

# 글로벌 프로세스 소싱에서의 효과적인 지식이전을 위한 거버넌스 구조 연구

## Governance Structure for Knowledge Transfer in Global Business Process Outsourcing

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### 요 약

기업 간 관계를 관리하는 효과적인 거버넌스 구조(governance structure)는 기업 간 관계의 성공에 매우 중요한 역할을 한다. 특히 기업 간 관계가 국경을 초월한 해외에서 이루어질 때, 기업 간의 문제를 조정하기 위한 효과적인 거버넌스 구조의 역할은 더욱 중요성을 갖게 되는 것이다. 실제 해외에서 비즈니스 프로세스를 소싱(Sourcing)하고 있는 업체와 서비스 제공 업체들은 해외 소싱 성공을 위한 효과적인 거버넌스 구조에 대해 매우 중요하게 인식하고 있다. 하지만 이에 대한 실증적인 연구는 부족한 실정이다. 본 연구에서는 IT 집약적인 비즈니스 프로세스 소싱에 있어서 고객과 서비스 제공업체 사이의 지식 이전이 BPO 성공에 중요한 역할을 한다고 보고, 이전되는 지식 유형에 적절하고 효과적인 거버넌스 구조에 대한 연구를 프랑스 회사들의 해외 소싱 사례를 통하여 수행하고자 한다.

*키워드 : 해외 비즈니스 프로세스 아웃소싱, 거버넌스 구조, 지식이전*

## I. Introduction

In recent years, companies located mainly in the United States and Europe are increasingly adopt offshore BPO (Business Process Outsourcing) that outsources non-core business processes as wells as supporting IT (Information Technology) to offshore vendors. The purpose of the offshore BPO is to re-

duce operating costs and to focus on firm's core competency. In France particular, companies take their processes to offshore locations such as Mauritius, Tunisia, Romania, Russia, India and China. The process usually outsourced is ranged from sales/marketing, accounting/finance, human resource, information technology, to customer care processes (UN, 2003). Accenture defines BPO as "contracting with an external organization to take primary responsibility for providing a business process or function (Linder and Cantrell, 2002)." Following this definition, this study considers outsourcing soft-

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ware development ‘function’ as business process outsourcing. In fact, ‘development of software’ is defined as key business process in many firms (Davenport, 1993).

More recently, firms seek on-shore or near-shore strategies for better communication and control: “offshoring is no longer the strategy that Wipro’s clients are pursuing ... for almost all of our engagement, we use some combination of on-shore, near-shore and far-shore resources(Sinnett, 2006).” To reflect emerging forms of BPO, this study uses more inclusive term global BPO rather than off-shore BPO. Altogether, the growth of global BPO is attributed to a combination of various factors, including advances in network technology and high-speed data networks.

In IT-intensive global BPO project, knowledge transfer is considered to be important to ensure the project success(Kobitzsch *et al.*, 2001). IS project in general is described as a process of communication and learning(Curtis *et al.*, 1988). Communication and learning occur among team members and between users and the analyst concerning different issues such as user requirements and system architecture (Ko *et al.*, 2005, Sarker *et al.*, 2005, Karlsen and Gttshalk, 2003). As complex IT projects are outsourced to vendors with expertise, communication and learning surpass the organizational boundary. Clients and consultants engage constant communication concerning the capabilities of the new system and training client employees for new system(Ko *et al.*, 2005).

In the heart of communication and learning is information and knowledge transfer among the parties. In global BPO project, knowledge transfer among the project stakeholders cuts across country boundaries. The exemplar knowledge transferred in

global BPO is as follows(Masood, 2007, Kobitzsch *et al.*, 2001): process knowledge, application knowledge, quality management knowledge, development (standards) knowledge, and company culture knowledge. Since knowledge and information are used interchangeably due to their close relationship, knowledge transfer in this study is defined as systematically organized exchange of information and knowledge between entities(May *et al.*, 2005).

In IOR(Inter-Organizational Relation), knowledge transfer is influenced by governance structure of IOR. For example, sensitive knowledge such as new technology is hard to be transferred under contract-based market structure(Mansfield and Romeo, 1980). Knowledge transfer is also influenced by control structure. Control mechanism influences the acquisition, interpretation, and dissemination of information, which is essential for organizational goals(Makhija and Ganesh 1997). Control mechanisms must be suited to the type of knowledge to be transferred in a given learning situation(Turner and Makhija, 2006, Makhija and Ganesh, 1997, Fiol and Lyles 1985, Shrivastava, 1983, Tushman and Nadler 1978).

In general, governance is defined as a set of ideas about how direction is provided. Governance of society involves a set of ideas about how direction is provided to society members. Governance of alliance provides directions to the firms participating in IOR. In this sense, governance mechanism for knowledge transfer can be defined as a set of mechanisms by which knowledge transfer is directed within IOR. Under this definition, control mechanism can be viewed as governance structure.

The objective of this study is to explore the effective governance structure for knowledge transfer in IT intensive global BPO. There have been re-

ports on control mechanism in global BPO, which includes assignment of a liaison engineer, onsite visits and inspections, reporting, risk management and common quality standards and procedures (Kobitzsch *et al.*, 2001). However there has been no systematic study to investigate effective governance structure for knowledge transfer based on types of knowledge.

## II. Research Methodology

After review of the literature on IS outsourcing, it was determined that no current theory answered the research question. Therefore, 'ground theory building' methodology that builds theory in a grounded and inductive fashion is used for this study (Eisenhardt, 1989, Yin, 1984). First, a generic framework on governance structure for knowledge transfer is derived from extant literature. The framework consists of potentially important constructs to study the governance mechanism for knowledge transfer. For the governance mechanism, this study focused on hierarchy/subsidiary structure, formal/informal control mechanisms and information systems. For knowledge type, the study derived the following types of knowledge-sensitive knowledge, codifiable knowledge and no-codifiable knowledge. This framework is applied to case analyses of two firms to explore effective governance mechanism for each type of knowledge transfer in global BPO. As results of this study, pertinent propositions for future academic inquiry will be derived.

## III. Governance Structure

### 3.1 TCE Perspective

Researchers have studied inter-organizational gov-

ernance mechanisms from TCE (Total Cost Economics) standpoint. TCE argues that the choice of the governance structure in Inter-Organizational Relationships (IOR) is determined by comparing the transaction costs of three alternative governance structures: market, hierarchy or hybrid structures (Williamson, 1979; Williamson, 1991). Transaction costs are associated with monitoring, adapting and enforcing contracts because of partner's opportunistic behavior. When firms can protect their investment from the opportunistic behaviors of the other by specifying all the contingencies on the contracts, contract-based market mechanism is appropriate. When bounded rationality limits partners to anticipate all the contingencies, hierarchy mechanism can complement the incomplete contract (Gulati & Singh, 1998, Decker, 2003). As the concerns about opportunistic behavior increase, the use of hierarchy mechanism increase.

A stream of IS outsourcing research has focused on TCE, viewing the IS Outsourcing decision as a rational decision based on transaction costs (Ang and Beath 1993; Ang and Cummings 1997; Nam *et al.*, 1996; Richmond and Seidmann 1993; Richmond *et al.* 1992). Environmental uncertainty and asset specificity are considered to determine transaction costs in IS outsourcing. While high uncertainty in technical change and the corresponding risks of technical obsolescence increase the need for outsourcing, high asset specificity increases the need for in-house services. As asset specificity increases, the client are more exposed to possibility of opportunistic expropriation (no unique needs of client are met, thereby reducing the quality and service to any single client) by the service provider. This leads to more in-house services.

As indicated in Kobitzsch (2001), opportunistic behavior of the vendors is also a concern in inter-

organizational technology transfer: technology transfer “usually causes no problems for distributed development organized across legally related company. However, such transfer becomes crucial where the independent partner company might also be developing software for competitors. Legal issues are sometimes involved when political considerations prevent the companies from freely transferring certain technologies such as encryption techniques.” According to Mansfield and Romeo (1980), firms tend to transfer their newest technology to overseas through subsidiaries rather than licensing or joint venture.

In the same way, the governance structure of BPO could be influenced by sensitivity of knowledge transferred among partners. Market mechanism is appropriate when sensitivity of the knowledge is low thus possibility of vendor’s opportunistic behavior is low. Hierarchy mechanism such as subsidiary would be more appropriate when sensitivity of the knowledge is high thus possibility of vendor’s opportunistic behavior is high.

### 3.2 Agency Theory Perspective

While TCE views that the choice of governance structure is determined by transaction costs, organizational scholars argue that the governance structure is influenced by task characteristics. Eisenhardt (1985) asserts that agency relationship exists in all cooperative efforts. In this relationship, one party is designated as the agents who act for the other called as principle. Task characteristics are variables to determine the structure of control mechanism in the agency relationship. If task is relatively programmed, behavior control is appropriate.

Control mechanisms for knowledge transfer can be viewed from agent theory perspective. In BPO,

while the outsourcer is principle, the provider is an agent. When the outsourced task is highly programmable, the task can be represented with a set of rules or steps. In this case, knowledge required to define the task process as well as knowledge required for process execution are explicit and codifiable. When knowledge related to the process is explicit and codifiable, the formal and structural controls(such as highly formalized standard operating procedures and rules, clearly established routines) are likely to be(Makhija and Ganesh, 1997).

If the task is less programmed, social control or information systems can be used(Eisenhardt, 1985). In IOR, the principal mode of social control is trust that is associated with goodwill and capabilities of the partners(Adler, 2001; Sako, 1992). Goodwill trust is defined as the expectation that another will perform in the interests of the relationship, even if it is not in the other’s interest to do so. Capability trust relates to expectations about another’s competencies to perform a task satisfactorily. In fact, trust is the most efficient and low-cost solution therefore it substitutes formal controls whenever a sufficient level of formal control is realized for safeguarding the transaction(Ouchi, 1979 and Decker 2003). Trust based partnership is a determining factor in IT outsourcing success(Kern and Wilcocks, 2001; Sabherwal, 1999; Lee and Kim, 1999). In the case where outsourced IS application has high asset specificity and strategic importance to the firm, mutual relationships play more important role.

In similar way, when knowledge transferred to the provider can not be prescribed in advance and thus formal control is not possible, social control can be used complementarily. That is, enhancing trust through socialization and enhancing partner’s knowledge through training can result in either a reduced need for formal control or in improved

control. According to Makhija and Ganesh(1997), “for more noncodifiable knowledge, more informal control such as socialization is better due to its flexibility. Acquisition of the embedded knowledge requires gaining experiences with the individuals and participation in the process over time. In global outsourcing environment where geographical barriers exist, socialization has limitation in use. In this case, socialization can be complemented with technologies that allow flexible and frequent communication between outsourcer and provider.

### 3.3 Information Technology

Firms enter IOR by cooperatively performing value-creating activities (Borys and Jemison, 1989; Dyer and Singh, 1998; Zajac and Olsen, 1993). To create value, IOR partners pool resources, determine tasks to be performed, decide on a division of labor, and agree to coordinate the tasks across organizational boundaries (Decker, 2003). Coordination is required to align their joint processes (Sobrero and Schrader, 1998).

To ensure that required knowledge is transferred across the organizational boundaries, appropriate IT based coordination mechanism needs to be designed (El Sawy and Bowles, 1997; Applegate and Gogan, 1995). Depending on task, the extent of coordination to transfer knowledge between partners can vary substantially. At one extreme, the partners may have minimal coordination that requires each partner to share information about the progress of its work to achieve goals. At the other extreme, knowledge transfer can be extensive, which will entail continuing mutual adjustments between partners and require each partner to link specific activities with other partners closely and regularly. Process management technologies (PMT) allows firms not only

to design, automate, execute, monitor and measure the process, but also to see every interaction with every participant in the process across the enterprise, query the past and present performance (Smith and Fingar, 2002).

Groupware system is also commonly used for inter-organizational knowledge sharing. Groupware system allows the knowledge to be stored, shared and routed among group members. The components of groupware system include e-mail, meeting systems and knowledge repository. E-mail plays a key role to motivate knowledge sharing between knowledge workers by mitigating temporal and special barriers. Desktop videoconference technology allows virtual teamwork project to access and share the knowledge of remotely located members (Davenport and Prusak 2000).

Governance structure for each type of knowledge discussed above is summarized below <Table 1>.

<Table 1> Knowledge Type and Governance Structure

Knowledge Type	Governance Structure
Sensitive Knowledge	Hierarchy
Codifiable Process Knowledge	Process Control
Less Codifiable Process Knowledge	Social Control /Information Technology

## IV. Data Collection

Data sources include interviews with managers and relevant publications regarding the firms. For Auchan case, the project managers of Supply Chain in Auchan and logistics manager in APIM (Agence pour la promotion International de Lille Metropole)

were interviewed to obtain the case data as well as regional industry data. Each interview took about an hour. The interview was conducted in face-to-face settings. Relevant publications such as company and industry publications were utilized as well. For INFO case, general manager and team leader of programming team were interviewed for two-day period. Each interview took about 1 hour.

French employment law made transferring employees between companies complex. Most companies consider their outsourcing stories as top secret, which makes difficult to obtain case data. In his reply to my mail requesting an interview, International Project manager in IBM, France, informed me that outsourcing stories are top secret for the French companies.

## V. Case Study Description

### 5.1 INFO Case

Established in 1994, INFO, France is a software development company for developing front and back end software for hypermarket. INFO is a subsidiary of LCL, French retailing group and have more than 450 customers, mainly supermarkets and hypermarkets in France and the south of Europe. INFO has provided the highest quality service through the collaboration with 150 companies (INFO, 2006). Since 1997, numbers of French competitors like Auchan and Carrefour focused on reducing costs through outsourcing, which creates fierce competition among competitors. In June, 2005 INFO, Mauritius was set up for S/W development and test as well as IT help desk for INFO France. LCL intends to cut costs and thus to strengthen their competitiveness in European market.

While INFO, Mauritius is denoted as INFO (M),

INFO, France is denoted as INFOR (F). INFO (M) has 16 people working. The organizational structure of INFO (M) consists of a general manager and team leaders leading a group of programmers.

The following shows how their work is done:

- (1) Project manager in France sends project specification.
- (2) Team leader studies the project description and estimates the number of developers and the time. Project management tool developed by INFO (F) is used.
- (3) The programming team develops and tests the program.

In INFO, all work is automatically saved in France. This is how they monitor the inter-organizational process.

According to the general manager, quality is the most important aspect in BPO. According to the team leader, quality means the followings: (1) once team leader submits the program to project manager, she or he does not get back the program for correction; and (2) keep the ethics of code that is 'instruction' about writing codes to ensure writing is good.

According to the team leader, she needs to have good communication with the project leader in France to produce good quality products. Their communications start when the project manager in France sends project specification. During this process, teams in Mauritius and project leader in France share knowledge. 80% of their communications is done via IP phone. The team leader communicates with the project leader 5~10 times per day using IP phone. The rest is done via e-mail or video conference. During this process, two-way communication occurs. According to the team leader, "Some-

times, developers in Mauritius suggest better ways of doing things. So this is two way communication.” According to the leader, due to phone, video-conference and teleconference, she feels no communication barriers. The only barrier she feels, is 2~3 hour of time difference.

The team of programmers had a lot of training regarding Dos and Don'ts, ethics of code, and ways of programming. The training program deals with how we think so that we communicate better with the project manager in France. As results, we produce better products. Once per week the team gets trained via videoconference. Frequent training is done via telephone or teleconference. In January, she went to France to have technical course on visual studio, .net. She learned rules and procedures about how to use .net. IT engineers from France is staying in Mauritius for 2 years. To make the knowledge transfer easier, the programmers had two-day intercultural training. The cultural training helped the programmers know what INFO (F) is expecting from us. According to the team leader, “Personally, I do not feel cultural difficulties.” Trust is important to ensure good team work. During her visit to France, the team leader had a chance to get along through social gathering.

## 5.2 Auchan Case

Auchan is a retail chain of France, which operates across 11 countries with 357 hypermarkets, 649 supermarkets and employs nearly 170,000 people (www.auchan.com). One of Auchan's primary goals is to provide its customers with products at the best possible price. Since the retail industry is intensively competitive with slow growth and low margins, Auchan knew that effective cost control including supply chain costs is vital to achieve low

price goal. Thus, through IBM, Belgium, Auchan launched an EDI-based Vendor Managed Inventory (VMI) as a means to reduce inventory costs and increase sales profits. IBM provided full support for Auchan's VMI operations as well as operation and management of all system software and hardware.

Auchan's main item is food where 80 biggest suppliers such as Heineken and Dannon supply 50% of the fast moving items. Fast moving items of the major suppliers are determined to be vendor managed. Each night, Auchan sends inventory information and sales data of the major supplier to IBM in Brussels, Belgium. These types of data are called product activity data. The EDI document is prepared to send the product activity data to the supplier. Upon receiving the EDI data, the supplier calculates the reorder point (ROP) for each item. Then the quantity available with retailer is compared to the calculated reorder quantity to determine order quantities. The supplier creates orders and the orders are sent to Auchan before the shipment is made. Once the retailer receives the product, invoices are matched and payments are made to the supplier accordingly.

VMI process outsourced through IBM can be codifiable with the following steps:

- **Data Synchronization** to resolve the differences in the product data between retailer and supplier.
- **EDI Setup** for data communication.
- **Setting up the Agreements** to prevent over and under allocations scenarios. Agreements on inventory turns, fill rates, frequency of replenishment and SLAs are predetermined.
- **Data Exchange** between Auchan and Suppliers. 'Product activity data', 'orders' and 'invoices' are exchanged.

- **Measurement** to monitor the success of VMI. The measurement includes improvements in inventory turn over, stock availability, inventory reduction and distribution.
- **Process Refine** to continue to reduce costs and increase efficiency between buyers and suppliers.

Auchan often needed communication, joint decision making, on-going adjustment with IBM. Constant changes in demand side drove frequent redefinition of SCM process and required frequent communication and adjustment with IBM. However, the communication and coordination with IBM were not trivial tasks. Based on lessons learned from WWRE(Worldwide Retail Exchange), Auchan complemented the coordination difficulty with social control. Auchan manager said that “with IBM, Informal relationship is important to get things done.” As time goes, he was afraid of discussing things with IBM because IBM might be working with Carrefour. etc(competitor) and Auchan might be losing important(strategic) information to IBM competitors. Informal relationship with outsourcer

was important to be efficient as well as to build trust.

## VI. Case Findings

The key features of knowledge type and governance structure were examined (see <Table 2>). The salient features of each firm’s governance structure are now compared.

**INFO Case** By setting up subsidiary, INFO could have more control over the operations and communications between employees in two countries. Process knowledge was codified as much as it can be via code of ethics and manual for project management tool. Non codifiable knowledge was transferred using various two-way communication mechanism such as telephone (IP phone), e-mail and video conference. Both technical and inter-cultural training programs facilitated knowledge transfer between employees in two countries. Technical training regarding Dos and Don’ts and ethics of code also helped the programmers understand the technical expectation of INFO, France. This in turn helped communication and knowledge transfer between

<Table 2> Summary of Case Findings

Knowledge Type	Governance Structure	
	AUCHAN	INFO
Sensitive Knowledge	◦ Subsidiary	◦ Reputable Vendor
Codifiable Process Knowledge	◦ Programming guideline such as code of ethics and quality standard Manual for Project Management Tool	◦ EDI Process
Less codifiable Process Knowledge	◦ Two way communication via video conferencing, teleconferencing, IP phone, e-mail. ◦ Technical Training ◦ Cultural Training ◦ Socialization ◦ Liaison Engineer deployment	◦ Face to face communication to discuss process redefinition ◦ Socialization



two countries. The cultural training helped the programmers know what INFO, France is expecting. The employees in two countries met together through the events and regular job rotation. Trust built during the social gathering after training events was crucial to ensure good team work. Social gathering also helped the transfer of tacit knowledge such as cultural knowledge. Liaison engineer from France also facilitated knowledge transfer between INFO, France and Mauritius.

**Auchan Case** Goodwill trust developed through socialization with vendor, capability trust coming from reputation of IBM, and perceived value from cost saving, sufficiently offset the risk of opportunistic behavior by the service provider in market mechanism. The VMI process as well as knowledge required to execute the process were pre-specified with a set of process steps and implemented by EDI system. Codifiable outcome knowledge such as inventory turns, fill rates, frequency of replenishment is specified via agreement. Less codifiable knowledge such as knowledge related to process redefinition was transferred via face-to-face meetings. The process of communications and on going adjustments with the service provider was facilitated through social control.

## VII. Conclusions and Limitations

It was widespread notion that global BPO is governed by market mechanism. Unlike early off-shore BPO, the business process is increasingly sourced under hierarchy governance in a form of oversea subsidiary. This study reveals that a combination of hierarchy/market, information system and social relationships are found to be effective governance mechanism depending on types of knowledge transferred in the global BPO. Through

the case study on two companies, the following propositions were generated for future study:

- Goodwill trust through social gathering can reduce concerns for provider's opportunistic behavior in relation to sensitive knowledge.
- Provider's capability trust can reduce concerns for provider's opportunistic behavior in relation to sensitive knowledge.
- Setting up subsidiary can reduce concerns for provider's opportunistic behavior in relation to sensitive knowledge.
- Formal and structural control mechanisms such as operating rules and guidelines are appropriate to transfer of codifiable process knowledge.
- Difficulty of coordination in global setting can be complemented by good relationship through social control.
- Informal relationship with provider provides efficient mechanism to complete the task.
- ICT such as video conferencing system and IP phones plays a critical role in transfer of less codifiable knowledge in global BPO.
- Training and inter-cultural training facilitates transfer of less codifiable process knowledge.
- Liaison employee facilitates transfer of less codifiable process knowledge.
- Good team work through frequent communication, socialization and training ensures high quality outcome.

The findings can not be extrapolated to all global BPO because this study is based on two cases. The case study companies operate within a specific business sector and their governance structure could be greatly influenced by the organizational culture, the national working culture,

as well as industry-specific issues. There is a need for more detailed interview, perhaps a larger cross-section of organizations to broaden the research data. Nonetheless, the findings still provide some fairly significant insights in exploratory research. This study found propositions that would help both academics and practitioners to understand the effective governance structure in global BPO.

## References

- Adler P. Market, "Hierarchy, and trust: the knowledge economy and the future of capitalism", *Organization Science*, Vol.12, No.2, 2001, pp. 215-234.
- Ang, S. and L. Cummings, "Strategic response to institutional influences on information systems outsourcing", *Organization Science*, Vol. 8, No.3, 1997, pp. 235-256.
- Ang, S. and M. Beath, "Hierarchical elements in software contracts", *Journal of Organizational Computing & Electronic Commerce*, Vol.3, No.3, 1993, pp. 329-361.
- Applegate, L. and J. Gogan, "Electronic commerce: trends and opportunities, *Business Fundamentals*", Harvard Business Cases, July 1995, pp. 1-16.
- Borys, B. And D. Jemison, "Hybrid arrangements as strategic alliances: theoretical issues in organizational combinations", *Academy of Management Review*, Vol.14, No.2, 1989, pp. 234-249.
- Curtis, B., J. Krasner, and N. Iscoe, "A field study of the software design process for large systems", *Communications of ACM*, Vol.31, No.11, 1988, pp. 1268-1287.
- Davenport, H., "Process Innovation: Reengineering Work through Information Technology", Harvard Business School Press, Boston, 1993.
- Davenport, H. and L. Prusak, "Working knowledge: How Organizations Manage What They Know", Harvard Business School Press, Boston, 2000.
- Decker, H., "Control of inter-organizational relationships: evidence on appropriation concerns and coordination requirements", *Accounting, Organizations and Society*, March 2003.
- Dyer, J. and H. Singh, "The relational view: cooperative strategy and sources of interorganizational competitive advantage", *Academy of Management Review*, Vol.23, No.4, 1998.
- Eisenhardt, M., "Control: organizational and economic approaches, *Management Science*", Vol.31, No.2, 1985, pp. 134-149.
- Eisenhardt, M., "Making fast strategic decisions in high-velocity environments", *Academy of Management Journal*, Vol.32, No.3, 1989, pp. 543-576.
- El Sawy, O. and G. Bowles, "Redesigning the customer support process for the electronic economy: Insights from Storage Dimensions", *MIS Quarterly*, Vol.21, No.4, 1997, pp. 457-483.
- Fiol, M. and M. Lyles, "Organizational learning", *Academy of Management Review*, Vol. 10, No.4, 1985, pp. 803-813.
- Gulati, R. and H. Singh, "The architecture of cooperation: managing coordination costs and appropriation concerns in strategic alliances", *Administrative Science Quarterly*, Vol.43, No. 4, 1998, pp. 781-724.
- INFOMIL, <http://www.infomil.com>(accessed 10<sup>th</sup> October 2006).
- Karlsen, T. and P. Gottschalk, "An empirical evaluation of knowledge transfer mechanisms for IT projects", *Journal of Computer Infor-*

- mation Systems Vol.44, No.1, 2003, pp.112-119.
- Kern, T. and L. Wilcocks, "The relationship advantage: Information technologies, Outsourcing and management", Oxford University Press, Oxford, 2001.
- Ko, G., L. Kirsch, and W. King, "Antecedents of knowledge transfer from consultants to clients in enterprise system implementations", MIS Quarterly, Vol.29, No.1, 2005, pp. 59-85.
- Kobitzsch, W., D. Rombach, and R. Feldmann, "Outsourcing in India", IEEE Software, March/April, Vol.18, No.2, 2001, pp. 78-86.
- Lee, J. and Y. Kim, "Effect of partnership quality on IS outsourcing success: conceptual framework and empirical validation", Journal of Management Information Systems Vol.15, No.4, 1999, pp. 29-61.
- Linder J. and S. Cantrell, "BPO big bang: Creating Value in an Expanding Universe", Accenture Institute for Strategic Change, August. www. Accenture.com, 2002.
- Makhija, M. and U. Ganesh, "The relationship between control and partner learning in learning-relate joint venture", Organization Science Vol.8, No.5, 1997, pp. 508-527.
- Mansfield, E. and A. Romeo, "Technology transfer to overseas subsidiaries by U.S.-based firms", The Quarterly Journal of Economics, Vol.95, No.4, 1980, pp. 737-750.
- May, R., S. Puffer, and D. McCarthy, "Transferring management knowledge to Russia: A culturally based approach", Academy of Management Executive, Vol.19, No.2, 2005, pp. 24-25.
- Masood, "The Limits of Offshore Outsourcing", Mortgage Banking, Vol.67, No.6, 2007, pp. 70-79.
- Nam, K., S. Rafagopalan, H. Raghav, and A. Chaudhury, "Information systems outsourcing", Communications of the ACM, Vol. 39, No.7, 1996.
- Ouchi, W., "A conceptual framework for the design of organizational control mechanisms", Management Science, Vol.23, No.9, 1979.
- Richmond, B. and A. Seidmann, "Software development outsourcing contract structure and business value", Journal of Management Information Systems, Vol.10, No.1, 1993, pp. 57-72.
- Richmond, B., A. Seidmann, and B. Whinston, "Incomplete contracting issues in information systems development outsourcing", Decision Support Systems, Vol.9, No.5, 1992.
- Sabherwal, R., "The role of trust in outsourced IS development project", Communications of the ACM, Vol.42, No.2, 1999, pp. 80-86.
- Sako, M.(1992) Productivity growth in Japan and the United States/ industrial harmony in modern Japan, Industrial Relations Journal Vol.23, No.1.
- Sinnett, W., "Global Sourcing For Global Markets", Financial Executive, Vol.22, No.3, April 2006, pp. 46-48.
- Sarker, S., S. Sarker, D. Nicholson, and K. Joshi, "Knowledge transfer in virtual systems development teams: an exploratory study of four key enablers", IEEE Transaction on Professional Communication, Vol.48, No.2, 2005, pp. 201-218.
- Shrivastava, P., "A typology of organizational learning systems", Journal of Management Studies, Vol.20, No.1, 1983, pp. 7-28.
- Smith, H. and P. Fingar, Making Business Processes Manageable, Internet World, Vol.8, No. 4, 2002.

- Sobrero, M. and S. Scharader, "Structuring inter-firm relationships: a meta-analytic approach", *Organization Studies*, Vol.19, No.4, 1998, pp. 585-615.
- Turner, K. and M. Makhija, "The role of organizational controls in managing knowledge", *Academy of Management Review*, Vol.31, No.1, 2006, pp. 197-217.
- Tushman, L. and D. Nadler, "Information processing as and integrating concept in organizational design", *Academy of Management Review*, Vol.3, No.3, 1978, pp. 613-624.
- UN, "United Nations e-Commerce and Development Report 2003, (New York and Geneva, USA and Switzerland, 2003)", United Nations Conference on Trade and Development, UNITED NATIONS, 2003.
- Williamson, E., "Transaction cost economics: the governance of contractual relations", *Journal of Law Economics*, Vol.22, No.2, 1979, pp. 233-261.
- Williamson, E., "Comparative economic organization: The analysis of discrete structural alternatives", *Administrative Science Quarterly*, Vol.35, No.2, 1991, pp. 269-296.
- Yin, R. *Case study research: design and methods*, Sage Publications, Inc., 1984.
- Zajac, E. and C. Olsen, "From transaction cost to transactional value analysis: implications for the study of interorganizational strategies", *Journal of Management Studies* Vol. 30, No.1, 1993, pp. 131-145.

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## Governance Structure for Knowledge Transfer in Global Business Process Outsourcing

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### Abstract

The structure chosen to govern knowledge transfer in Inter Organizational Relationship (IOR) is often argued to be critical to the success of IOR. However, little research is done on the effective governance structure for knowledge transfer in global Business Process Outsourcing (BPO). The objective of this study is to explore the effective governance structure for knowledge transfer in IT intensive global BPO. Ground theory building methodology is used for this study. First, a generic framework on governance structure for knowledge transfer is derived from extant literature. The framework consists of potentially important constructs to study the governance mechanism for knowledge transfer. For the governance mechanism, this study focused on hierarchy/market structure, formal/informal control mechanisms and information systems. For knowledge type, the study focuses on sensitive knowledge, codifiable knowledge and non codifiable knowledge. This framework is applied to case analyses of two firms to explore effective governance mechanism to transfer each type of knowledge. As results of this study, pertinent propositions for future academic inquiry are derived.

**Keywords:** *Case Study, global Business Process Outsourcing, Governance structure, Knowledge Transfer*

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이화여자대학교 컴퓨터학과를 졸업하고 Texas Tech University에서 경영정보학 석사와 박사를 취득하였다. 현재 이화여자대학교 경영대학 경영정보시스템 부교수로 재직 중이다. 주요 관심분야는 비즈니스 프로세스 관리 (Business Process Management)로서 현재 프로세스 아웃소싱과 관련된 조정 및 통제 메커니즘에 대한 연구를 수행 중이며 관련 분야에서 다수의 논문을 발표하였다. 한국경영정보학회와 한국시뮬레이션 학회 회원이다.

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