

## **Trust building in dynamic and multinational cooperation**

**Abstract:** focused on the cooperation characterized by dynamic, multinational and short-term, the paper analyzed its characteristics and found that managerial problems was caused by culture difference which hidden in geography distance as well as obstacles from short-term cooperation time. Furthermore, probe into the function of trust shows the evidence that trust mechanism can reduce the complexity of cooperation and regulate the behavior of participants. And, it is the proper management measure to improve the efficiency of dynamic and multinational cooperation. Finally, consider the different phases of cooperation cycle, a three phases model of trust building was proposed.

**Key words:** cooperation; dynamic; multinational; trust mechanism

### **1 Introduction**

Globalization has been a prominent characteristic of the modern business environment where increasingly open frontier is leading to the emergence of wider and less restrictive markets for goods, services and locations for investment (NUNES, 2005). In high-velocity environments, the ability to produce multiple product innovations in quick succession is critical. Many companies adopt external development strategies and cooperation among different companies is inevitable and widespread for it leads to benefits of resource sharing, cost saving, shorter development cycles, and better-integrated and designed products to fit different markets.

Compared with traditional cooperation, new characteristics can be found in today's cooperation. The demands of customer needs changing and product efficiency require the agile cooperation. Resources complementation companied with organizations becoming more knowledge based and core competence focused, working practices in industry have changed completely (Dani, 2006) ---- the extensive cooperation is needed urgently. To adapt to these new trends, more and more companies began to adjust their strategies and share business efforts and unique skills in alliances with partner organizations. In addition, development of IT provides the platform on which companies can allocate resource globally to realize new value. So, today's cooperation can be labelled with more dynamical and multinational due to changes from the environment and the companies.

Now, dynamic and multinational cooperation (DMC) is often in forms of virtual or extended enterprises (Camarinha-Matos, 1999; Reid, 1996) which characterized by IT using and globally dispersed partners. In these cases, familiarity among partners is usually lacking when cooperation take place and different culture, self-interest seeking of partners, communication way may become the obstacle and have a serious negative effect on cooperation. Although sophisticated and advanced information technology gives cooperation so much support, cooperation, especially when characterized by specific short-term goals and little familiarity among partners, can be problematic in practice. Close relations are likely to be needed for the task complementation, while loose relationship from distributed business activities and temporary duration of contract complicate the management. Too much cooperation, even the projects of advanced IT production, for example software development, does not always work as intended. Study shows that failures are mostly due to problems of coordination, especially when projects are large and globally distributed (Herbsleb, 1999; Mann, 2002).

With the growth of global trade and investment it is increasingly important to devise means to reduce the obstacles and improve the performance of cooperation. The new features of cooperation require unique coordination mechanism characterized by trust and mutually beneficial (Toshiya, 2002). Considering this, the paper paid particular emphasis on the trust building in DMC with the purpose of giving some insights that can guide the effective management mechanism in practice. Analysis of advantages in theory and challenges in practice of DMC and function of trust give the contextual evidence to support the necessity of trust mechanism. Furthermore, three phases model of trust mechanism building is proposed.

### **2 Advantage in theory and challenge in practice: contextual evidence of trust mechanism**

In DMC, value increasing process can break through the restriction of geography distance by IT and partners dispersed around the world contribute their core competences. All these make the cooperation own the flexible and loose organization structure while rigorous and close production process. Through this new type of coordination along the stream of production, partners can get the economical and matching recourse, effective market position leveraging and quick reaction to

customized and changing demand (Nues. A, 2005). Consequently, in theory, DMC can improve the performance greatly.

However, despite sophisticated arrangement and advanced IT tools using, cooperation continues to be challenging in practice. Many cooperation tasks are behind schedule, over budget and do not always work as intended, especially when task are large and globally distributed (Kraut, 1995). Since business activities are distributed among several sites, information and decision nodes are scattered along the network and business links are very dynamic and often informal, it is understandable that geographic dispersion will affects partners' ability to coordinate. More and more manager found that there are too much of difficulties they face ---- from the complicated arrangement of task to the routine communication and conflict solving, all these things might become the problems in DMC. Furthermore, there is often the case that managerial experience is malfunctioned, even to the capable multinational managers. So, the dilemma DMC faced is the gap between the advantages in theory and the real performance in practice.

In DMC, process of production will be broken into pieces and re-integrated globally which means that most of partners who own the different background both in institution and in culture must keep the same pace. Behind the geographic dispersion, there are institutional and cultural differences and cooperation cross the national boundary as well as the culture boundary where differences can create obstacles. Substantial cultural diversity appears to prevent effective communication (Maznevski, 2001; Ratcheva, 2001) and often leads to coordination difficulties (Sarker, 2002)----but these may be subtle and difficult to recognize until significant damage has already been done. Consequently, the most essential problem is the obstacle of communication and management partly result from the culture difference. Advanced IT can shorten the geographic distance, but it can't work to the "distance" between the different culture. In some cases, only depend on the platform of IT may worsen the culture problem. High technology on its own is not enough to overcome institutional and cultural differences (Handy, 1995).

Dynamic in DMC characterized by short-term, instantaneous and changeable, arise from the variation rhythms induced by demand and different partners' product system. These make the opportunism behaviour inevitably and complicate the cooperation management. Obstacles from culture difference prevent the partner's willing of cooperation and opportunism influence the product efficiency greatly which result many failure cooperation. Mechanism that can work well in traditional cooperation can not work efficiently any more, and it is challenge for DMC to find and establish proper management mechanism during such short and changing cooperation time.

Characteristics of DMC and the corresponding influence to the performance imply the strong dependence among the partners. Furthermore, since speed and flexibility are necessary prerequisite for running of DMC, appealing to legal contracts is often the last solution for conflict solving. Global partners have to rediscover how to coordinate based more on trust than on control if they want to make the business work and enjoy the cooperation benefits (Handy, 1995). There has been evidence that trust plays a key role as a foundation for effective collaboration (Kramer 1999) and can strengthen inter-organizational ties, speed contract negotiations and reduce transaction costs (fu, 2005). A direct link between trust and cooperation performance exists, once the need for cooperation is established, trust becomes the salient factor in determining performance (David, 2004). So, high level of trust is the most important bond and trust mechanism is essential in DMC.

Trust effectively and efficiently reduces complexity by enabling partners with different knowledge bases and experiences to collaborate (Gefen, 2000). Such collaborative relationships can be either virtual or face-to-face. In virtual collaborative relationships, technology is often considered the Achilles heel and trust is the key issue (David, 2004).

### **3 Functions of trust mechanism in DMC**

Trust can be identified as the individual's (or group's) belief that another individual (or group) makes good faith efforts to behave in accordance with commitments both explicit and implicit (Dani's, 2006). And, such trust is generally influenced by familiarity among the individuals, shared experiences and goals, reciprocal disclosure between individuals over time, and demonstration of non-exploitation expressed over time. Apart from the individual view, trust in business activities is also related to the degree of regulation in the business (Fox, 1974) and trust regimes (Ackroyd and Thompson, 1999).

It is generally admitted that there are three management mechanisms---- authority, market and trust (Powell, 1990), authority is mainly used in traditional enterprise to regulate internal actions; market mechanism plays its role in broader market to allocate and regulate the social resources through price which is the most adequate mechanism in the perfect competition situation market. The cooperation under conditions between the above two, namely the combination of semi-market and semi-organized situation such as DMC, trust may play major role (Luo, 1996). Theoretically, trust mechanism influence DMC as the ways of: (1) DMC possesses the features of high degree of asset **speciality**, uncertainty and low transaction frequency. While trust can offset the defects in these aspects; (2) According to a game theory analysis, trust affect the outcome of cooperation by ensuring more return; (3) trust improve the

cooperative circumstances as well as the behaviour of participants(Guo, 2006). Moreover, trust plays its role in practice:

First, reduce the complexity of coordination and improve the efficiency of decision. The root of complexity of DMC lies in the unfamiliarity between partners as well as the uncertainty caused by “individual rationality”. All these make it difficult to provide sufficient information for decision during the coordination. The dilemma in DMC is that coordination needs the “rational individual”, who concerns more about individual returns from the coordination to make decision according to the principle of “collective rationality”. However, facing so complex situation, partners may make decision with hesitation and miss the opportunity by the end, or select the solution of maximizing the individual profit only. On the other hand, complexity may also result ineffective actions because partners can't get the elaborate directions of coordination and often lose synchronization. Through improving understanding between the partners and giving the clarity information, it can reduce the complexity both from environment and the coordination system, thus play the role of “simplifying” to ensure a fruitful cooperation.

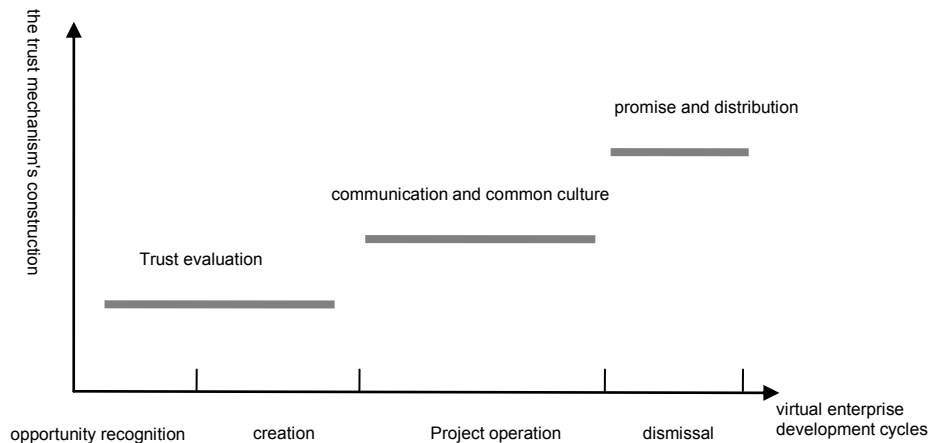
Second, regulate and improve the behaviour of participants. Different from the traditional enterprise, independency of participants in DMC makes the hierarchy-authority mechanism play its role no longer. Under this condition, the communication and understanding between each party become more important. From the view of control, it is trust mechanism that promote the convert of cooperation behaviour from supervised to self-regulated, for that trust can help partners obtain high quality information from others, deepen the comprehension to each other and accordingly take adequate and positive reaction.

Profit expectation and the complementarity of resources can be the regulation factors in DMC also. Once partners realize that future outcome needs contributions from all the participants, they will take action positively. Here, future profit plays the role of guidance for all parties to successful coordination. Complementarity of resources in DMC means that each participant's resources are necessary and unique for fulfilling the production and any opportunism behaviour will bring serious damage. In the production chain of DMC, the expression of regulation power of complementarity is that every participant is at the node of the network with other partners both upstream and downstream. This relationship determines certain action rules that must be abided by all the partners, so it can be a regulation mechanism to some extent. However, to both the guidance of profit and the control of resources complementary, a prerequisite for their regulation power play is that all the parties be aware of the future outcome and the significant of resources complementary. It needs the trust of all partners. Only when trust factors embodied into the cooperation, can the parties believe the future outcome, believe the behaviour of other partners, thus the regulation of profit and resources complementarity can play their roles.

#### **4 Three phases model of trust building in DMC**

DMC focused more on ‘swift trust building’ among globally dispersed and unfamiliar partners for it is difficult to assess partner's trust in a short life circle (Sarker, 2001). Generally, good trust mechanism needs longer period to develop. But as to the virtual enterprises, the independence and dispersion of partners and diversity of the culture, particularly the temporary of the cooperation, bring difficulties in trust building. Some scholars put forward the concept of ‘Swift Trust’ (Meyerson,1996), but, which is also queried as the same time. As an important factor, the trust mechanism carries substantial weight for realization of virtual enterprises' target. Therefore it has to be an important content for the DMC and be given substantial consideration.

Though temporary is primary characteristic in the operation of DMC, it will realize the ‘swift trust building’ to a certain degree that integrate trust mechanism into the whole process of DMC. According to the actions, the development cycle of DMC can be divided into several stages of opportunity recognition, setting up of DMC, project operation as well as the cooperation dismissal. In correspondence, the trust mechanism's construction can be designed as trust evaluation, communication and common vision cultivation and the promise to cash three parts.



**Figure 1: Three phases model of trust building in DMC**

#### Phase 1: Trust evaluation

Generally, leader in DMC is that who discover the market opportunity. And usually, they begin the collaboration and assume the work of opportunity recognition which includes the demand analysis and the task decomposition. Afterward, leader will seek for the appropriate resources from the exterior market and the collaboration partners according to the understanding of demand as well as the situation of task decomposition.

In this phase, although the production cooperation has not started really, the trust building should begin so as to ensure future achievement. For deep understanding of task and the exterior resources is the foundation of virtual collaboration, the trust mechanism construction should focus on the following targets: first, make the trust mechanism the necessity when DMC be designed. As an intangible factor, the functions of trust mechanism usually exhibit during the production phase where partners contact with each other practically. So, trust building is often neglected by leaders whose attention is on the market opportunity and resources choice at the initial period of the DMC. As mentioned above, the guarantee of trust building is the long period of time, while the virtual enterprise's characteristic of temporary production make the cooperation cycle very short. Therefore, it's necessary to consider the trust mechanism at the very beginning of the DMC in order to give a good foundation for mechanism's establishment in the later period. Second, integrate the trust evaluation into the partners choosing. Temporary existence combined with the special task of DMC brings a lot of difficulties for the trust mechanism's establishment. Primarily, the trust mechanism needs the partners' support and maintenance which makes the qualified partners become the important prerequisite for successful DMC. Therefore, evaluating the trust of partners ensure the future cooperation is the feasible measure.

#### Phase 2: Communication and common cultural building

The operation period of DMC is the important phase that transforms the presetting plan into the tangible task through the partners' matching work. With the increasing of close contact among the partners, conflict becomes inevitable and the trust mechanism is needed urgently. Now, the function of trust mechanism is to pull the partners closer and establish a harmonious cooperation environment. Supposed the first stage's work of trust mechanism building is effective, and all the members of DMC are qualified in trust evaluation and trust behaviour. The point of DMC management shifts into the effective communication and the common culture cultivation.

Under the conflict between the partners is the different interest caused by commercial goals as well as the different enterprise culture. Partners in DMC bring the variable core competence which can solve the problem of resources utilizing efficiency to some extent, while it brings the problems caused by culture difference. Each enterprise has its own standard for profit and values which adapt them to their original environment. In addition, partners dispersed globally often communicate in the way of telephone, facsimile, email etc. compared with face to face communication, these methods create the distortion or loss of information more often. Different culture backgrounds accompanied with deviation of information make it difficult for DMC to success.

The base of trust building is the enough and credible information. For problem caused by communication should be solved by communication itself, it is very important for DMC to build a highly effective communication mechanism. In DMC, high technology method can overcome the obstacles from long distance. While, to make it play its role more efficiently, some regulation and

subsidiary measures should be designed---for example, the regular face to face meeting according to different period during cooperation, summit of high level managers and video meeting, so as to broaden the channel of communication and ensure the effective trust communication.

As mentioned above, another problem in this stage is the conflict caused by culture. The DMC is a mixture of multi-culture where partners owned different value standard understand and deal with the relation with other partners in different way. Wrong consciousness, explanation and the evaluation of cross-cultural will also produce the barrier for internal communication and create the conflict (David, 2004). Definitely, this different cultural context will affect the mutual understanding and trust behaviour of partners. Furthermore, only depending on broad communication channel can't solve this problem successfully and it is necessary to alleviate them from the root. So, "assimilation" of organization culture consciously becomes another important work in this stage, for example, training, promoting homogeneity culture, creating sound collaborate environment are effective measures in this stage.

#### Phase 3: promise and distribution

In this phase, the primary task of DMC has been finished and partners will be evaluated so as to determine the profit share correspondingly. Then, part or all of members participated in the collaboration will leave the DMC. Although it is the epilogue, success of DMC can't be ensured still because if work in this time is improper---- especially when it come down to the profit distribution, result of cooperation will be discounted greatly for partner's psychologically dissatisfaction and indifferent. Considering these, two functions should be the primary task for trust mechanism building: first, regulate member's behaviour and ensure that all the behaviour during the disintegration should be on the calendar of cooperation agreement. Second, keep partners' cooperation records in detail as the evidence for their future cooperation. At the same time, it will enhance the effect of the first function for record itself can be a effective regulate measure.

Furthermore, changes of partners cooperation psychology in disintegration period also include inevitable neglect of the task for there may be new contract attract them more. In this case, it is usual thing that partners pay more attention on their own profit rather than collaboration achievement ---- even adopt the deceitful behaviour to seek the profit. Therefore, functions of inspection and prevention should be considered in the trust mechanism building in this period.

What is worth for reference is the credit rating system in finance industry where the good historically credit record will be the important qualification for enterprise to get loan in future. The same mechanism can be designed in DMC and good cooperation record should be the important prerequisite for future cooperation. So, it is necessary to keep cooperation record for once the information about partner's cooperation can be recorded in detail, considering the future profit and development, partners will try their best to contribute more and overcome the negative influence of psychology at disintegration period. More important thing is that establishment of cooperation information poll will provide great help for partner choosing and ensure a good beginning in next DMC.

## 5 Conclusion

The paper analyzed the environment, function and approach of trust building in dynamic and multinational cooperation (DMC) characterized by changeable, multinational and short-term cooperation. It was found that most of obstacle of DMC was caused by culture difference and opportunism behavior which hidden in geography distance and dynamic cooperation. As the perfectly matched mechanism, trust mechanism can reduce the complexity of coordination and regulate the behavior of participants to improve the efficiency of DMC. Furthermore, consider the different phase of cooperation cycle, a three phase model of trust building was proposed which suggested that different point should be emphasized: the work of first stage of cooperation should be focused on the trust evaluation on partners; for the second stage, it should be transferred to the communication channel and common culture cultivating; and, the final stage, point should be put onto the promise and data recording for the future cooperation.

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