본사 자원과 메커니즘의 유사성과 격차가 합작투자기업의 학습효과에 미치는 영향

The Effect of Resource, Mechanism Relatedness and Gap on International Knowledge Transfer

조 형 기 서울과학종합대학원 교수 (hgcho@assist.ac.kr)

ABSTRACT

This research examines the effect of the relatedness and the gap between Resources and mechanisms on effectiveness of inter-organizational knowledge transfer. According to the literature, there has been a competing theory between two claims; one is that inter-organizational knowledge transfer will be more effective due to the reduction of the transaction cost as the relatedness increases. And the other is that the mutual complementarity of different organizational characteristics will increase synergy. In total, the relatedness and the gap of the Resource and mechanism makes the inverted U-shaped relationship with the inter-organizational knowledge transfer.

As the result of empirical analysis about 109 Korean-based Joint Ventures entered country, it shows that the relatedness of parent company's production Resources, learning mechanisms, and coordination mechanisms made the inverted U-shaped relations with the inter-organizational knowledge transfer and the gap of production Resources and adjustment mechanism formed the same relationship. However, the U-shaped relationship has been established in the relatedness of market Resources, but the gap of market Resources and the learning mechanism was not statistically significant.

Through this study, I can draw a best conclusion that the inter-organizational knowledge transfer will be more effective when the relatedness and the gap of management resources and mechanisms is in optimal level. However, when it comes to market Resources, it can be inferred that the result could be the opposite because the partner country's market environment would be different

Keywords: *Knowledge Transfer, Resource Relatedness, Mechanism*

I. Research Question

As a communication and information technology changes fast and globalization of market accelerates, the global learning became more important in the area of management studies. And it is becoming the explaining factor of international competitiveness of Multi-National Enterprises (Goshal, 1987; Kogut and Zander, 1992). According to the resource based views, the learning capability of firms is becoming critical resource of competitive advantage. Nonaka and Takeuchi(1995) emphasized that learning is the most important resource which firms have that determines firm's performance.

Man is accustomed to the experienced event,

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which means relatedness or similarity. To acquire knowledge effectively, I should identify the relatedness of facts. The relatedness divided by the measure, criterion, or distinguishing factor into relatedness and un-relatedness. After Wrigley(1970), Rumelt(1974) had suggested the product-market criterion of business, a lot of researchers suggested the relatedness criterion(Farjoun, 1998; Markides and Williamson, 1994; Stimpert and Duhaime, 1997; St. John and Harrison, 1999; St. John and Rue, 1991; Tanriverdi and Venkatraman, 2005 etc.), relatedness by resource based view becoming more and more explaining power. The reason is that firm diversifies accordingly not by the SIC(Standard Industry Classification) but by the strategic assets that they had accumulated for sustainable competitive advantage to their competitors.

Therefore, this research examines the effects of resource or mechanism relatedness and gap in the process of knowledge transfer between International Joint Venture based on a cross-sectional sample of 109 multinationals, and this study empirically investigates the simultaneous effects of relatedness or gap of resources by regression analysis. In contrast to past research that generally assumed a direct relation between these explanatory variables and knowledge transfer effectiveness, this study's findings highlight the inverted-U shaped relationship between resource and international learning effectiveness. And also mechanism relatedness and gap played critical role in explaining the knowledge transfer of international joint venture.

II. Theoretical Background

1. Knowledge Characteristics and Its Learning

As Knowledge includes multi-dimensional attributes there are a lot of difficulties for us to understand the exact meaning(Nonaka, 1994), it can be understood according to the characteristics of knowledge as explicit knowledge and tacit knowledge. Tacit knowledge which differs with the explicit knowledge means the experience, paradigm or know-how that are difficult to transfer to others.

In his empirical study of global strategic implementation(strategic alliance or joint venture), Simonin (1999) revealed that both knowledge-specific variables(i.e., tacitness and complexity) and partner-specific variables(i.e., prior experience, cultural differences, and organizational distance) impacted the process of knowledge transfer. He further established the critical role played by the construct knowledge ambiguity by showing that it fully mediates the effects of these variables on knowledge transfer. In his empirical study on the knowledge sharing and effectiveness.

Knowledge management system(KMS) become more important to achieve the competitiveness of firms. KMS will be affected by the knowledge circulation process and fitness of task characteristics(Lee and Chung, 2004), degree of globalization, diversity of management activity(Kim and Band, 2005). Knowledge management is a kind of process, and this stimulate the innovation, new product development, cost reduction and technology, therefore improves the KMS performance.

According to the previous theorists , the success

factors of inter-organizational learning are partner characteristics(Lane and Lubatkin,1998) such as absorptive capacity, KMS-the fitness of task characteristics(Lee and Chung, 2004), knowledge and partner-specific variables(Simonin, 1999), and so on.

2. Resource Relatedness

Resource-based perspective emphasizes the relatedness of the strategic resources or asset(Markides and Williamson, 1994; Robins and Wiersema, 1995), e.g., customer, channel, skill(Farjoun, 1998; Lemelin, 1982), human and physical capital resources, potential and actual resources(Nayyar, 1992). Traditional approach on relatedness focuses on the tangible characteristics of business, such as product, market, and technology or using the objective index like entropy or Herfindal index of SIC(Standard Industry Classification) count which assumes that if two business share the same SIC they must have common input requirements and similar production or technology functions.

According to Rumelt(1974, 1982), firms are classified into categories of diversification strategies based on an evaluation of similarities or judgment about the nature of relatedness across the business of the firm. This approach was based on the premise that the pattern of relatedness among business could be discerned by an external examination of the product-markets in which skill and knowledge of key elements of input, throughput and output.

Lemelin(1982) was among the first to underscore the importance of resource attributes as sources of relatedness. The resources that provide the basis for business relatedness have since then been viewed as part of continuum: from the unique and specialized assets, skill, and capabilities that give each of a firm's business a competitive advantage, to general management skills.

Porter(1991) classified resources as following categories. First, some firm attributes termed as resources are activities – such as sales forces or R&D organization. A second category of resources is skills, organizational routines, or other assets attached to particular activities or groups of interrelated activities. Underlying the ability to link activities or share them across business unites, for example, are organizational skills and routines that represent important assets. A final category of resources is external assets such as reputation and relationship. Among these first and second categories are similar to attributes of mechanism.

3. Mechanism Relatedness

A SER-M(subject, environment, resource - mechanism) perspective is a dynamic theory of strategy to explain the success of a firm in a more comprehensive way. In this perspective, the subject(s), environment(e), and resources(r) are integrated rather than independently examined. Firms try to understand the environment(e) and utilizes or creates necessary resources to prepare strategic a way to adapt to or to initiate environmental change(Cho & Lee, 1998). The SER-M perspective puts a premium on mechanism to find the essence of firm and the sources of competitive advantage. In general, this perspective views a firm as a bundle of mechanisms.

Regarding several types of mechanism belongs to institutional mechanism, what is more important is

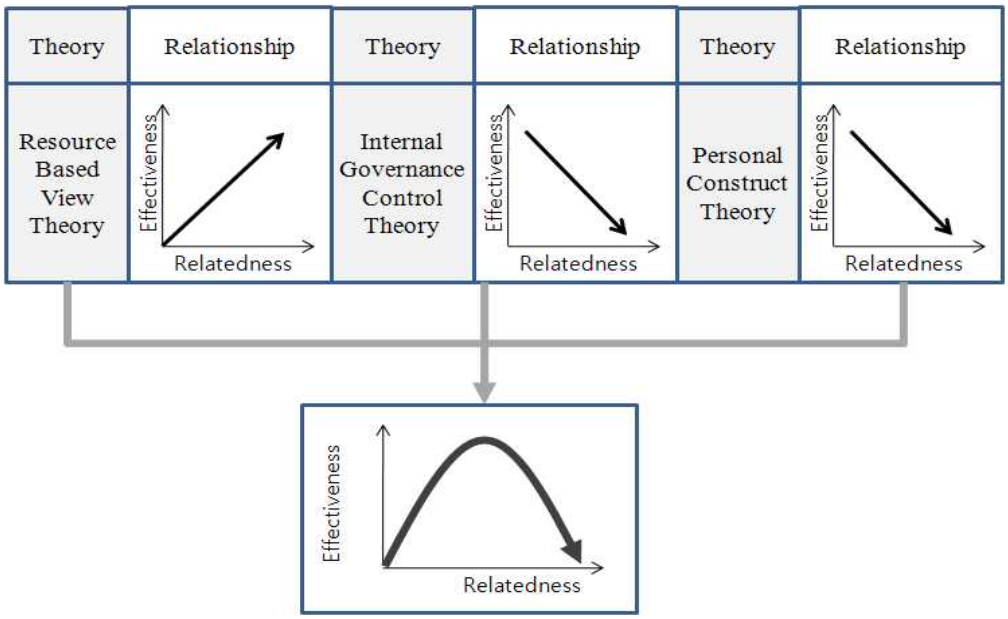
'process' by which each type evolves, not the specific type itself. This thesis shall define learning mechanism as the organizational process by which the members of a firm learn ways of various international operations for international growth.

St. John and Harrison(1999) identified manufacturing-based resource and activity similarities between industries as a way of capturing relatedness and synergy potential. They found that most high-performing, manufacturing-based firms did value synergy creation. Firms are aggressively pursued resource sharing and employed administrative mechanisms to achieve coordination. They suggested that organization capital such as planning, controlling, and coordination systems or mechanisms must be employed in synergy creation, instead of human and physical capital resources.

A study on learning mechanism is classified into the area of 1) knowledge transfer from Headquarters to joint venture, 2) knowledge sharing by joint venture and knowledge creation by learning, 3) knowledge transfer(or harvesting) from joint venture to headquarters, Inkpen(2000) suggested knowledge management process should be divided into three stages that first, the approach of the two headquarters on the knowledge, second knowledge sharing and integration, third the re-transfer of knowledge from joint venture to headquarters in strategic alliance with firms(Gupta and Govindarajan, 2000; Inkpen, 2000; Inkpen and Dinur, 1998; Lane and Lubatkin, 1998; Simonin, 1999).

4. Relatedness and its Competing Performance

Resource Based View theorists emphasize on



〔Figure 1〕 The relationship between Relatedness and Effectiveness

the fact that related firms outperform unrelated ones where accumulated assets are important(Markides and Williamson, 1994; Nayyar, 1992; Robins and Wiersema, 1995; Rumelt, 1974, 1982). For example Markides and Williamson(1994) proved that five types of strategic assets and that related firms outperform unrelated ones. Indicating the limitation of the SIC systems as an information sources, Robins and Wiersema(1995) empirically tested the explanatory power of resource-based relatedness, which emphasize on the strategic assets, such as capability, tacit knowledge and know-how and they found that corporations with more highly interrelated business portfolios outperform firms with lower levels of portfolio relatedness. Although the multi-business firm has advantages in knowledge creation for innovation, but cross-division transfer of the resource and capabilities would be more difficult to achieve it compared to in-division transfer(Kim, Bae and Huh, 2009)

However, according to the Internal Governance Control theory, the unrelated firms has relatively low level of information asymmetry compared to the that of capital market, corporate managers can use internal audits to negate information asymmetries. This theory supports the argument of the complementary benefits(Farjoun's, 1998; Krishnan, Miller and Judge, 1997) or assets. Also Personal Construct Theory perspective focuses attention on managers, their perceptions, and understandings, and their influence on decision making. Krishnan and Miller and Judge(1997) suggested the managers' complementarity which is defined as differences in functional background between the acquiring and acquired firm managers influenced the firms performance(Hambrick and Mason, 1984; Phersson, 2006; Stimpert and Duhaime, 1997).

Conclusionally, Resource Based View of Firm theorists and Subject Environment Resource-Mechanism theorists and Internal Governance Control theorists and Personal Construct Theorists or Top Management Team theorists are competing as shown in [Fig 1]. Although the relevance of the resources and mechanisms increase the learning effect in a certain level, but when the relevance exceeds 'the' certain level, the learning effects will fall due to a lack of new information, increasing the need for the coordination and the capacity gap between two organizations. This reasoning we can derive that the relationship between relatedness, gap with learning effectiveness has some optimal point.

Ⅲ. Hypothesis

1. Relatedness and Learning Effectiveness of Joint Venture

According to Resource Based View of Firms theorists, such as Nayyar(1992), Lemelin(1982), Markides and Williamson(1994), Robins and Wiersema(1995) suggested that related-diversified firms should make it use synergy effect by resource sharing and leverage core competence through the relatedness. They found that corporations with more highly interrelated business portfolios outperform firms with lower levels of portfolio relatedness.

Lemelin(1982) was among the first to underscore the importance of resource attributes as sources of relatedness. The resources that provide the basis for business relatedness have since then been

viewed as part of continuum: from the unique and specialized assets, skill and capabilities that give each of a firm's business a competitive advantage, to general management skills. Emphasizing on the strategic assets Markides and Williamson(1994) proved that five types of strategic assets -customer concentration/service requirement/channel dependence/product customization/the average skill leverage of the labor force- relatedness is superior to market relatedness and that related firms outperform unrelated ones only in market where accumulated assets are important.

Simonin(1999) suggested that absorptive capacity implies not only an ability to value and assimilate new external knowledge, but also an ability to commercially apply it to achieve organizational objectives. Cohen and Levinthal(1990) suggest that the degree to which the outside knowledge is targeted to the student firm's needs and concerns will influence the ease of learning and utilization. Another dimension is the relatedness of the two firms' knowledge processing, the 'know-how' portion of their knowledge bases. This dimension of processing can be referred to mechanism, which means that there should be the positive relationship between firm's mechanism relatedness and knowledge transfer effectiveness.

According to Resource Based View of Firm theorists and Subject Environment Resource-Mechanism theorists, as the relevance of the resources and mechanisms between two companies increase, sharing and understanding resources and mechanisms among the members are able to perform quickly and easily, and finally higher performance will occur by efficient knowledge transfer and knowledge sharing.

However, the reason of collaboration with other companies is not only for the purpose of knowledge transfer and knowledge sharing but for the risk averse of the unknown environment and the strategies through the acquisition of new information. In the later case, if the resources and information between headquarter and subsidiaries is very similar, the resources and capabilities rather than on the other side will lose interest and win-win benefits and managers' complementarity, which Internal Governance Control theorists and Personal Construct Theorists or Top Management Team theorists have claimed, does not occur. Therefore, if the mechanism and resources and knowledge between two companies are too similar, the learning effect of knowledge transfer and knowledge sharing will be lower.

By this reasoning, although the relevance of the resources and mechanisms increase the learning effect, when the relevance exceeds a certain level, the learning effects will fall due to a lack of new information and increasing the need for the creation of new knowledge. In other words, because of the similarity of resources and mechanisms, the hypothesis that learning effect in joint venture has an inverted U curve relationship can be derived.

H 1a Head Quarter's resource and mechanism relatedness between partners will have the inverted U-Shaped relationship with the learning effectiveness of Joint Venture

H 1b Head Quarter's resource and mechanism relatedness between partners will have the inverted U-Shaped relationship with the learning effectiveness of Joint Venture

2. Gap and Learning Effectiveness of Joint Venture

Also Nayyar(1992) concluded that gap between potential and actual relatedness may explain why diversification strategies often fail to achieve their stated objectives. He suggested that firms' difficulty to attain the potential benefits of relatedness is due to the kinds of implementation difficulties, and that greater attention ought to be directed toward examining ways in which firms to obtain greater benefits from relatedness.

According to the to communication theory, information flows from one side to the other side and when there is difference - when the balance is broken - the flow occurs. It means that knowledge transfer and knowledge sharing takes place. The balance appears in various forms, for example, the differences between two organizational value Recognition (Gupta and Govindarajan, 2000), knowledge absorption capacity (Cohen and Levinthal, 2000), learning mechanisms (Cho and Lee, 1998) and capabilities (Inkpen and Dinur, 1998).

Organizational learning is a systems-level concept that can become useful only when its component parts are thoroughly understood and brought down to an operation level. Unless individual knowledge is shared throughout the organization, the knowledge will have a limited impact on organizational effectiveness. Thus organizational knowledge creation by learning represents a process whereby the knowledge held by individuals is amplified and internalized as a part of an organization's knowledge base.

Gupta and Govindarajan(2000) applied the communication theory on knowledge transfer mechanism. They classified the knowledge transfer into 5 process, such as inflow, outflow, headquarters to subsidiaries, subsidiaries to subsidiaries. In their study among five variables, four variables-(1)value recognition on knowledge, (2)type of transmission channel, (3)motivation institution according to knowledge transfer, and (4)knowledge absorptive capacity-are empirically supported. Lane and Lubatkin(1998) examined the partner characteristics play in the success of inter-organizational learning and the relative relatedness of those characteristics -absorptive capacity, dyad construct and relative absorptive capacity- affect its parent-company's knowledge. Inkpen and Dinur(1998) found that the effectiveness of the various knowledge connection mechanisms depended on the tacitness of knowledge and organizational levels involved in the process. They proposed that knowledge connections differ in their ability to mobilize different types of knowledge.

Like the relatedness, as the 'GAP' between two organizations increases, both organizational learning and its effects begin to occur and grow up. However, if the gap of knowledge - related resources and the knowledge absorption mechanism exceeds a certain level, it causes an adverse effect on learning outcomes because knowledge transfer costs exceed the benefits of a learning effect. In other words, when it comes to the gap between resources and mechanisms, it can be derive the hypothesis that the learning effects between the joint ventures have an inverted U relationship.

H 2a Head Quarter's resource Gap between partners will have the inverted U-Shaped relationship with the learning effectiveness of Joint Venture

H 2b Head Quarter's mechanism Gap between partners will have the inverted U-Shaped relationship with the learning effectiveness of Joint Venture

Ⅳ. Model, Measurement, Data, and Method

1. Model and Measurement

To test the four research hypotheses, an estimation model is proposed as Eq.1 and Eq.2. The dependent variable LNEF is defined as the learning effectiveness resulted from the knowledge transfer(outflow and inflow) between parents and subsidiaries(Gupta and Govindarajan, 2000).

$$LNEF = \beta_0 + \beta_1(PRR) + \beta_2(PRR)^2 + \beta_3(MRR) + \beta_4(MRR)^2 + \beta_5(LMR) + \beta_6(LMR)^2 + \beta_7(CMR) + \beta_8(CMR)^2 + \beta_9 CLD + \beta_{10} EXP + \beta_{11} OWN + \beta_{12} SIZ + \varepsilon \quad \text{(Eq.1)}$$

〈Table 1〉 Description of variables

Variables	Description
LNEF	<Learning Effectiveness of Knowledge Transfer> - Reduction of Dependence/Application/Synergy/Competitiveness/Objective Achievement by the 7-Likert scale
PRR	<Production Resource Relatedness> -Production/R&D/Channel Relatedness between two companies by the 7-Likert scale
MRR	<Market Resource Relatedness> - Product/Market Relatedness between two companies by the 7-Likert scale
LMR	<Learning Mechanism Relatedness> - Manual/Formality/Training/Absorptive capacity/Evaluation/Compensation/Communication Relatedness between two companies by the 7-Likert scale
CMR	<Coordinating Mechanism Relatedness> - Competence/Management/Strategy Relatedness between two companies by the 7-Likert scale
PRG	<Production Resource Gap> - Product/Production/R&D Gap between two companies by the 7-Likert scale
MRG	<Marketing Resource Gap> - Customer/Market Gap between two companies by the 7-Likert scale
PMG	<Learning Mechanism Gap> - Management/Manual/Formality/Training/Absorptive Capacity Gap between two companies by the 7-Likert scale
LMG	<Coordination Mechanism Gap> - Evaluation/Compensation/Coordination Gap between two companies by the 7-Likert scale
CLD	<Cultual Difference> - 1 for the mother company's origin is America, EU or Middle East; 0 for Asia
EXP	<Experience> - The year of two companies' experienced(Joint Venture) period
OWN	<Ownership> - The share ratio of foreign partner company compared to domestic company
SIZ	<Firm Size> - Ln(Sales Volume/mil KRW)

$$LNEF = \beta_0 + \beta_1(PRG) + \beta_2(PRG)^2 + \beta_3(MRG) + \beta_4(MRG)^2 + \beta_5(LMG) + \beta_6(LMG)^2 + \beta_7(CMG) + \beta_8(CMG)^2 + \beta_9 CLD + \beta_{10} EXP + \beta_{11} OWN + \beta_{12} SIZ + \varepsilon \quad \text{(Eq.2)}$$

where PRR is the production resource relatedness; MRR is the market resource relatedness; LMR is the learning mechanism relatedness; CMR is the coordinating mechanism relatedness; CLD is the cultual difference between joint venture; EXP is the partnership experience; OWN is the share ratio of domestic partner company; SIZ is the firm size of sales volume; εis the error term representing the omitted variations; PRG is the production resource gap; MRG is the market resource gap; LMG is the learning mechanism gap; and CMG is the coordinating mechanism gap.

[Table 1] lists the description of the dependent and explanatory variables.

The degree of learning effectiveness(LNEF) is denoted by the 7-scale from the survey questionnaire results. To test the nonlinear relationship between LNEF and resource/mechansm relatedness/gap in Hypothesis, a quadratic form of PRR, MRR, LMR, CMR and PRG, MRG, LMG, CMG are also included in the model.

To prove the inverted U curve relationship between x and y variable in y=ax2+bx+c, the condition of coefficient 'a' should be lower than zero. Or in the equation y=a0+a1x+a2x*z+ε, we take partial derivative of y with respect to x, we have ∂y/∂x=a1+a2z. The prediction of the comparative static exercise is that a1>0, a2<0(Angelopoulous et al. 2008; Dutt and Mitra, 2002). This relationship is useful in the Environmental Kuznets Curve (EKC) hypothesis that pollution levels increase as a country develops, but begin to decrease as rising incomes pass beyond a turning point(Agras and Chapman, 1999; Canas, Ferrao, Conceicao, 2003; Suri and Chapman, 1998). In this study, I chose the former method to test the relationship between relatedness/gap and learning effectiveness.

〈Table 2〉 Sample Characteristics

[Industrial Composition]

Industry	# of JV
Chemical Engineering	22
Machinery	19
Wholesales & Retail	14
Electronics	12
Metals	11
Food & Beverage	9
Others	22
Total	**109**

[Sample Profile]

Profiles		Data
Partnership Period		12.4 Yr
Sales volume (2005)		914.7 KRW(*bil*)
# of Employee		1,025
Foreign Ownership		54.07%
Nation-ality	Japan	50(45.8%)
	EU	38(34.9%)
	North America	16(14.7%)
	Others	**5(4.6%)**

2. Data

The population for this study consists of large and medium-size Domestic Joint Venture of Korea. Selection criteria for compiling the sample-sales greater than 10 million Korean Won and a workforce of more than 100 employees-drew from available, published information in the KOTRA inward Foreign Direct Investment Directory. Based on the reported concentration of Joint Venture in specific industries, I also classified the share ratio above 20% among directory. This study targeted large and medium-size companies operating in high-technology sectors to avoid surveying small firms with a high likelihood of no international Joint Venture. Accordingly, a sample of 109 Korea located Joint Venture companies was drawn from the KOTRA inward Foreign Direct Investment Directory. The strategic nature of the survey's content, the focus on cross-corporate boundaries issues such as transfer of technological know-how, and the probing of past corporate experience with collaborations necessitated the choice of top executives.

The data consists of chemical engineering(22), machinery(19), wholesales and retail(14), electronics(12), metal(11), food & beverage industry (9), and others(22). Among 109 firms, 50 samples(46%) has country origin of Japan, 38 samples(35%) of EU, 16 samples(15%) of North America and 5 samples(4%) of other areas. At the time of the survey, the reported joint ventures have 12.4 year of partnership and average sales volume arrives to 914.7 billion Korean Won, and average employee number is 1,025. The ownership of foreign partner go through average 54.7% of stock ratio, which means that investing partners want to play the majority role in the span of control.

3. Method

3.1 Factor Analysis

Factor analysis is used to analyze the interrelationships among a large number of variables and then explain these variables in terms of their common underlying dimensions or factors(Hair, Anderson, and Tatham, 1987; Stimpert and Duhaime, 1997). Factor analysis was performed on the full set of 15 relatedness and gap items of resource and mechanism in order to identify patterns in managers' understandings. The questionnaire measure of relatedness and gap factors Ire rotated using the Varimax transformation. Because orthogonal transformations such as Varimax are generally viewed as easier to interpret and are the appropriate rotation techniques when factors will be used in subsequent statistical analyses.

3.2 Questionnaire Design

Like many other studies that have successfully utilized questionnaires to capture about important issues(Fombrun and Zajac, 1987; Hambrick, Geletkanycz and Fredrickson, 1993), this study adapted a mail and interview survey to acquire data. The format and content of the questionnaire were initially developed from a thorough literature review, and pretested using doctoral students, faculty, and business contacts familiar with the issue of inter-firm collaboration. In addition to general facts and descriptive information about the international joint venture under scrutiny, the questionnaire included specific questions related to

〈Table 3〉 Factor Analysis : Relatedness and Gap

Factor Analysis 1: Relatedness				
Variable	Learning Mechanism Relatedness	Production Resource Relatedness	Coordinating Mechanism Relatedness	Market Resource Relatedness
Product relatedness	0.280	0.108	-0.005	**0.863**
Market relatedness	-0.114	0.198	0.271	**0.832**
Production relatedness	0.354	**0.857**	0.099	0.122
R&D relatedness	0.333	**0.754**	0.158	0.048
Channel relatedness	0.025	**0.814**	0.258	0.259
Competence relatedness	0.033	0.326	**0.651**	0.353
Management relatedness	0.084	0.606	**0.651**	0.041
Strategy relatedness	0.310	0.302	**0.675**	0.041
Manual relatedness	**0.776**	-0.034	0.223	0.271
Formality relatedness	**0.758**	0.271	0.255	-0.042
Training relatedness	**0.683**	0.316	0.094	0.134
Absorptive capacity	**0.843**	0.312	-0.134	-0.174
Evaluation relatedness	**0.677**	0.138	0.203	0.112
Compensation relatedness	**0.724**	0.099	0.363	0.122
Communication relatedness	**0.634**	0.333	0.283	0.199
eigen-value	7.315	2.233	1.555	1.264
variance explained	43.03%	13.14%	9.15%	7.44%
cumulative variance	43.03%	56.17%	65.31%	72.75%

Factor Analysis 2: Gap				
Variable	Learning Mechanism Gap	Production resource Gap	Coordinating Mechanism Gap	Market resource Gap
Product gap	0.028	**0.917**	0.002	0.081
Customer gap	-0.012	0.550	-0.031	**0.770**
Market gap	-0.084	0.139	0.088	**0.890**
Production gap	0.027	**0.882**	0.154	0.263
R&D gap	0.309	**0.842**	0.055	-0.011
Competence gap	**0.718**	0.214	0.225	0.342
Management gap	**0.871**	-0.300	0.176	0.077
Manual gap	**0.902**	0.213	0.083	0.031
Formality gap	**0.788**	0.163	0.251	-0.094
Training gap	**0.712**	0.147	0.487	-0.230
Absorptive capacity gap	**0.669**	0.132	0.433	-0.289
Evaluation gap	0.421	0.066	**0.776**	0.192
Compensation gap	0.110	-0.110	**0.874**	0.046
Coordination gap	0.254	0.126	**0.850**	0.031
eigen-value	7.026	3.236	1.893	1.419
Variance explained	41.33%	19.04%	11.14%	8.35%
Cumulative variance	41.33%	60.37%	71.50%	79.85%

Factor extracting method : Main ingredient method
Rotation method: Standardized Kaiser Varimax Transformation
a. 13 Factor rotation is convergence in repeated calculation

the partner, the collaborative objectives of each party, the degree of collaborative experience, and issues of knowledge transfer pertaining to technology or process knowhow. Most of the items

in the questionnaire followed 7-point Likert-type scales. All measures Ire assessed via a 7-point interval scale ranging from 'strongly disagree' to 'strongly agree.'

4. Measurement

Learning Effectiveness: In their headquarters-subsidiary knowledge flow study, Gupta and Govindarajan(2000) distinguished the knowledge flow into two categories such as outflow and inflow of parents and subsidiaries. They measures the knowledge flow the procedural types of knowledge, and developed seven items as follows: i.e., marketing know-how, process design, etc,. Lee(2002) developed global learning effectiveness based on the Porter's(1986) seven primary activities Porter(1985), also he measured the effectiveness into two concepts, that is the diversity of global learning scope and the intensiveness of learning. In this study, I will focus on the effectiveness of global learning by building the questionnaire.

resource relatedness: Stimpert and Duhaime(1997) measured the resource relatedness four factor groups, such as, Product-Market relatedness, Differentiation relatedness, Financial relatedness and Commodity relatedness, using 27 item questionnaire. Nayyar(1992) developed the questionnaire emphasized on the degree of sharing resources at each business unit. He used 10 item questionnaire-management know-how, fixed-asset, marketing skill, R&D capability, central training center, coordinating capability, culture, cash flow, HR resources, the sales ratio.

Mechanism Relatedness: Cohen and Levinthal(1990) defined the term 'absorptive

〈Table 4〉 Reliability Result(Cronbach's α) of Factor

Variable	Cronbach's α (No. of question)	mean	S.D.	Min	Max
Learning Effectiveness	0.935(8)	4.791	·0.661	4.422	5.083
Learning Mechanism Relatedness	0.887(7)	4.295	0.505	3.991	4.495
Production resource Relatedness	0.865(4)	4.394	1.231	3.885	5.115
Market resource Relatedness	0.814(4)	4.106	0.798	3.884	4.642
Coordinating Mechanism Relatedness	0.770(2)	4.991	1.321	4.330	5.651
Learning Mechanism Gap	0.910(6)	3.894	0.303	3.734	4.037
Production resource Gap	0.901(3)	4.092	0.183	4.000	4.183
Coordinating Mechanism Gap	0.862(3)	4.080	0.083	4.037	4.119
Market resource Gap	0.882(2)	4.899	0.349	4.725	5.073

capacity' as a firm's general ability to value, assimilate, and commercialize new, external knowledge. Nichollis-Nixon(1993) measured pharmaceutical firms' absorptive capacity three ways: the number of biotechnology patent the firm held, the number of new products it had on the market development, and its reputation for expertise in the human healthier applications of biotechnology. In terms of knowledge processing relatedness, Lane and Lubatkin(1998) measured each firm's structure the formalization of management practice and the extent to which decisions are centralized(17 questionnaire 7-Likert-type scale). They also adopted the Gomez-Mejia's(1992) basis of pay scale to differentiate between the use of algorithmic and experiential compensation(10 questionnaire 7-Likert-type scale).

Cultural Difference: In international strategic alliances, cultural differences produce additional difficulties and challenges for managers, who must allocate more time on communication, design of compatible work routines, and development of common managerial approaches(Olk, 1997). Cultural distance or asymmetry not only creates difficulties for identifying market opportunities and figuring out market mechanisms, it also raises barriers for communicating with partners and for understanding the nature of their competitive advantage. At the heart of these difficulties, language proficiency and alignment between partners dictate the boundaries of communication and knowledge flows.

Partnership Experience: Experience at collaborating is essential to manage a diverse portfolio of collaborative ties as well as to accumulate the capability to benefit from the resulting interdependencies. In fact, ignorance and lack of collaborative experience are often blamed as the main source of alliance problems and failures. Furthermore, as empirically shown by Simonin(1997), past experience leads to the emergence of a distinct form of collaborative know-how that helps achieve greater benefits in subsequent alliances.

Ⅴ. Results

1. Results of the Factor Analysis

Factor analysis of the 15 relatedness items suggested a four-factor solution. While the fifth factor did not meet the 'eigen-value ≥ 1' guideline suggested by Gorsuch(1983), a scree plot indicated that the fifth factor should be included(Hair et al., 1987). But in this study, I excluded the fifth factor, because the explaining value is very low. This fourth factor explained an additional 7.44 percent of the variance, and total variance explained by the four factors was 75.46 percent. The rotated relatedness factor matrix is shown in [Table 3] Variables with factor loadings greater than 0.600 or less than -0.600 are highlighted in bold print.

Another factor analysis is conducted. The factor analysis of the 14 Gap items suggested a four-factor solution. While the fifth factor did not meet the 'eigen-value ≥ 1' guideline suggested by Gorsuch(1983), a scree plot indicated that the fourth factor should be included(Hair et al., 1987). This fourth factor explained an additional 8.35 percent of the variance, and total variance explained by the four factors was 79.85 percent. The rotated relatedness factor matrix is shown in lower part of [Table 3]. Variables with factor

loadings are applied the same method with the above procedure.

[Table 4] shows the variable reliability result. I evaluated the multiple-item measures with conventional psychometric evaluations. Reliability and factor analyses assessed internal consistency. For example, Cronbach's alphas of 0.887 for relatedness, 0.910 for gap far exceeded the minimum benchmark of 0.70 specified by Nunnally(1978). For each measure, factor analysis results strongly indicated unidimensionality.

Means, standard deviations, and correlations among 9 variables are summarized in [Table 5]. From Learning Mechanism Relatedness to 5 are subject to ' resource and mechanism relatedness' and 6 to 9 are 'resource and mechanism gap'.

2. Results from the Regression Analysis

[Table 6] shows the results of regression analysis. Here, I examined the relationship between

〈Table 5〉 The Results of Correlation Analysis

	Mean	S.D	1	2	3	4	5	6	7	8	9	10	11	12
1.Effectiveness	4.791	1.146												
2.Learning Mechanism Relatedness	4.295	0.827	0.600*											
3.Production resource Relatedness	4.376	1.130	0.766*	0.561*										
4.Market resource Relatedness	4.106	0.834	0.573*	0.555*	0.697*									
5.Coordinating Mechanism Relatedness	4.991	1.243	0.263*	0.203*	0.360*	0.429*								
6.Learning Mechanism Gap	3.894	0.881	0.162	0.226*	0.250*	0.591*	0.477*							
7.Production resource Gap	4.092	1.174	0.647*	0.554*	0.773*	0.526*	0.028	0.233*						
8.Coordinating Mechanism Gap	4.080	0.865	0.134	0.041	0.197*	0.484*	0.372*	0.588*	0.168					
9.Market resource Gap	4.654	1.281	0.260*	0.598*	0.315*	0.261*	0.049	0.139	0.312*	0.214*				
10.Experience	12.491	9.346	0.040	-0.006	-0.051	-0.113	0.164	-0.032	-0.127	-0.008	0.008			
11.Ownership	0.547	0.324	-0.029	-0.030	-0.056	-0.053	0.053	-0.123	-0.037	-0.092	0.000	-0.070		
12.Cultural Difference	0.393	0.344	-0.022	-0.040	0.139	0.078	0.081	0.187	0.125	0.031	-0.051	-0.060 *	-0.361	
13.Firm Size	11.884	1.883	0.014	0.021	0.090	-0.078	-0.031	-0.008	0.198*	-0.064	-0.042	-0.125	-0.046	0.065

* Correlation is significant at the 0.05 level(2-tailed)
** Correlation is significant at the 0.01 level(2-tailed)

〈Table 6〉 Regression Result with Relatedness

	MODEL 1	MODEL 2	MODEL 3
Constant	4.423** (8.85)	0.679 (1.21)	2.355 (1.49)
cultural difference	-0.035 (-0.16)	0.232 (1.59)	0.179 (1.48)
Experience	0.875** (3.32)	-0.001 (-0.01)	-0.533** (-2.90)
Ownership	-0.198 (-0.91)	-0.055 (-0.38)	-0.088 (-0.72)
Firm Size	0.143 (1.41)	-0.041 (-0.59)	-0.099 (-1.69)
Production resource Relatedness		0.673** (7.10)	2.239** (5.11)
(Production resource Relatedness)^2			-0.187** (-3.15)
Market resource Relatedness		-0.014 (-0.10)	-6.399** (-6.30)
(Market resource Relatedness)^2			0.737** (6.35)
Learning Mechanism Relatedness		0.327** (3.07)	3.253** (5.74)
(Learning Mechanism Relatedness)^2			-0.376** (-5.05)
Coordinating Mechanism Relatedness		-0.017 (-0.28)	1.374** (3.02)
(Coordinating Mechanism Relatedness)^2			-0.126** (-2.58)
F	3.276	22.340	26.271
R^2	0.112	0.641	0.767
Adj R^2	0.078	0.613	0.737

the resource and mechanism characteristics and the learning effectiveness of international joint venture-that is inter-organization, controlling the partnership period, cultural differences, ownership structure and firm(Joint Venture) size. The dependent variable, represents the learning effectiveness. Model 1, which consists of four control variables, cultural difference, partnership experience, ownership structure and firm size, explained 7.8 percent of the relationship with the Learning Effectiveness. The explaining power, however, dramatically increased from 7.8 percent to 61.3 percentage(⊿R2 = .535).

Hypothesis 1a and 1b, I predicted that resource relatedness and mechanism relatedness between partners will have the inverted U-Shaped relationship with the learning effectiveness of Joint Venture and is partially supported.

According to Model 2 in [Table 6], the Production resource Relatedness(coefficient .673, t-value 7.10, p<0.01) and Learning Mechanism Relatedness(coefficient .327, t-value 3.07, p<0.01) have positive relationship with the inter-organizational Learning Effectiveness. But Market resource Relatedness and Coordination Mechanism Relatedness have no significant

relationship with dependent variable. This result supports the Resource Based View of Firm theory and Internal Governance Control Theory perspective.

From Model 3, Production resource Relatedness(coefficient 2.239, t-value 5.11, p<0.01) has strong positive relationship with the Learning Effectiveness. The square value of Production resource Relatedness(coefficient -0.187, t-value 3.75, p<0.01) has negative relationship with the dependent variable, as I predicted in H 1a. Which means that Production resource Relatedness has inverted U-shaped relationship with the Learning Effectiveness in significant level. But Market resource Relatedness(coefficient -6.399, t-value 6.30, p<0.01) has negative relationship with the Learning Effectiveness. The square value of Production resource Relatedness(coefficient 0.737, t-value 6.35, p<0.01) has positive relationship with the dependent variable, which means that Production resource Relatedness has U-shaped relationship with the Learning Effectiveness in significant level. In sum, the Hypothesis 1a is partially supported.

〈Table 7〉 Regression Result of Gap

	MODEL 1	MODEL 4	MODEL 5
Constant	4.423** (8.85)	2.430** (3.85)	-3.368 (-1.80)
cultural difference	-0.035 (-0.16)	0.148 (0.88)	0.258 (1.56)
Experience	0.875** (3.32)	0.753** (3.48)	0.519* (2.13)
Ownership	-0.198 (-0.91)	-0.286 (-1.73)	-0.219 (-1.35)
Firm Size	0.143 (1.41)	-0.017 (-0.20)	-0.047 (-0.59)
Production resource Gap		0.615** (7.97)	1.595** (4.26)
(Production resource Gap)^2			-0.148** (-2.68)
Market resource Gap		0.061 (0.90)	0.523 (0.90)
(Market resource Gap)^2			-0.056 (-0.87)
Learning Mechanism Gap		0.122 (1.01)	-0.148 (-0.17)
(Learning Mechanism Gap)^2			0.054 (0.44)
Coordinating Mechanism Gap		-0.162** (-1.26**)	1.832* (2.19)
(Coordinating Mechanism Gap)^2			-0.249* (-2.42)
F	3.276	13.437	11.102
R^2	0.112	0.518	0.581
Adj R^2	0.078	0.480	0.529

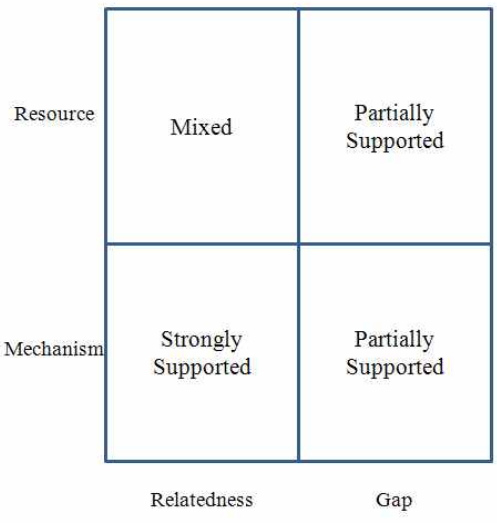
According to the Model 3, Learning Mechanism

Relatedness(coefficient 3.253, t-value 5.74, p<0.01) has positive relationship with the learning effectiveness, and the square value of Learning Mechanism Relatedness has negative relationship(coefficient -0.376, t-value -5.05, p<0.01), which means that Learning Mechanism Relatedness has inverted U-shaped relationship with the Learning Effectiveness in significant level. Coordinating Mechanism Relatedness(coefficient 1.374, t-value 3.02, p<0.01) has positive relationship with the learning effectiveness, and the square value of Learning Mechanism Relatedness has negative relationship(coefficient -0.126, t-value -2.58, p<0.01), which means that Learning Mechanism Relatedness has inverted U-shaped relationship with the Learning Effectiveness in significant level as I predicted in H 1b.

And Hypothesis 2a and 2b, the resource gap and mechanism gap will have the inverted U-Shaped relationship with the learning effectiveness of joint venture and is partially supported. From Model 4 in [Table 7], Production resource Gap(coefficient .615, t-value 7.97, p<0.01) has positive relationship with inter-organizational Learning Effectiveness. This result supports the Personal Construct theory. But, Coordinating Mechanism Gap(coefficient -.162, t-value -1.26, p<0.01) has negative relationship with dependent variable in a significant level. This result supports the Resource Based View of Firm theory and Internal Governance Control Theory perspective.

And in the Model 5, Production resource Gap(coefficient 1.595, t-value 4.26, p<0.01) has positive relationship and square value of Production resource Gap(coefficient -.148, t-value -2.68, p<0.01) has negative relationship with the inter-organizational Learning Effectiveness, which supports the Hypothesis 2a of resource Gap being inverted-U shaped. But Market resource Gap does not have any relationship with dependent variable in a significant level.

According to the Model 5, Coordination



	Variables	Result
1a	Production Resource Relatedness	
	Market Resource Relatedness	
1b	Learning Mechanism Relatedness	
	Coordinating Mechanism Relatedness	
2a	Production Resource Gap	
	Market Resource Gap	not significant
2b	Learning Mechanism Gap	not significant
	Coordinating Mechanism Gap	

〔Figure 2〕 The Summary of Results

Mechanism Gap(coefficient 1.832, t-value 2.19, $p<0.01$) has positive relationship with the learning effectiveness, and the square value of Coordination Mechanism Relatedness has negative relationship(coefficient -0.249, t-value -2.42, $p<0.01$), which means that Coordinating Mechanism Relatedness has inverted U-shaped relationship with the Learning Effectiveness in significant level. Which means that Coordinating Mechanism Relatedness has inverted U-shaped relationship with the Learning Effectiveness in significant level as I predicted in H 1b. But Learning Mechanism Relatedness has no significant relationship with dependent variable, so this result means that the Hypothesis 2b is partially supported.

Ⅵ. Conclusion and Further Research

Relatedness, when managed properly, should result in tangible and intangible synergies that make the corporate strategy more than the sum of the individual business unit strategies(Kanter, 1989; Porter, 1985). The aim of this study was to advance my understanding of the process of knowledge transfer in international joint venture. It revealed that both resource and mechanism characteristics and partner-specific variables as control variables(i.e., cultural difference, partnership experience) impacted this process.

As I mentioned, dependent variable is oriented the knowledge on the area of improving firm's especially joint venture's competitiveness such as competence, objective achievement, and reducing dependency, etc. First, the results shows that Production resource Relatedness has invert U-shaped relationship with the learning effectiveness by knowledge transfer. As Stimpert and Duhaime(1997) concluded that resource relatedness is a multidimensional product-market, differentiation(value chain), resource-construct, although they did not explicit separate the types. The result of this study matches with resource based theorist such as Robins and Wiersema(1995), Stimpert and Duhaime(1997), St. John and Harrison(1999). One of the most important findings of this study is that the resource relatedness of headquarter of joint venture have some optimal degree of range. If the relatedness of two firms go beyond the optimal point, the firms are de-motivated due to their same knowledge scheme structure in Joint Venture context. Therefore managers of each firm should find out the optimal degree of resource relatedness especially in production related resources and learning, coordinating mechanism to improve their competitiveness by knowledge transfer.

The management, however, resulted in opposite relationship as expectation, that is the relationship market resource relatedness. I interpret that final stage of market resource relatedness have positive relationship, that is U-shaped with the learning effectiveness of knowledge transfer. It means that in joint venture context, Head Quarter managers should cooperate with the local managers, because they do not know well the local market. Therefore managers in Multi National Enterprises had better take regard to choose partner with similar level in production and highly different level of market resources to make maximize the effective learning in implementing strategic alliance or joint venture.

The empirical result also represents that gap in production resources also has optimal range of effective knowledge transferring by learning. And

gap in product and market didn't represent the relationship or the optimal range of knowledge transferring.

Second, since there is a considerable research literature on the use of administrative mechanisms for achieving commitment and coordinated action in the implementation of strategies(Cho & Lee, 1999; Gupta and Govindarajan, 1991). The general theory of coordination that is emerging in the research literature suggests that environmental conditions and the firm's own strategy-structure choices determine the complexity of the coordination task. The chosen system of coordinating mechanisms should then reflect that complexity. Coordinating systems generally employ a combination of top-down controls, formal bureaucratic controls, structural changes to achieve interaction, and socialization methods to create a common culture and shared vision. The result can be summarized that learning and coordinating mechanism relatedness have inverted U-shaped relationship with the learning effectiveness in joint venture, which represents that firms with similar mechanism base especially in learning or coordinating have optimal range of mechanism relatedness in joint venture context. If the firm has little mechanism relatedness or too much mechanism relatedness, it could be ineffective in transferring knowledge for improving its competitiveness or functional strength. Therefore managers in Multi National Enterprises should recognize that there be the optimal point of mechanism relatedness of headquarter firms in starting strategic alliance or making up joint ventures.

Also coordinating mechanism gap have inverted U-shaped relationship with the learning effectiveness, which represents that firms with mechanism gap has optimal range in joint venture context. If the firm has little mechanism gap or too much mechanism of it, it could be ineffective in transferring knowledge for improving its competitiveness or functional strength. Therefore managers in multi national enterprises should recognize that there also be the optimal point of mechanism gap or gap of headquarter firms in starting strategic alliance or making up joint ventures. Learning mechanism gap resulted the inverted U-shaped relationship with the learning effectiveness of inter-organizations, however it has no significant level of result.

Although conventional economic and strategy theories suggest that relatedness should provide opportunities for synergies, but they had lack of dominant logic of management, which I named 'mechanism-based view' of firms. Also my study have some contributions that inter-firm gap as well as relatedness is quite important factor in explaining learning effectiveness by knowledge transfer of organizations. Development of synergies across related business units is the key to development of a corporate-level manufacturing-based distinctive competence. These and related topics should provide fruitful avenues for future research. And more strict methodology are applied in future research, too.

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첨부 : 국제합작 투자기업의 학습 효과 연구 설문

안녕하십니까?

서울대학교 국제경영 연구센터입니다.

본 설문은 국제합작 투자기업 간 자원 및 학습 메커니즘 동질성이 합작투자 회사의 학습효과성에 미치는 영향에 대한 분석입니다.

글로벌 환경하에서의 상생을 위한 지식경영은 그 중요성이 점증하고 있으며, 학문적으로 많은 연구 분야입니다.

귀하의 소중한 응답이 국내합작 투자기업의 발전을 위한 중요한 기초자료로 분석 및 활용되므로 바쁘시더라도 성의 있는 답변 부탁드리겠습니다.

감사합니다.

서울대학교 국제경영연구 센터

책임연구원 조형기

기업(ab) 일반 사항

1. 귀사(ab)의 매출액은 어느 규모입니까?
2. 귀사(ab)의 정규직 종업원은 몇 명입니까?
3. 귀사(ab)와 합작투자한 모기업(B)의 국적은 어디입니까?
4. 귀사(ab)는 합작 연수가 얼마나 됩니까?
5. 귀사(ab)의 외국(법)인 지분은 몇 %입니까?

학 습 효과성

		전혀 아니다		←	보통 이다	→		매우 그렇다
1.	합작 투자를 통해 파트너사(B)로부터의 지식 의존성이 감소했다.	1	2	3	4	5	6	7
2.	합작 투자를 통해 획득한 지식을 회사(ab)에서 많이 활용하고 있다.	1	2	3	4	5	6	7
3.	파트너사(B)통해 획득한 지식은 기존 자사 모기업(A)지식과 시너지를 창출하고 있다.	1	2	3	4	5	6	7
4.	합작투자 경험을 통해 회사(ab)의 학습역량이 높아졌다.	1	2	3	4	5	6	7
5.	합작투자를 통해 획득한 지식은 회사(ab)의경쟁력을 한층 제고시키는 계기가 되었다.	1	2	3	4	5	6	7
6.	합작투자를 통해 획득한 지식은 회사(ab)의전반적 합작 목표달성에 기여하였다.	1	2	3	4	5	6	7

모기업 A, B의 자원 관련성(Relatedness)과 수준 차이(Gap)								
1-1.	모기업(A,B)간 생산하는 주력 제품의 관련성이 높다고 보십니까?	1	2	3	4	5	6	7
1-2.	모기업(A,B)간 생산하는 주력 제품의 수준 차이는 크다고 보십니까?	1	2	3	4	5	6	7
2-1.	모기업(A,B)간 주요 고객(Client)은 상호 유사성이 높다고 보십니까?	1	2	3	4	5	6	7
2-2.	모기업(A,B)간 주요 고객(Client)의 매출 규모차이는 얼마입니까? 1)1.2배 2)1.5배 3)2.0배 4)3.0배5)5.0배 6)10.0배 7)10.1배 이상	1	2	3	4	5	6	7
3-1.	모기업(A,B)간 활동하는 주력시장이 서로 비슷하다고 생각하십니까?	1	2	3	4	5	6	7
3-2.	모기업(A,B)간 주력시장의 규모는 차이가 큽니까? 1)1.2배 2)1.5배 3)2.0배 4)3.0배5)5.0배 6)10.0배 7)10.1배 이상	1	2	3	4	5	6	7
4-1.	모기업(A,B)간 제조라인의 유사성이 높다고 생각하십니까?	1	2	3	4	5	6	7
4-2.	모기업(A,B)간 제조라인의 수준차이는 크다고 생각합니까?	1	2	3	4	5	6	7
5-1.	모기업(A,B)간 기술(R&D)의 관련성은 높다고 생각하십니까?	1	2	3	4	5	6	7
5-2.	모기업(A,B)간 기술(R&D)의 수준차이는 크다고 생각하십니까?	1	2	3	4	5	6	7
6-1.	모기업(A,B)간 영위하고 있는 유통구조는 비슷합니까?	1	2	3	4	5	6	7
6-2.	모기업(A,B)간 영위하고 있는 유통구조의 수준차이는 크다고 생각하십니까?	1	2	3	4	5	6	7
7-1.	모기업(A,B)간 핵심역량은 유사하고 생각하십니까?	1	2	3	4	5	6	7
7-2.	모기업(A,B)간 핵심역량의 수준차이는 크다고 생각하십니까?	1	2	3	4	5	6	7
8-1.	모기업(A,B)간 경영관리기법은 유사하다고 보십니까?	1	2	3	4	5	6	7
8-2.	모기업(A,B)간 경영관리기법의 수준차이는 크다고 보십니까?	1	2	3	4	5	6	7
9-1.	모기업(A,B)간 전략은 유사하다고 보십니까?	1	2	3	4	5	6	7
9-2.	모기업(A,B)간 전략수립 수준 차이는 크다고 보십니까?	1	2	3	4	5	6	7

모기업 A, B 간 학습 메커니즘 유사성(Commonality)과 수준 차이(Gap)

1-1. 다음은 학습 메커니즘 요소에 대한 모기업(A,B)간 유사성은 매우 높다고 생각하십니까?

1) 모기업(A,B)간 매뉴얼 유사성	1	2	3	4	5	6	7
2) 모기업(A,B)간 문서나 보고서 유사성	1	2	3	4	5	6	7
3) 모기업(A,B)간 교육훈련 프로그램 유사성	1	2	3	4	5	6	7
4) 모기업(A,B)간 인적 학습 역량 유사성	1	2	3	4	5	6	7
5) 모기업(A,B)간 평가 메커니즘 유사성	1	2	3	4	5	6	7
6) 모기업(A,B)간 보상 메커니즘 유사성	1	2	3	4	5	6	7
7) 모기업(A,B)간 커뮤니케이션 채널 유사성	1	2	3	4	5	6	7
8) 모기업(A,B)간 업무 조정 메커니즘의 유사성	1	2	3	4	5	6	7

1-2. 다음 학습 매커니즘 요소에 대한 모기업(A,B)간 수준차이는 크다고 할 수 있습니까?

1) 모기업(A,B)간 업무 매뉴얼 수준	1	2	3	4	5	6	7
2) 모기업(A,B)간 문서나 보고서 수준	1	2	3	4	5	6	7
3) 모기업(A,B)간 교육훈련 프로그램 수준	1	2	3	4	5	6	7
4) 모기업(A,B)간 인적 학습 역량 수준	1	2	3	4	5	6	7
5) 모기업(A,B)간 평가 시스템 수준	1	2	3	4	5	6	7
6) 모기업(A,B)간 보상 프로그램 수준	1	2	3	4	5	6	7
7) 모기업(A,B)간 커뮤니케이션 채널 수준	1	2	3	4	5	6	7
8) 모기업(A,B)간 업무 조정 메커니즘 수준	1	2	3	4	5	6	7

대단히 감사합니다

저 자 소 개

조 형 기 (Cho Hyung Gi)

서울대학교 대학원 경영학과에서 국제경영 전공으로 박사학위를 취득하고, 현재 서울과학종합대학원 전임강사로 재직 중이다. 주요 연구관심분야는 다각화 전략, 국제경쟁전략, 지속경영전략, 리더십, 전략적 인적자원관리 등이다. 그의 논문은 국제경영, 경영전략, 리더십, 위기관리, 지식이전 분야며, 전문경영인연구, 생산성논집, 지속경영연구, 기업사례연구 등에 발표되었다.