## FIRM'S PARTNERSHIP AND COMPETITIVE ADVANTAGE

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### ABSTRACT

This study examines the effectiveness of the theory of structural embeddedness adopted to partner network analysis for studying how firm's partner relationships contribute to competitive advantage. Two major ERP (Enterprise Resource Planning) package vendors in Japan, which have significant partner relationships as one of their characteristics, are analyzed as a comparative case study. First, their partnership networks are analyzed based on the resource based view theory, then an analysis is added based on the structural embeddedness theory which can complement shortfalls of the resource based view theory.

The conclusion of this study is as follows:

1) From the perspective of resource based view theory, an ERP package vendor that has open relationships structure with its partners does not have the differentiation advantage compared to an ERP package vendor that has close relationships structure with its partners 2) Otherwise, from the perspective of structural embeddedness theory, the former type ERP package vendor has 'Opportunity Advantage' compared to the latter type ERP package vendor.

That 'Opportunity Advantage', a capability to get more business opportunities, has been not clearly examined in the conventional resource based view theory. However, by analyzing partnership networks of the ERP package vendors in Japan based on the structural embeddedness theory, this study makes the difference clear among the ERP package vendors concerning 'Opportunity Advantage' capabilities.

Keywords: Resource Based View, Structural Embeddedness Theory, ERP Package Vendor, Partnership Network, Partner Relationships

#### Introduction

This Paper argues how a firm's partnership contributes to acquire a competitive advantage. The aim of this paper is to insist the effectiveness of introducing a partner network view to that argument. In this paper, Competitive advantage is used as a main cause of making a market share difference among firms. There exists "sustainable competitive advantage"

when the advantage in market share has sustained and the main cause of sustainable competitive advantage is analyzed.

To argue competitive advantage of individual firms, it is effective to be based on the Resource Based View (RBV) theory. Negoro (2005b) is one of advocators of the developed RBV theory. Negoro (2005b) expanded RBV theory with two new concepts: isolation mechanism and strategic values. But even the RVB, there's some theoretical lucks to analyze a firm and its partnership.

One of theoretical lucks of RBV is insufficient consideration regarding elements of competitive advantage. In conventional RBV, "differentiation advantage" and "cost advantage" have been studied by many scholars, but other factors that bring competitive advantage have not been less examined. For example, "Opportunity advantage", an access ability to market and customers, has not been noticed. "Opportunity Advantage" means a condition that a firm obtains more business opportunities in a market. A firm's partner network that brings more business opportunities has a possibility of bringing in a competitive advantage related to market share. Furthermore, "opportunity advantage" has a possibility to be a trigger to cumulate resources that lead to differentiation. This advantage varies according to a structure of partnership and choice of partners.

Searching opportunity in a market is conducted not only by sales activities of focal firm but also by its business partners. In the case of focal firm, opportunity advantage is limited simply by the firm's size. But In the case of searching opportunities by business partners, factors other than a firm's size are supposed to affect competitive advantage. As a method to investigate them, this paper complementarily introduce a theory of structural embeddedness for analyzing partner network characteristics.

## Attention to partner network

The theory of structural embeddedness is a typical perspective for studying partner network. Gulati, who is one of advocates of structural embeddedness, exhibits "network resources" concept to complement conventional competitive strategy theory. Network resources are found in relationships of firms' networks contrasting with individual firms' internal resources. Gulati argues that network resources contribute to produce resources that gain inimitable values. The conceptual framework of network resources consists of network membership, network structure, and tie modalities. With the network membership, we focus on what player compose partner network. With network structure, we pay attention to characteristics of structural pattern of firms' relationships. For example, it examines whether a network is more redundant or less redundant. With the tie modalities, we examine the characteristics of the way of relationships among firms.

### **Research Methodology**

### Subject of Research

This paper conducts a case study regarding ERP package vendors and its partners in Japan.

We choose SAP Japan which is a foreign capital ERP package vendor as a main target and the GLOVIA business of Fujitsu which is a domestic package vendor as the object of a comparison.

Table 1 shows time series ERP market share in Japan.

|             | 1997  | 1998  | 1999  | 2000  | 2001  | 2002  | 2003  |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| SAP         | 34.2% | 46.9% | 33.0% | 45.6% | 50.4% | 45.9% | 46.1% |
| OracleEBS   | 15.4% | 14.4% | 24.0% | 19.0% | 15.7% | 19.1% | 20.6% |
| GLOVIA      | 10.3% | 7.2%  | 9.5%  | 7.5%  | 7.9%  | 9.1%  | 10.8% |
| PeopleSoft  | 0.9%  | 2.9%  | 5.8%  | 3.2%  | 4.2%  | 5.9%  | 8.1%  |
| SSA         | 9.4%  | 7.2%  | 5.8%  | 4.6%  | 3.9%  | 4.6%  | 6.3%  |
| Intentia    |       | 0.7%  |       | 3.5%  | 3.2%  | 3.0%  | 3.6%  |
| FS          |       | 0.7%  | 2.1%  |       | 3.5%  | 3.4%  | 3.2%  |
| FlexProcess |       |       |       | 0.9%  | 1.0%  | 1.1%  | 1.4%  |
| Baan        | 12.8% | 3.6%  | 7.0%  | 6.5%  | 7.4%  | 5.5%  |       |
| J.D.Edwards | 17.1% | 11.6% | 6.0%  | 5.9%  | 2.7%  | 2.4%  |       |
|             |       |       |       |       |       |       |       |
| Others      |       | 4.7%  | 5.8%  | 3.3%  |       |       |       |

## Table 1. Time series ERP market share in Japan (1997 – 2003)

SAP Japan has been keeping top market share in Japan.

## Assumptions of analysis

We assume that there doesn't exist differentiation points that definitively affect to market share on basic product functions between SAP Japan's ERP product and the GLOVIA business of Fujitsu. There are three reasons for this:

(1) Many new firms have entered relatively easily to ERP package business. This leads to a thought that the basic functions of ERP packages are not inimitable. Because the basic functions of ERP packages have core functions based on constitutionally standardized business processes like accounting.

(2) Most of ERP packages need to be customized with add-on development when they are implemented to customer business. It is a rare case to be implemented as an ERP software is. Customizing quality affects the competitiveness more than their functionality differences. Customizing quality significantly depends on a partner's ability.

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(3) On the assumptions (1) and (2), ERP package vendors are not supposed to be able to keep high market share for many years. Of cause there are many factors that determine market share like product price or reputation based on implementation achievements other than product functionality. However, this paper focus on contribution of partner network out of these factors that determine market share. Therefore this paper doesn't intend to verify that market share is determined by partner ability or network structure, but to indicate the possibility that partner network have a strong influence to market share.

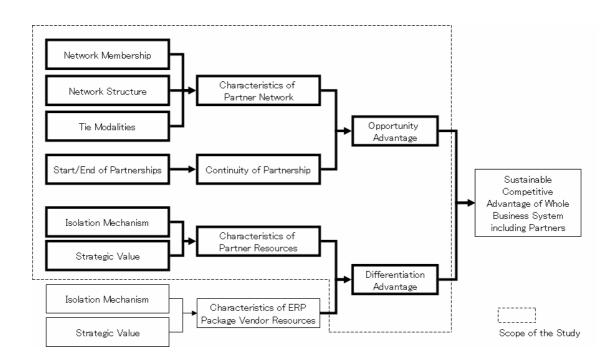
#### **Case Analysis**

This paper focus on two elements - partner resources and partner network - to illuminate how partner relationship contributes to competitive advantage. What has to be noticed is that partner resources don't indicate all the resources that partner have but resources that complement business activities of a product vendor. This limitation is aimed to compare the business systems of ERP package vendors.

First, resource isolation mechanism and strategic value are analyzed using the framework of Negoro (2006). Second, partner networks composed by package vendors and partners are also examined using the three relationship characteristics – network membership, network structure and tie modalities – advocated by Gulati (2000).

Figure 1 shows analysis framework based on these theories.

#### **Figure 1. Analysis Framework**



#### Analysis of partner resources

#### Isolation Mechanism

The resources held by partners of SAP Japan to conduct ERP package business exist outside SAP Japan. And partners are connected to SAP Japan through relatively loose relationships of partner system and expectation of getting profit opportunity on business. Therefore it is quite likely that partners use their resources for other package vendors or utilize their resources to develop and sell their own ERP package products. That is to say, resources held by partners of SAP Japan are easy to convert to utilize for other ERP package vendors and it is relatively easy to be converted. It is difficult to say that their resources are inimitable. On the other hand, the resources held by partners of the GLOVIA business of Fujitsu have close relationship with Fujitsu, and there's few possibility that their resources are transferred or converted. In the business system that ERP package vendor and partner business that conduct complementary activities promote the whole ERP package business, the GLOVIA business of Fujitsu whose partners cannot easily convert or transfer their resources has more rigid isolation mechanism than SAP Japan whose partners can convert or transfer their resources.

#### Strategic Value

ERP package implementation usually takes long time and need a large scale project team. The loss of failure must be huge. It is supposed that customers take care of reducing that uncertainty and this is one of the main evaluation points when they choose solution using ERP package.

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In the case of SAP Japan, there exist highly capable and experienced partners. But on the other hand it depends on the partner's capability whether the implementation success or not. In other words, partner skills are varying and the contribution to reduction of uncertainty on implementation fluctuate according to partner. The GLOVIA business of Fujitsu that hold many stable resources inside their body is more capable of reducing uncertainty. In fact, Fujitsu, a general computer manufacturer, hold a collective strength that is produced from the synergy of Fujitsu group firms. With this strength, Fujitsu can easily appeal to its customers of its capability of reducing uncertainty. But on the other hand, it is appreciated the fact that there exist high ability holding partners for SAP Japan. Therefore the strategic value is even for SAP Japan and the GLOVIA business of Fujitsu.

#### *Summary of partner resources analysis*

Table 2 shows a summary of analysis of partner resources.

|                        | SAP Japan |   | GLOVIA Business of Fujitsu |  |  |
|------------------------|-----------|---|----------------------------|--|--|
| Isolation<br>Mechanism | ×         | Possibility of transferring of<br>partner resources to other<br>firms   |                            | No risk of transferring of<br>partner resources to other<br>firms          |  |
| Strategic<br>Value     | Δ         | There exists partners that<br>provide high quality services,<br>but it depends on partner's<br>capability whether they can<br>satisfy customers and it is<br>unstable |                            | Service quality<br>discrepancies are few but<br>not always high in quality |  |

## Table 2. Summary of Partner Resources Analysis

## Analysis of partnership continuity

The advantage of partner network does not directly bring opportunity advantage. Firms gain opportunity advantage after maintaining the advantage partner network for some period. Therefore it is required to survey the partnership continuity before examining partner networks itself.

Started point and ended point of partnership of each firm are surveyed to analyze partnership continuity.

In general, the partnership continuity of SAP Japan's partners is very high.

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In the case of the GLOVIA business of Fujitsu, its partner system started in April 2007 and its history is very short and the time is not enough to affect the partnership continuity. But there are some long-time group firms of Fujitsu, these firms had relationship with Fujitsu before the GLOVIA partnership. They are supposed to have been conducted GLOVIA business continuously. As far as we could survey, the partnership continuity is high both in SAP Japan and in the GLOVIA business of Fujitsu.

### **Analysis of Partner Network**

In this section, an analysis based on structural embeddedness theory on partner network consists of ERP package vendor and its partner firms are conducted.

### Network membership

In the case of SAP Japan, most distinctive feature of its network membership is the partnership with SIers that belong to customer firm group. Furthermore, SAP Japan has many relationships with major computer vendors and major independent SIers. These partners not only conduct implementation business passively but also conduct expanding activities like cooperative development of industry specific templates or horizontal deployment of their existing software assets in the same industry. Otherwise, in the case of the GLOVIA business of Fujitsu, most of network members are distributors or SIers of Fujitsu's own group firms. It is not explicitly shown in the partner system of the GLOVIA business of Fujitsu has partnership in GLOVIA business with its subsidiaries and non-GLOVIA related partner firms.

Judging from these facts above, SAP Japan's network membership is supposed to have comparative superiority because it has various types of members in partner network and various types of partnership and cooperation.

#### Network Structure

The network members of SAP Japan are supposed to affect its network structure.

The members - user firms, SIers that belong to customer business group, computer vendor and consulting firms - hold their own business networks. SAP Japan acquires the access to new customers through the networks of partners. These customers are difficult to access from SAP Japan of itself. The business opportunities with new customer are increased to combine with other firms that hold their own business networks. The business network structure of SAP Japan brings opportunity advantage to SAP Japan.

In the case of the GLOVIA business of Fujitsu, most of its partners are its group firms. The relationships between partners and customers are nearly equal to the relationships between Fujitsu and the customers. Partners doesn't have business network with customer independently. In this case, access from Fujitsu is limited to the extent that Fujitsu and its group firms can reach. It is limited to the existing customers of Fujitsu.

We judge that the network structure of SAP Japan's partner network is superior to the GLOVIA business of Fujitsu because of its probability of access to more customers (opportunity advantage).

### Tie Modalities

When we examine tie modalities, we need to draw attention to structure and maintenance of the partnership. Tie modalities is closely related to maintenance of partnership.

In the case of SAP Japan, partners are required relationship specific investments. This is one of the factors that ties SAP Japan and partners. To be more specific, it is a participation in training courses provided by SAP Japan. According to a hearing from one of the partners of SAP Japan, some million yen of investment par trainee is required. The investment amount increase when multiple engineers are required to develop. This investment is sunk cost for partner firms. To collect this cost, partners prefer to continue business with SAP Japan. Therefore the tie between SAP Japan and its partners are relatively strong, and it also contributes to maintain partner network structure to some degree.

The GLOVIA business of Fujitsu, similar to SAP Japan, requires to take training courses to became a partner. This investment is sunk cost for partner firms. To collect this cost, partners prefer to continue business with the GLOVIA business of Fujitsu. Therefore the tie between the GLOVIA business of Fujitsu and its partners are relatively strong, and it also contribute to maintain partner network structure to some degree.

It is equal in tie modalities of 2 ERP vendor's partner networks.

#### Summary of partner network analysis

Table 3 shows a summary of analysis of partner network.

|                       | SAP Japan |  | GLOVIA Business of Fujitsu |   |  |
|-----------------------|-----------|--|----------------------------|---|--|
| Network<br>Membership | 0         | Rich diversity with user firms,<br>user group SI firms, consulting<br>Firms        | ×                          | Poor diversity with group firms   |  |
| Network<br>Structure  | 0         | Combination of multiple<br>business networks                                       | ×                          | Single business network   |  |
| Tie Modalities        | 0         | Maintain relation structure by<br>relation specific investment for<br>SAP training | 0                          | Maintain relation structure by<br>relation specific investment for<br>GLOVIA training |  |

## Table 3. Summary of Partner Network Analysis

### Summary of case analysis

By analyzing partner relationship of ERP package vendors, the GLOVIA business of Fujitsu is superior to SAP Japan in both isolation mechanism of resources and strategic value of resources based on an analysis of resources held by partners. According to the perspective of conventional resource based view, under the assumption that basic functions of each product has not significant difference, the GLOVIA business of Fujitsu might have been more successful in the market than SAP Japan. But against this expectation, SAP Japan has a large market share in reality. On the other hand, the analysis focused on the partner network, contrary to the result of analysis based on partner resources, we have a conclusion that SAP Japan is superior to the GLOIVA business of Fujitsu in partner network. Not only the differentiation advantage of business system of ERP package business, but also the opportunity advantage brought by partner network might have brought greater success – market share – to SAP Japan.

#### Conclusion

## **Opportunity advantage and differentiation advantage**

From the case analysis, we reached a result that the partner network of SAP Japan is superior. But the superiority of resources held by partners are not necessarily recognized. Presuming an opportunity advantage, it suggests that partners hold not only a mere operational resources but also an essential resources that bring SAP Japan an opportunity advantage.

Based on the conventional resource based view perspective, the difference between SAP Japan and the GLOVIA business of Fujitsu might be explained that it was caused from the historical context. In the other words, SAP Japan, as an independent company and new entry to the Japanese market, was necessary to newly build its partner network. But The GLOVIA business of Fujitsu had already held partner network for selling computer equipments when they entered to ERP package business and this lead to the difference in holding and cumulating resources. Viewing from this uniqueness of the historical context, it seems that the GLOVIA business of Fujitsu has an advantage in terms with cumulating resources.

On the contrary, by introducing a structural embeddedness point of view, forming a partner network is lead to not only gain mere operational resources for selling and implementing ERP package but also gain new opportunity advantage through partner network.

In short, it is impossible to explicitly render an opportunity advantage brought by partners by means of only examination of partner resources based on the conventional resource based view. By complementary introducing the structural embeddedness perspective, did this paper, we can make it clear the differences.

#### References

- Burt, R.S., (1992), *Structural Holes: The Social Structure of Competition*, Harvard University Press
- Granovetter, M., (1985), Economic action and social structure: The problem of embeddedness, *American Journal of Sociology*, Volume 91 Issue 3

Gulati, R., Nohira N. and Zaheer A., (2000), Strategic Networks, *Strategic Management Journal*,, pp205-210.

Itami, N., Kagono, T. (1993), Seminor Introduction to Business Administration 2<sup>nd</sup> edition, Nikkei Inc.

Kagono, T., Inoue, T.(2004), Business System Strategy, Yuhikaku Publishing Co., Ltd.(\*)

Konno, Y., (2002), Strategy Theory, Interfirm Relationship Theory and Structural Embeddedness Theory, *Akamon Management Review*, Vol. 1 Issue 5 and 6, pp.2-13.(\*)

Negoro, T., (2005a), New Field of Business Model Framework, *Research Institute of Information Technology and Management eds. Business Strategy in the Digital Era*, Media Select Publishing. (\*)

Negoro, T., (2005b), Close Examination of Inimitability Concept, Waseda University Research Institute of Information Technology and Management Working Paper. (\*)

- Negoro, T., (2006), What is the Starting Point of Strategy Formation? : Toward the Strategic Theory of Inner-Outer Integration", *Waseda Commercial Review*, Vol. 407. (\*)
- Yano Research Institute Ltd. (2003), 2002-2003 *The Realities and The Strategy Outlook of Functionally Expanding ERP Market*, Yano Research Institute Ltd.(\*)

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- Yano Research Institute Ltd. (2003), 2003-2004 *The Realities and The Strategy Outlook of Functionally Expanding ERP Market*, Yano Research Institute Ltd.(\*)
- Information Service Study Group in ERP Forum Japan, (2004), 2004 ERP Users White Paper, ERP Forum Japan(\*)
- Nikkei BP, (1998), Sales check of ERP : The Market is continuously expanding with SAP leading Domestic companies including Hitachi and NTT data increased their market share, Nikkei Watcher On IT Business, 1998.5.1 Issue, Nikkei BP (\*)
- Nikkei BP, (1999), Sales check of ERP : Pay Attention to SAP's recovery from Rapid slowdown Has Vigour in Small and Middle Business Market, Nikkei Solution Provider, 1999.7.23 Issue, Nikkei BP (\*)
- Nikkei BP, (200), Sales check of ERP :Stopped at 22% Increase in Revenue Amount in the Year 1999; Revision of Main Business System will grow and 75% Increase in the yaer 2000, Nikkei Solution Provider, , 2000.7.21 Issue, Nikkei BP(\*)

(\*) These are written in Japanese only.