



Inter-Organizational Relationship and Networks

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ABSTRACT

Understanding the relationship between/among the competitors, the customers and the suppliers, etc. - in other words, the relationship about the competition and the cooperation, etc. with the corporate stakeholders - and seeking how to deal with it enables us to make effective strategies.

In this paper, I will make the definition/classification of the "inter-organizational relationship"; study about the strategic alliance; introduce the Strategic Alliance Model; make the definition/classification of the "inter-organizational networks"; introduce the mechanism of the formulation and the continuity of the inter-organizational networks. Furthermore, I will refer to the impact of IT in the networks.

INTRODUCTION

The studies about "the inter-organizational relationships and networks" are not new. The origin of the studies about the inter-organizational relationships is the series of studies made by sociologists in late-1950s to early-1960s, such as Dill (1958), Levine and White (1961), etc. And the studies about the inter-organizational networks were made by Evan (1966) and Caplow (1964).

However these themes are becoming more significant, because the development and the diffusion of information technologies have been changed the organizational environment - both internal and external so rapidly, and the way of "the inter-organizational relationships and networks." (Scott Morton, et. al. 1991)

INTER-ORGANIZATIONAL RELATIONSHIP

What is Inter-Organizational Relationship?

The organization has its own purpose. As Barnard puts it, one of the elements of formal organization is the purpose (1966: 82-91).

In the open system theory, an organization has mutual relationship with its environment (Kast & Rosenzweig 1972: 447-465, Scott 1992: 76-94, Bennis & Nanus 1985: 159-160), especially with its market or stakeholders.

The inter-organizational relationship is how to relate to other organization(s) in order for one organization to realize its own purpose.

Basic Pattern of Inter-Organizational Relationship

The basic pattern of the relationship between/among the organizations is;

- No relationship
- The rivalry (or competition)
- The cooperation
- The independent

Such relationships are situationally changeable. Brandenburger & Nalebuff (1996: 4) stated that "business is cooperation when it comes to creating a pie and competition when it comes to dividing it up."

CLASSIFICATION OF COOPERATIVE RELATIONSHIP AND STRATEGIC ALLIANCE

Classification of Cooperative Relationship

Yoshino & Rangan (1995: 3-24) classified the business relationship into the contractual agreement and the equity arrangement. The former was broken down into the traditional, and the non-traditional. And the latter was broken down into the no new entity, the creation of entity, and the dissolution of entity.

What is Strategic Alliance?

As Yosino & Rangan (1995: 3-24) defined the strategic alliance as follows:

A strategic alliance links specific facets of the businesses of two or more firms. At its core, this link is a trading partnership that enhances the effectiveness of the competitive strategies of the participating firms by providing for the mutually beneficial trade of technologies, skills, or products based upon them.

1. The two or more firms that unite to pursue a set of agreed upon goals remain independent subsequent to the formation of the alliance.
2. The partner firms share the benefits of the alliance and control over the performance of assigned tasks - perhaps the most distinctive characteristic of alliances and the one that makes them so difficult to manage.
3. The partner firms contribute on a continuing basis in one or more key strategic areas, e.g., technology, products, and so forth.

And they defined the non-traditional contracts, the no new equity, and the non-subsidiary joint ventures, as the "strategic alliances."

STRATEGIC ALLIANCE MODEL BASED ON CORE-COMPETENCE

Organizational Environment and Strategic Fit

The organizational environment can be characterized as five distinguished phenomenon at present.

- The globalization led by U.S. is becoming "de facto standards."
- The money market is becoming enlarged and the uncertainty is increasing.
- The technologies including IT are remarkably developing and accelerating the speed of "change."
- The market changed from production-oriented to customer-oriented.
- The issues on the ecology, and the safety, etc. are getting more important.

To meet such situations, we need a new principle of organizing for the strategic fit.

Strategic Alliance Model Based on Core Competence

I will introduce a strategic alliance model based on "core competence" as one of the new models based on new principles of organizing (Lipnack & Stamps 1994: 18).

- Outsourcing Model

In this model, the non-core competence works shall be outsourced to the external specialists by contracts. Through the outsourcing, the organization can concentrate its resources into its "core competence" and make its activities more effective and efficient. Also through shifting its paradigm from the "possession" to the "utilization" (or from "stock" to "flow") of the resources, the organization can reduce the inefficiency and the risks of possessing the full-set of the assets.

1 Network-based Division of Labor Model - Virtual Corporation Model

In this model, two or more organizations share their core competence and share a series of the business processes, and act like a "virtual corporation" as a whole. Through the division of labor, the effectiveness and the efficiency of a "virtual corporation" can be improved. The members participate the networks - through the reciprocal agreement, the contracts of memberships of the networks, or the contract with the leader of the networks. "Supply Chain Management" can be a sort of this model.

INTER-ORGANIZATIONAL NETWORKS

Network and Inter-Organizational Networks

Because the term "network" has broad meanings, it is very difficult to define precisely and perfectly. I use the "network" in connection with the networks of organizations.

Lipnack & Stamps (1998: 14) introduced five principles of organizing in the 21st Century; the unifying purpose, the independent members, the voluntary links, the multiple leaders, and the integrated levels. And the traditional hierarchical organization has been already outmoded, and the network organization with the above five principles can be a possible next ones.

In the cooperative relationship, two or more organizations formulate the network(s); and there the above new principles can be effective.

What Shape Do the Inter-organizational Networks Take?

- Vertical vs Horizontal
- Imai (1984: 67-70) classified the network into the vertical network (tightly connected, well-planned, and concentrated), and the horizontal network (loosely connected, self-organized, and decentralized).
- Homogeneous vs Heterogeneous or Complementary vs Division of Labor

The network(s) formulated by two or more organizations can be classified into the homogeneous network - members share same function, and the heterogeneous network - members share different function.

The former is, for example, the joint R&D, or the cooperative distribution, etc. In this case, as each member carries out same function in cooperation with others, the network(s) will be the "complementary network."

The latter is, for example, in the distribution channel, each member - suppliers, manufactures, distributors, wholesalers, and retailers - carries out each function in the distribution process. This network will be called as the "division-of-labor network."

THREE ELEMENTS OF ORGANIZING INTER-ORGANIZATIONAL NETWORKS

Barnard (1966: 95-99) listed communication, willingness to serve, and common purpose as the elements of an organization. Among them the "communications" is the first premise. It enables to formulate and share the common purpose, to induce the willingness to serve, and to enable the cooperative work.

In utilizing his theory, the problem is whether a "member" of the inter-organizational networks can be handled same as a "person." or, whether a "member" can be personalized or not. It can be explained by considering the relationship among inter-organizational networks, their members, and the persons in the members as the recursive relationship in the networks.

INTER-ORGANIZATIONAL NETWORK MODEL BASED ON BARNARD'S THEORY

To continue the formal organization, the fulfillment of the effective cooperation, and the organizational efficiency are indispensable (Barnard 1966: 95-99). The effectiveness of the cooperation is

to what extent organization does it attain its common purpose. And the organizational efficiency is organization's "capacity to offer effective inducements in sufficient quantity to maintain the equilibrium of the system."

Morimoto (1985) illustrated the relationship between three elements of the formal organization, and the effectiveness of cooperation and the organizational efficiency. It can be applicable to the inter-organizational networks by using the view of the recursive relationship such as the "inter-organizational network," the "member of network," and the "person inside member."

EFFECTIVENESS AND EFFICIENCY OF NETWORK THROUGH INFORMATION TECHNOLOGY

As I stated before, the formulation and the sharing of the common purpose, and the operation/harmonization of cooperative work, will be realized by the communication. In this connection, it is the most important that how effective and efficient the communication is.

Information technologies affect not only the above "communication" area but also the area of organizational activity and result. As a result, the effectiveness and/or the efficiency of organization can be improved.

As to the problem area concerning information technologies in inter-organizational network model, I point out that;

- three elements of inter-organizational networks - common purpose, communication, willingness of cooperation - can be made more effective/efficient by the support of information technologies.
- in the area of the organization structure, in order to utilize the information technologies more effective and efficient, the organization structure and the business process should be redesigned suitable for information technologies. Building a new business process with the suitable information technologies and redesigning structure of organization suitable for such new business process is significant.
- in the area of the organizational activity and the result, effective usage of the information technologies enables each activities more effective and efficient.

For the inter-organization networks, how well they can build the sustainable competitive business model, the system of division of labor among members, and integrate it must be critical success factors.

CONCLUSION

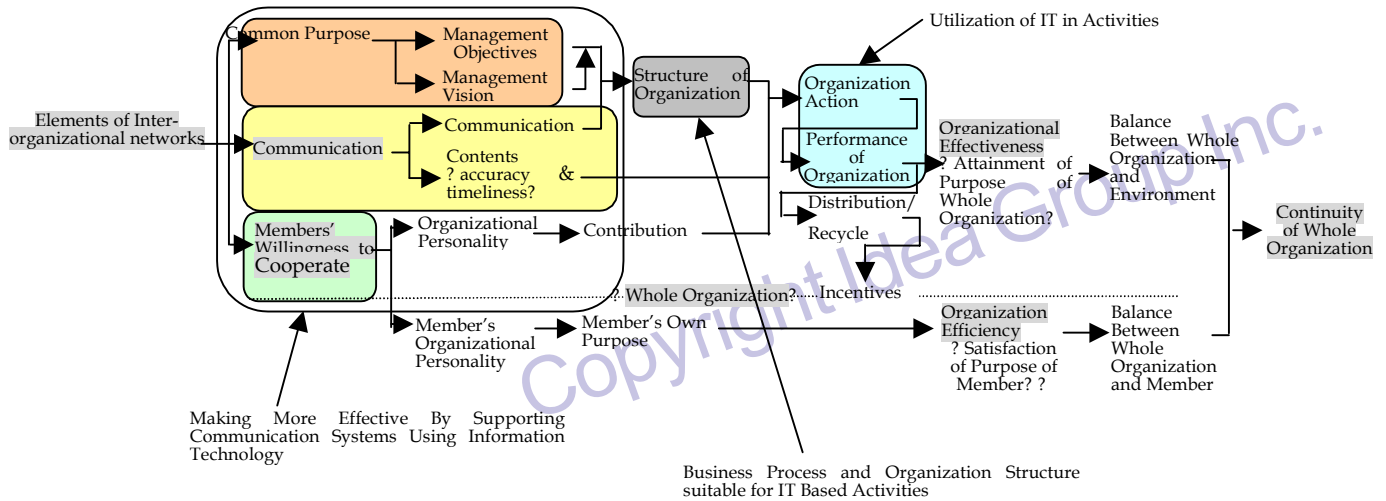
In this research, I pigeonholed what is the inter-organizational relationship, including the classification of cooperative relationship, the strategic alliance, the Strategic Alliance Model. Then I sort out what are the inter-organizational networks with Barnard's theory of cooperation, and theory of formal organization.

I introduced the model based on Barnard's theory, and then studied problem area regarding the information technologies.

REFERENCES

- Barnard, C. I., "The Function of the Executive - Thirtieth Anniversary Edition," Harvard University Press, 1966
- Bennis, W., & Nanus, B., "Leaders - The Strategies For Taking Charge," Harper & Row, Publishers, Inc., 1985
- Brandenburger, A. M. & Nalebuff, B. J., "Co-opetition," Currency Doubledat, 1996, 4
- Caplow, Theodore, *Principles of Organization*. New York: Harcourt Brace Jovanovich, 1964
- Dill, William R., "Environment as an Influence on Managerial Autonomy," *Administrative Science Quarterly*, 2, 1958, 409-443
- Evan, William M. (1966). "The Organization Set: Toward a Theory of Interorganizational Relations," in *Approaches to Organizational Design*, 173-188, ed. James D. Thompson. Pittsburgh: University of Pittsburgh Press, 1966

Figure 1: Elements and problem area of inter-organizational network and information



(Source: Morimoto 1985: 7 with amendments of author)

Imai, K., "Information Network Society," Iwanami Shoten, 1984, 67-70 (Japanese)

Morimoto, M., "Enterprise Organizations," Chuokeizaisha, 1985 (Japanese)

Kast, F. E. & Rosenzweig, J. E., "General System Theory: Applications for Organizations and Management," *Academy of Management Journal*, December 1972, pp.447-465

Levine, Sol and Paul E. White (1961). "Exchange as a Conceptual Framework for the Study of Interorganizational Relationships," *Administrative Science Quarterly*, 5, 583-601

Lipnack, J. L. & Stamps, J., "The Age of Network - Organizing Principles for the 21st Century," John Wiley & Sons, 1994

Scott Morton, M. S., "The Corporation of the 1990s - Information Technology and Organization Transformation", Oxford University Press, 1991, 13-14

Scott, W. R., "Organizations - Rational, Natural, and Open Systems, International Editions Third Edition," Prentice-Hall, 1992, 76-94

Yoshino, M. Y., & Rangan, U. S., "Strategic Alliances - An Entrepreneurial Approach to Globalization", Harvard Business School Press, 1995

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