

*For The Third European Conference on Organisational Knowledge, Learning
and Capabilities, 5-6 April 2002, Athens, Greece*

**Organizational Learning of Business Relationship Value by
Means of Causal Mapping**

**Tatiana Bouzdine-Chameeva,
Tibor Mandják, François Durrieu**

*Bordeaux Business School
680, cours de la Liberation, 33405 Talence Cedex France
Tel: 33-556-84-5555; Fax: 33-556-84-5500
Email: tatiana.chameeva@bordeaux-bs.edu;
tibor.mandjak@bordeaux-bs.edu; francois.durrieu@bordeaux-bs.edu*

Academic track.

We attempt to address the following questions:

(10) How is knowledge management related to business strategy and organisational performance?

(12) What processes do organisations use to synthesise and acquire knowledge resources, generate new applications from those resources, and develop dynamic capabilities and value-creating strategies?

Organizational Learning of Business Relationship Value by Means of Causal Mapping

**Tatiana Bouzdine-Chameeva,
Tibor Mandják, François Durrieu,**
Bordeaux Business School, France

Abstract

Organisational learning based on interactive relationship between business strategy, processes, structure, and people both between and within organisations is evident, and presents a means by which the surfacing of knowledge can be facilitated.

A common definition of knowledge is "justified true belief" (NONAKA, I. TAKEUCHI, H. 1995). Belief presents, by definition, a human phenomenon. Therefore, belief refers to an individuals or group's idea about what is "truth". While the individual or group may believe that this "truth" is justified, "truth" is always problematic. This means that the idea that "knowledge" can be simply transferred is misplaced. Some particular version of "truth" can be transferred by an organisation and might be, which is also questionable, understood by the recipients. It may not be even accepted given alternative "justified true beliefs" (GALLIERS, R. D., NEWELL S. 2000).

We aim our research at developing this line of reasoning and testing its utility in organisations that are concerned about their management of knowledge related with business relationship value. More specifically, we are investigating organisations that are actively involved into business relationship with their partners and attempt to understand the value of this relationship for organisational learning (BROWN, J. C., DEGUID, P., 1991).

In the inter-organisational markets the knowledge creation, its transfer and sharing process is realised in business relationships, which present an interactive exchange between two organisations. The value of the business relationships always has its our interpretation at the seller (marketing) and the buyer (purchasing) side (FORD, et all 1998). To define the value of business relationship, we put forward several working hypothesis. We suppose that the value is dynamic and measurable, and it presents a concrete combination in time of economic and non-economic (social) components (interrelated in between them). The causal approach is implemented to shed light on the collective representation of a value phenomenon on all three levels' (episode, relationship and network) of a three-dimension conceptualisation of the focal business relationship value.

How can we develop the shared vision on the business relationship value? What tools can be implemented in order to assist a management team in organisational learning via their business relationships? Causal mapping is an efficient tool in a representation of thoughts as it is able to reflect different views of team members, structure a problem, facilitate mutual understanding (EDEN, C., ACKERMANN, F. 1998). We apply this technique to aim the organisational learning of business relationship value by means of constructing a collective causal map of a group involved into business relationship. As the collective causal map of a group presents a hierarchy of aspirations, strategic issues, problems and strategic options (EDEN C. 1991), we attempt to reveal the beliefs of members of a group involved into business relationship about causal relations and the reasoning behind the purposeful actions (BOUZDINE T; et all 2001). Shared vision of the group focuses on the key issues significant on the structural level of the group and the convergence of opinions of the group members involved in business relationship (WEICK, K. E., 1993). On the level of meanings, convergence facilitates the discussion and a problem solving process. We have to follow the group in time, discuss and review again with its members a collective causal map over time to compare eventual changes in their understanding of business relationship value. This approach allows us to observe an organisational learning process of a group.

The acquisition of the collective knowledge of group based on measurement of the value of business relationship aims on improvement of organisational learning, which becomes an essential issue of the strategic development of business relationship management in the 21st century.

Keywords: Organisational learning, value creation, business relationships, causal mapping.

Organizational Learning of Business Relationship Value by Means of Causal Mapping

**Tatiana Bouzdine-Chameeva,
Tibor Mandják, François Durrieu**

*Bordeaux Business School
680, cours de la Liberation, 33405 Talence Cedex France
Tel: 33-556-84-5555; Fax: 33-556-84-5500
Email: tatiana.chameeva@bordeaux-bs.edu
francois.durrieu@bordeaux-bs.edu; tibor.mandjak@bordeaux-bs.edu*

Introduction: Organisational learning as individual cognition in an organisational perspective

The idea of organizational learning is widely recognised in the past decades as a cornerstone of organisation's business success. "The ability to learn faster than your competitors may be your only sustainable competitive advantage" wrote DeGeus in 1988. Business strategies have realized that the ability of organisational learning may indeed be the key to long-term business success (Collis, 1994; Grant, 1996). Organisational learning plays an important role in the internal dynamics and politics of organisational life (Cooper, 1995). "Just as experience in production increases one's productivity in producing, so experience in learning may increase one's productivity in learning." (Stiglitz, 1987)

New economy is considered as a knowledge economy, based on a new meaning of value. In this always-changing new world, value is disaggregated and reaggregated by customers. The world is doubled. Supply and value chains exist, however they are completed by their virtual forms (Rayport and Svikola 1995). Products become more and more intangible (Grönroos 2000) and personalised. Information gets its own value. Value creation at any stage of the virtual value chain involves a sequence of five activities as gathering, organising, selecting, synthesising, and distributing information. In fact every business competes in two worlds: a physical world of resources that managers can see and touch (marketplace) and a virtual world of information (marketspace) (Rayport and Svikola 1995).

Knowledge, knowledge creation and consequently an ability of organisational learning become an important source of value. Knowledge about the customer, its needs, behaviour, satisfaction, and way of using the product or service are among the core questions of business performance and competitiveness. To know these elements is one of the goals and characteristics of a market driven organisation (Day 1994). Knowledge could be the basis of a successful product innovation or a kind of customer satisfaction. Conversely, knowledge becomes a part of organisational learning process (Slater and Narver 1995).

The term "organisational learning" signifies for us an emphasis on the processual character of learning. We view it as a management tool for developing tacit, causal abilities of individual members in organisations. Therefore we consider organisational learning as individual cognition process in an organisational perspective. This perspective in theory and practice of organisational learning focuses upon working with individual members' causal models or maps, which we suggest to develop in our research as well.

The view of organisational learning as a tool to regulate and control organisational processes entails so-called "shared visions" (Senge, 1990) initiated by management teams. Evidently, there is a strong belief that learning can be "managed". If managers are to sustain this belief in organisations, they must have the tools to implement the results of organisational learning into practice and therefore create intrinsic motivation or aspiration in everyone involved in the processes.

Knowledge creation is a process whereby individuals and groups within the company and between companies share tacit and explicit knowledge. In this process they create new product and service concepts, justify these concepts against available market data, the firm's strategy, and commercial and technological feasibility of the solutions proposed. Knowledge creation process helps to create prototypes; products and services based on the outcome of these justifications. Finally it means a cross-level knowledge to other groups, departments, and firms (von Krogh et al. 2000). Grant and Baden-Fuller (2000) argue that the interfirm knowledge creation and share have an important role in the efficiency and performance of each partner company (supplier and buyer). They are going so beyond and "assume that knowledge is the source of all Ricardian rents and that all other factors of production are supplied by competitive factor markets" (Grant and Baden-Fuller 2000).

Today the firm "focuses upon accessing and integrating knowledge in order to create goods and services as both the most important and most difficult task of economic organisation. The merit of this approach is that it does not begin with some abstract concept of the transaction, but with the basic task of value creation: production" (Grant and Baden-Fuller 2000). Production here means a more general activity, as it is the transformation of existing resources into a new resource combination. Generally speaking a basic task of an organisation is to transform resources into values. In this transformation process organisation is using its own resources as well as the resources of its suppliers and partners. Value means a concrete combination of resources accepted and used as value by the customer. This resource combination on the organisation's side, as well the perceived value at the customer's side contain a specific, unique, and different constellation of tacit and explicit knowledge of each side, and its capabilities in terms of organisational learning.

Role of business relationships in knowledge creation and organisational learning

In the business markets (Webster 1991, Dwyer and Tanner 1999, Anderson and Narus 1999) the knowledge creation, its transfer and sharing process is realised in business relationships. The better understanding of business relationship value may indeed be a source of profound organisational learning process for the company aimed at revitalizing its relations with business partners and transforming resources into values.

Our starting point about business relationships is the International Marketing and Purchasing group (IMP) interaction model (Hakansson 1982). Business relationships are realised between customer and supplier and demand different levels of efforts in investments (money, time, skill), organisation learning, adaptation, commitments, and trust building from both parties. The different type of exchange episodes (products/services, financial, information and social) are the building blocks of the business relationships. The frequency of these episodes could build and strengthen this interactive relationship. In a business relationship, parties may or may not adopt their products or services, may build mutual trust, may or may not use routines (Wilson 1995, Mandják-Durrieu 2000).

Each business relationship is unique and customised and has its own, long or short, positive or negative, simple or complex, harmonic or confused, history. At the same time, it is a part of the whole business relationship's portfolio of the organisation. It brings the real difficulty to the management of business relationships; they are simultaneously dealt with as being unique and as a part of a whole system of relationships. Managers "face a twofold task; on the one hand they must manage each individually significant relationship, and on the other they must also maximise the company's return on its overall portfolio of interdependent relationships." (Ford et al. 1998 p.88).

Organisations' behaviour in a business relationship is not only influenced by themselves but by other (economic and non-economic) actors too. This indirect influence links together different business relationships. Business networks are created by this "connectedness". The focal relationship (between customer and supplier) is embedded in its atmosphere (Hakansson 1982), and its network. No company is an island (Hakansson-Snehota 1988) in the inter-organisational

market. „Business markets are not random structures, where everyone can do business with everyone else at any moment, if only the product and price is right. Instead, business markets are the outcome of *organisation* by those involved in the network of business relationships” (Ford et al. 1998 p.67). And an organisation " is a collection of inert resources that are only activated through interaction with others. Companies interact with each other and develop relationships in order to exploit and enhance their own resources *and to gain the benefit of those of others*” (Ford et al. 1998 p.46). Anderson (1995) argues that the "value creation and value sharing can be regarded as the *raison d'être* of collaborative customer-supplier relationships" (Anderson 1995 pp.348).

Organisations can not exist without business relationships. The question is not about the existence of business relationships but about its forms, characteristics, and intensity whether it is strong or weak. How can they be developed to bring more benefits to each side? What can be learnt from these relationships? How this knowledge can be used for organisational learning of a firm? Organisational complexity involves the dynamic complexity referring to how the relations « between cause and resulting effects are distant in time and space » (ROTH and SENGE, 1996), that is the so-called *technical issues* of organisational life. On the other hand, there is *behavioural* complexity referring to the “diversity in the organisations, mental causal models, and values of decision makers” (SENGE, 1990). The model is supposed to help detect the type of problems that have to be solved in organisations and to anticipate any potential difficulties in solving them. Dynamic and behavioural complexities of organisational learning get in the focus of our research.

The real managerial question is the allocation of always-limited resources to an optimal combination of customers (Turnbull 1990) or suppliers. Portfolio analysis could be a solution and several applications have been developed and published. Despite these useful and rather complex methods Turnbull et al. (1996) have found that "resource allocation decisions are often taken without full assessment of the potential of and threats to each relationships" (Turnbull et al. 1996 p.52).

Beyond the eventual methodological difficulties of the portfolio analysis the problem may be rooted in the complexity of business relationships and in the lack of a solid decision making basis about them. As resource allocation is always a strategic decision and as business relationships present one of the most important assets of an organisation it seems to be an important question to learn more about the decision making process. How do managers make their decisions about development, consolidation or suspension of a particular business relationships? What is the basis of these decisions?

Value creation as a cornerstone of decision-making in business relationships

«Value creation is the process by which the competitive abilities of the hybrid [the business relationship] and the partners are enhanced by being in the relationship...Not all relationships are symmetrical, but for the relationship to flourish, each partner needs to see some benefit beyond working independently" (Wilson 1995 p.342). The goal of our paper is to adjust the basic concept of the business relationship value in the context of organisational learning.

Based on a literature research we have elaborated a holistic framework of the value of business relationships (Mandják and Durrieu 2000), and developed several research hypotheses (Bouzdine-Chameeva et al. 2001).

We refer to our literature review on the value of business relationship (Mandják -Durrieu 2000) structured by episode, relationship, and network level. Besides North American and European (IMP) business relationship and channel publications we have studied a part of relationship marketing and supply chain management research findings. Finally we have identified the characteristic value components at each of these levels.

At episode level,

- ◆ a sum of benefices received by customer in monetary terms (Anderson-Narus 1999),
- ◆ result of previous relationships (Normann-Ramirez 1993),

- ◆ a value carrier (Ravalad-Grönroos 1996),
- ◆ a set of economic and non economic elements (Reddy 1991)
- ◆ relationship benefices or sacrifices (Ravalad-Grönroos 1996)

are various offerings that determine different kinds of the episode value. Here, the value is a static result of an exchange received by a customer.

At relationship level, value exists, and is dynamic. Different kinds of relationship value components are:

- ◆ desired, perceived and judgement aspect (Flint et al. 1997),
- ◆ economic, strategic and behavioural dimensions (Wilson-Jantrania 1996),
- ◆ safety, credibility and security (Ravalad-Grönroos 1996),
- ◆ trust for a mutually profitable relationship (Gassenheimer et al. 1998);

At network level the dynamic face of the value is the value creation process related with organisational learning process. Value creation is seen differently in literature :

- ◆ as stages of relationship development (Wilson 1995),
- ◆ as mutual goals, non-retrievable investments, adaptations, structural bonds, cooperation and commitment (Wilson 1995),
- ◆ as direct and indirect functions (Walter et al. 2000).

Let us note that at episode level, the value is mainly a result, while at relationship level it is a process of creation. The result of this process is not only the relationship value but also the relationship itself. Different elements of this value seem to be mainly non-economic. The creation value is realised inside a focal relationship and also has its impact on connected relationships.

At network level, value is coming from the fact of connected relationships. Due to "connectedness", we can tie relationship value and network value. As consequence of connectedness, major elements of this value seem to be non-economic. At the network level, value creation inside a focal relationship could have a positive or negative effect on connected relationships.

Our experience proves that organisational learning at this level may indeed serve as a key to a better understanding of different kinds of network value. These various kinds of network value are constructive values such as resource transferability, complementary activity (Anderson et al. 1994), collaborative closeness, or operational excellence (Morash-Clinton 1998). Deleterious values are resource particularity, activity irreconcilability, or actor-relation incompatibility (Anderson et al. 1994). At the network level, the value seems to be a process of sharing that refers us again to the necessity of an organisational learning implementations at this stage.

We have integrated the results of our literature analysis in an early holistic three levels and three dimensions framework of the focal relationship value in business network.

To summarise our hypothesis we can conclude that:

- ◆ Time, economic and non-economic elements are the three main components of the value of the business relationships. The value of the business relationships is dynamic which supposes that it is changing in time but not sequentially (time dependence is not linear).
- ◆ The value of the business relationships is a concrete combination of economic and non-economic components in a time-scale. (These two components contain a group of elements.) The three components are interrelated.
- ◆ The value of the business relationships always has its our interpretation at the seller (marketing) and the buyer (purchasing) side.
- ◆ The value of the business relationships is measurable. This measure (if it is find) could be useful at management level as well.
- ◆ At the episode level, the economic component is the most determinant, while the non-economic component is to be more important at the relationship and network levels. Therefore organisational learning process facilitates the process of value creation at these levels of business relationship.

The complexity of the research question we study is coming from the actual proportion and dynamics of the value dimensions. Moreover it is important to take into consideration that the value of the business relationship is the two-way interrelationship process. (Figure 1.):

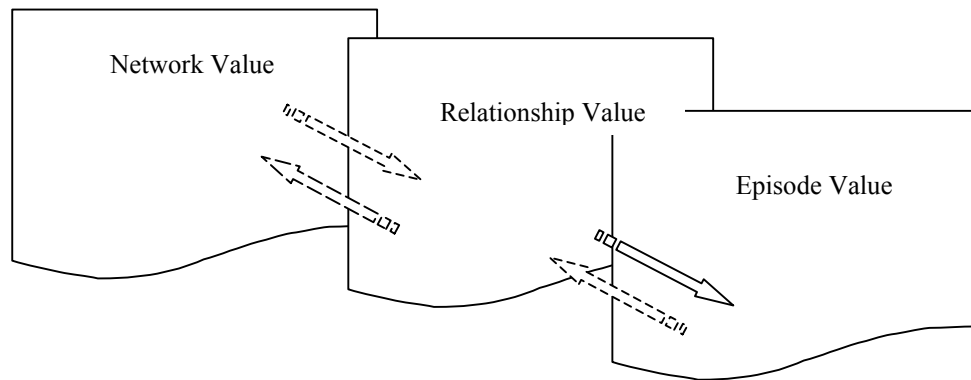


Figure 1. : The two-way interrelations between the three levels.

The complexity of the system is increasing on each level, the boundaries between economic and non-economic components become more perceptible. Business relationship value is always perceived and not only by one person but also by a group of involved peoples. In a business relationship, we speak about at least two groups of people involved into the relationship; one at the seller's side and the other is on the buyer's side. It means that the business relationship's value has at least two different collective representations. These representations depend on mental models (Day 1994) of each involved person. To understand these collective representations and facilitate a shared vision of a managerial team on a perceived value of business relationship, we propose a causal approach and the application of a causal mapping technique.

The theoretical interest of the research is therefore, the distinction of economic and non-economic part of the value, while the managerial interest is presented by an organisational learning process aimed at managing of the business relationship portfolio defined by the value creation.

Causal mapping to represent business relationship value

The technique of causal mapping is an efficient tool used for representing thoughts as it reflects different views of team members, structure a problem and facilitates mutual understanding (Eden and Ackermann 1998). The collective map of a group presents a hierarchy of aspirations, strategic issues, problems and strategic options (Eden 1991). Due to this technique, we can present the beliefs of managers involved into a buyer-supplier relationship about causal relations and the reasoning behind their purposeful actions.

Four types of a collective map are constructed automatically by our programme ANCOM (Chameeva et al.1997, Bouzdine-Chameeva and Michrafy 2000) based on a comparative analysis of opinions of each manager involved into a relationship: *an Assembled map* which is obtained by summarising all individual views, and contains all the concepts and links chosen by all group members; *a map of Unanimity* presents a map of common elements; *a map of Majority* is constructed with all the concepts and links common for the majority of individuals - $(K/2+1)$ and *a map of Enlightened Majority* as a type of an aggregated collective map which we propose. The map is created with a respect to the importance of each concept and the value of each link in the initial set of N concepts for the group of individuals. The criteria we use for this collective map integrate the two principles - of domain centrality and democracy. It contains all the concepts and links common for the maps of all individuals; concepts that are the most valuable for the majority of individuals $(K/2+1)$ in the group; concepts of the highest rank in the individual maps.

We study a real business relationship between Sky Space Company and one of his major suppliers in the space industry. Sky is a huge, diversified; French high-tech company and Sky Space is its space division. We interview managers involved in purchasing, project management and research development in the same business relationship. The group interview was based initially on the 83 items about business relationship value. These items were generated from

research works in the domain (Anderson et al. 1994, Lapierre 2000). During an interactive discussion with the group, these items have been categorised by participants. They have created nine categories related with business relationship value. Afterwards managers have been asked to construct their own individual maps linking the defined categories in between. ANCOM software has been used further on to elaborate the collective causal map of Sky Space's business relationship value. The managers highly evaluated the discussion process as it was really helpful for them in a better understanding of their views on business relationship value. The views of purchasing side have been different to those of a research development team and an exchange of opinions has been a true organisational learning process when all the sides have gained due to the experience of others. The next stage of an organisational learning process covers the process of validation of a final collective causal map based on further discussions with managers.

Organisational learning of BRV: one example

To illustrate an application of our framework of business relationship value, we present here *the map of Enlightened Majority* of Sky Space. This is a collective representation of Sky Space's business relationship with one of its most important suppliers. Figure 2 shows the buyer's view of this business relationship

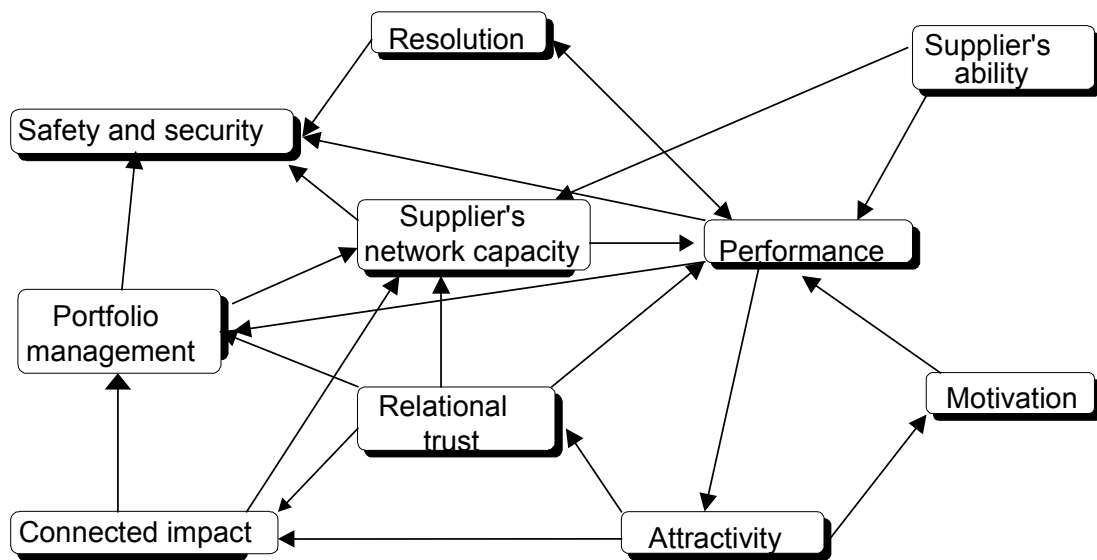


Figure 2. Collective causal map of the value of Sky Space' business relationship with one of its major suppliers

Boxes represent the different value elements (concepts) and arrows show the links between them ("Decision Explorer" software, Banxia Ltd. UK, have been used for visualising causal maps). Boxes and arrows are based on the participants' answers' and calculated by ANCOM software. Episode, relationship (relation) and network value forms the value of this focal business relationship between Sky Space and its supplier.

Performance, safety and security define the episode value and **suppliers network capacity**. **Performance** consists of economic and technical evaluations of the offer. **Safety and security** for this relationship is important because of criticality (resources and actors) and specificity in this particular industry. By **supplier's network capacity**, we define the credibility and the reputation of the supplier and the impact of Sky Space's offer upon the supplier's offer. It means taking into consideration the network aspects at episode level by the buyer's side.

Supplier's ability, relational trust, resolution, and motivation describe the relationship (relation) value. By **supplier's ability**, we understand the capability of the supplier to build a reliable, flexible, and contractual offer for a specific client. The **relational trust** concerns all the

relational abilities (as sincerity, exchange transparency, and the reality of promises) which are necessities to maintain and develop trust between supplier and client. **Resolution** means the entire problem resolving practices. By **motivation**, we define the open-mindedness of and the co-operation between the two organisations to develop the relationship.

The network value is defined by **supplier's attractivity**, **connected impact** and **portfolio management**. The **supplier's attractivity** is the importance of this actor in the network. **Connected impacts** are the consequences of connected relations on the focal relationship in terms of resource transferability, activity complementarity and actor-relation generalizability (Anderson et al. 1994). **Portfolio management** concerns the management of the focal relationship in comparison of others relationship but also aspect about leadership and references of the supplier.

Look at now the links among key concepts in the constructed map. If **performance** (economic and technical evaluation of the offer) is the central concept characterising the relationship value (8 links), the **safety and security** of the supplier present the goal (4 links). All the dimensions of a relationship value aims at reinforcing the stability of the relationship. This is why this relationship is valuable for Sky Space.

However, the relationship value is not described only by episode value. Suppliers network capacity (6 links), portfolio management (5 links) and relational trust (5 links) illustrate the second group of core concepts. Here we have an institutionalised aspect of the relationship as **supplier's network capacity**; **relational trust** and **portfolio management** show the willingness to be legitimated by the others as a referent and capable actor in the network. This aspect of legitimisation in the network identifies a non-economic dimension of the relationship value. **Supplier's attractivity** (4 links) and **connected impact** (4 links) illustrate the third group of core concepts, which is related with the network dimension of value.

The proximity of the two actors defines common practices and common framework of understanding the activity. This proximity institutionalises the relationship (DiMaggio and Powel 1983). The proximity means the bridge over the different kind of distances between supplier and client (Ford et al. 1998).

We would like to note that in the Sky Space case the unanimity map contains no common links. So it doesn't provide us with a sufficient background for constructing a shared vision of a group on the relationship value. The majority map presents more information and highlights the importance of the concept **Performance** for the group. However it is rather poor because of a small sample. Nevertheless, the map of enlightened majority (which in our case is the same as the assembled map) shows us the common links for the majority of participants and presents a well-defined vision of Sky Space on the relationship value.

Final conclusions and remarks

A common definition of knowledge is "justified true belief" (NONAKA, I. TAKEUCHI, H. 1995). Belief presents, by definition, a human phenomenon. Therefore, belief refers to an individuals or group's idea about what is "truth". While the individual or group may believe that this "truth" is justified, "truth" is always problematic. This means that the idea that "knowledge" can be simply transferred is misplaced. Some particular version of "truth" can be transferred by an organisation and might be, which is also questionable, understood by the recipients. It may not be even accepted given alternative "justified true beliefs" (GALLIERS, R. D., NEWELL S. 2000).

We have aimed our research at developing this line of reasoning and testing its utility in organisations that are concerned about their management of knowledge related with business relationship value in order to understand the value of this relationship for organisational learning (BROWN, J. C., DEGUID, P. ,1991). We have made an attempt to reveal the beliefs of members of a group involved into business relationship about causal relations and the reasoning behind the purposeful actions. Shared vision of the group (a management team in our study) focuses on the key issues of business relationship value is significant on the structural level of the group and the convergence of opinions of the group members involved in business relationship. On the level of meanings, convergence facilitates the discussion and a problem solving process.

On the basis of these first findings we could confirm that the value of the business relationship exists and has different individual and collective perceptions. It is a concrete

combination of economic and non-economic elements. In the case of Sky Space it is the ensemble of ten concepts presented in our paper. These elements (concepts) are different at the episode, relationship and network level. In the case of Sky Space the legitimisation aspect of the focal business relationship's value at the network level seems to be an important non-economic dimension. To get a complete picture of a value-based management of relationship we aim at defining a buyer-based and a supplier-based view on the value of business relationship.

The interactive discussion with a management team has served as a first stage of an organisational learning process and helped managers to determine the crucial cornerstones of a business relationship value. The next stage is to validate a collective causal map on the business relationship value and elaborate a shared vision of a managerial team on this value. We have to follow the group in time, discuss and review again with its members a collective causal map over time to compare eventual changes in their understanding of business relationship value. This approach allows us to observe an organisational learning process of a group. The final goal of the process is a better understanding of relations with business partners and successful managing of their business relation portfolio based on organisational learning process of a firm.

The acquisition of the collective knowledge of group based on measurement of the value of business relationship aims on improvement of organisational learning, which becomes an essential issue of the strategic development of business relationship management in the 21st century.

References

- ANDERSON J.C., JAIN D., CHINTAGUNTA P. K. (1993) Customer value assessment in business markets: A state of Practice studies, *Journal of Business, to, Business Marketing*, Volume 1, No1, pp.3-29.
- ANDERSON, J.C. ,NARUS, J.A. (1999) *Business market management, Understanding, creating and delivering value*, New Jersey, Prentice Hall
- ANDERSON, J.C.,HAKANSSON, H.,JOHANSON, J. (1994) Dyadic business relationships within a business network context In: *Journal of Marketing* Volume 58, No.4, pp.1,15
- BOUZDINE - CHAMEEVA, T., DURRIEU, F. , MANDJAK, T. (2001). *Application of causal maps to measure business relationship value*. In F. Ackermann, G. -J. de Vreede, Proceedings of Group Decision and Negotiation, La Rochelle, 4-7 june 2001. pp.141-145.
- BROWN, J. C., DEGUID, P. (1991) Organisational learning and communities of practice: toward a unified view of working, learning and innovation. *Organisation Science*, Vol. 2, No 1, pp. 40-57.
- COLLIS, D.J. (1994). Research Note – How valuable are organisational capabilities? *Strategic Management Journal*, 15, pp.143-152.
- COOPEY, J. (199. 5). The learning organisation: power politics and ideology. *Management Learning*, 26(2), pp.193-214.
- DEGEUSS, A; P; (1988), *Planning as learning*, Harward Business Review, 66 (2), pp. 70-74..
- EDEN C. (1991) Causal mapping: a review, In: *European Journal of Operations Research* Volume 36.
- EDEN, C., ACKERMANN, F. (1998). *Making Strategy: The Journey of Strategic Management*. Sage Publications
- ESTERBY-SMITH, M., BURGOYNE, J., ARAUJO, L. (1999). *Organisational Learning and the Learning Organisation*, Sage Publications, 247 p.
- FLINT, D.J.,WOODRUFF, R.B.,GARDIAL, S.F. (1997) Customer value change in industrial marketing relationships, A call for new strategies and research In: *Industrial Marketing Management* Volume 26, No.2, pp.163-175
- FORD, D.,GADDE, L.E.,HAKANSSON, H.,LUNDGREN, A.,SNEHOTA, I.,TURNBULL, P.,WILSON, D. (1998) *Managing business relationships*, Chichester, John Wiley
- GALLIERS, R.D. NEWELL S. (2000) Back to the Future : From Knowledge Management to Data management. *London School of Economics and Political Science, Working Paper Series, No.92. ISSN 1472- 9601.*

- GRANT, R.M. (1996) Prospering in dynamically-competitive environments – organisational capability as knowledge integration .In *Organistaion Science*, 7 (4), pp. 375-387age Publications
- LAPIERRE, J. (2000) *Development of measures to assess customer perceived value in business,to,business context*. In Woodside A.G., *Getting better at sense,making*, Collection Advances in Business Marketing and Purchasing, Jai Press, Stanford, Connecticut , pp. 243-286.
- MORASH, E.A.,CLINTON, S.R. (1998) Supply chain integration: Customer value through collaborative closeness versus operational excellence In: *Journal of Marketing Theory and Practice* Special Issue, pp.104-120
- NONAKA, I., TAKEUCHI, H. (1995) *The Knowledge-Creating Company. How Japanese Companies Create the Dynamics of Innovation*. New York, NY : Oxford University Press.
- RAVALD, A.,GRÖNROOS, CH. (1996) The value concept and relationship marketing In: *European Journal of Marketing* Volume 30, No.2, pp.19-30 ;
- REDDY, M.N. (1991) Defining product value in industrial markets, In: *Management Decisions*, Volume 29, No.1., pp.14-19.
- ROTH, G.L., SENGE, P.M. (1996) From theory to practice: research territory, processes and structure at an organisational learning centre. *Journal of Organisational Change*,9, (1), pp.92-106.
- SENGE, P.M. (1990) *The Fifth Discipline : The Age of Practice of the Learning Organisation*. London : Century Business.
- STIGLITZ, J. E. (1987). Learning to learn, localised learning and technological progress , In: P.Dasgupta and P; Stoneman (eds), *Economic Policy and Technological Performance*. Cambridge: Cambridge University Press.
- TURNBULL, P.,ZOLKIEWSKI, J. (1997) Profitability in customer portfolio planning In: Ford, D. (ed.) *Understanding business markets: Interaction, relationships and networks*, Second edition, London, Dryden pp.305-325
- WALTER, A.,RITTER, TH.,GEMÜNDE, H.G. (1999) Value,creation in buyer,seller relationships: Theoretical considerations and empirical results from a supplier's perspective Proceedings of 15th IMP Conference in Dublin, Special session on Relationship Value
- WEICK, K. E. (1993) The collapse of sense making in organisations: The Mann Gulch disaster. *Administrative Science Quarterly*, Vol. 3, pp.628- 652.
- WILSON, D.T. (1995) An integrated model of buyer,seller relationships In: *Journal of the Academy of Marketing Science* Volume 23, No.4, pp.335-345;

Authors' Vitae

Tatiana Bouzdine-Chameeva (Ph.D. in applied mathematics from Moscow State University, Russia) is Professor of Cognitive Sciences, Head of the Department Information, Decision and Management at Bordeaux Business School. Her research is in decision analysis, decision-making process and an application of optimisation methods to management problems.

Tibor Mandjak (Ph D in management, University of Budapest, Hungary) is a Professor in the Department of Marketing at Bordeaux Business School. His research interests involve industrial and project marketing and marketing strategy.

François Durrieu (Ph D. Toulouse University) is Assistant Professor in Department of Marketing, Bordeaux Business School. His areas of research interest include industrial marketing and marketing research.