cheaper to cooperate with. See figure 1.

The organization decides in the second phase – on the base of intention, aim and information of the level of trust of potential partners (for example: on the basis of cognition about their understanding of trust and their ability for trust) – for a concrete form of the organization of SC and their management.

Theoretically, we can say that a low level of trust (this is value of trust and level of ability of trust) has influence on a worse evaluation of the potential partners and increases the need after the formalization of cooperation (See Figure 1).
The next questions are connected to investigation and definition of the type, form and way of cooperation between the participants in an SC and their management, this is SCM. The higher form of understanding trust as a value by chosen partners and higher ability of trust, have an important influence on the whole organization of SC/SCM.

Figure 1: How trust influences different types of relationship of SC

Theoretically, we can say, that a low level of trust (this is value of trust and level of trust) by single participants of SC increase the complexity and entanglement of cooperation in SC. Consecutive this has influence on: the level of centralization of cooperation, choice of the organizational way of SC (this is the choice of the type, form and organizational way), pretentiousness of the needed management of SC and choice of the way of the performance of the management, etc. (See Figure 1).

The level of trust directly or indirectly influences other important characteristics of SC/SCM, as for example: role of the customer in SC, time orientation of SC, leveraging technology of SC, communication across SC, inventory control of SC, and coordination of SC. But the discussion of the influence of trust on mentioned characteristics of SC/SCM extends our chosen frame of the contribution.
REFERENCES


