

## A Study of the Impact of Knowledge Sharing and Utilization on the Characteristics and Joint Performance of the Participants in an International Joint Ventures

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### [Abstract]

The study is to investigate the impact of the knowledge sharing and utilization among the participants in international joint ventures on the characteristics and the joint venment performance of the participants. The specific areas of the investigation for significant impacts of knowledge sharing & utilization by international joint ventures are contract compliance, motivation & willingness for business participation, management autonomy, organizational culture and the joint performances, and the characteristics that are unique to the participants in international joint ventures are empirically investigated as well. The findings of the empirical analysis are as follows: knowledge sharing & utilization has positive impacts on the areas of contract compliance, management autonomy, motivation & willingness for business participation and organizational culture, and, in return, the areas of contract compliance, managerial autonomy, and motivation & willingness for business participation appeared to have positive effects on their joint venture performances.

▶ **Key words:** International Joint Venture, Knowledge Sharing and Utilization, Contract compliance, Organizational Culture, Joint Venture Performance

### [요 약]

본 연구는 국제합작사업 기업들을 대상으로 합작사업 참여기업 간 지식공유 및 활용이 참여자 간 특성과 합작 성과에 어떠한 영향을 주는지를 살펴보고자 하였다. 본 연구에서는 국제합작사업의 지식공유 및 활용이 국제합작사업 참여기업 간 특성인 참여기업 간 계약준수, 사업 참여 동기 및 의지, 경영 자율성, 조직문화들과 합작성과에 어떠한 유의한 영향을 미치며 또한, 국제합작사업 기업들만이 가지는 특징을 실증분석을 통하여 알아보하고자 하였다. 실증분석결과 지식공유 및 활용은 계약준수, 경영자율성, 사업 참여 동기 및 의지, 조직문화에 긍정적인 영향을 주며, 계약준수, 경영자율성, 사업 참여 동기 및 의지는 합작성과에 긍정적인 영향을 미치는 것으로 나타났다.

▶ **주제어:** 국제합작투자, 지식공유 및 활용, 계약준수, 합작성과, 조직문화

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## I. Introduction

International joint venture is one of the most significant strategies of companies for their growth and competitiveness and the objectives of international joint ventures vary, but most prominent examples of such objectives can be an increase in market share, improvement of managerial efficiency, access to new resources and capacities, and entering into overseas markets etc[1]. Whatever the objective would be, it is recognized that international joint ventures contribute to the competitive advantage of the participating companies.

Especially in today's knowledge-based industries, it can be said that knowledge sharing and utilization is a critical factor for the competitiveness of the companies[2]. But there are also negative factors which are regarded as hindrances to the success of international joint ventures, such as the conflicts of interests and objectives of the participating companies, cultural discord, and the fact that controlling such things is very difficult[3].

It is, therefore, strategically important to the success of international joint ventures to share and utilize the corporate resources of knowledge, based on mutual trust between the participating companies. According to the new study of the theory of knowledge-based strategies of [4], knowledge-based perspective of corporations traditionally developed from resource perspective and the various levels of success of the companies can be explained with such collaborations.

In this regard, it is emphasized that the most critical strategic resource is knowledge[5]. And from this knowledge-based perspective, creativity of knowledge of organizations is source of corporate competitiveness[6].

In this study, the analysis focuses on the causal relationship between knowledge sharing and utilization of the participating companies, and their respect of the mutual contract, motivation and

willingness for participation, managerial autonomy, organizational culture and the success of international joint ventures.

## II. Theoretical Background

It seems that the concept of knowledge sharing is not clearly specified among the investigators. And this is because the investigators are thought to focus more on specific activities and the processes rather than on the definition of the concept itself.

According to their definition of knowledge sharing, the investigators are deemed to consider knowledge sharing as one of their effective efforts to develop innovation potential of their employees.

[7] said of the definition of knowledge sharing in 'the study of the impact of knowledge sharing on individual innovation potential' that most important thing in knowledge management is how to support individuals to share their knowledge in their organizations, and a necessary condition for organizational performance is to support the spread, implementation and development of knowledge sharing, thereby facilitating the spread, implementation and development of activity knowledge, and thereby knowledge sharing eventually leads to new knowledge creation for the corporation by inducing individuals to think critically and creatively. And this is confirmed with empirical analyses that knowledge sharing has positive effects on innovation potential of individuals.

Contractual responsibilities of participating corporations in international joint ventures are written agreements and the implementation of the agreements is important in fostering trust among the participants. And there are plenty of studies that empirically show that the contractual responsibilities and their execution have important effects on their mutual trust and satisfaction and further more on the long term relationship of the participants. Corporate managerial autonomy in the

study means corporate ability to implement managerial activities independently [8].

According to [9] in ‘the study of critical factors that decide the performance of the technology transfer by multinational corporations for their subsidiaries’, managerial autonomy of subsidiaries appeared to have positive effects on their mutual trust and collaborations and successful technology transfer between the headquarters and its subsidiaries.

[10] has confirmed that autonomy motivates the organization members to be creative and therefore create new knowledge, and it is also confirmed that organizations that enjoy autonomy are generally more flexible in obtaining, interpreting and applying their knowledge. Therefore, it can be said that increased autonomy increases possibility for successful knowledge sharing.

Organizational culture is formed in the process of solving their mutual issues together that the organization members face, and it functions as shared value and systematic meaning that binds them as a community.

According to [11] in ‘the empirical study of the impact of mutual interaction between the organizational culture and the organizational communication on the effectiveness of the organization’, organizational culture appears to have positive effects on job commitment and job satisfaction.

According to [12], cultural distance between the transferor and the beneficiary is found to be negatively related to knowledge sharing because countries whose cultures are dissimilar to those of their partners may find it tougher to get over cultural barrier in knowledge sharing because their cultural, political and social norms are different.

knowledge sharing and utilization of international joint ventures has a significant effect on contractual compliance, motivation and willingness to participate, management autonomy, organizational culture and joint ventures.

In this study, making use of the existing findings, the hypotheses are as follows.

Hypothesis 1: knowledge sharing and utilization between the participants will have positive impact on the participants’ contract compliance.

Hypothesis 2: knowledge sharing and utilization between the participants will have positive impact on the managerial autonomy.

Hypothesis 3: knowledge sharing and utilization between the participants will have positive impact on the motivation or willingness of the participation.

Hypothesis 4: knowledge sharing and utilization between the participants will have positive impact on the organizational culture.

Hypothesis 5: contract compliance between the participants will have positive impact on the success of joint venture.

Hypothesis 6: managerial autonomy between the participants will have positive impact on the success of joint venture.

Hypothesis 7: Motivation and willingness for participation between the participants will have positive impact on the success of joint venture.

Hypothesis 8: homogeneity of organizational culture between the participants will have positive impact on the success of joint venture.

### III. Research Method

#### 1. Research Model and Hypotheses

The purpose of this study is to find out how

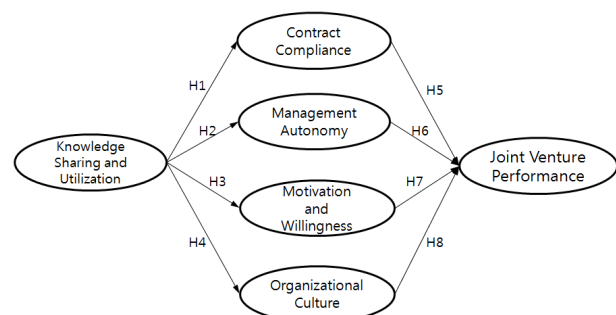


Fig. 1. Research model and Hypothesis

## 2. Sampling

The demography of the respondents for the study is as follows: First, as for gender composition, the 173 (78.3%) respondents were male, while the 48 (21.7%) respondents were female, so the male respondents were 125 people more than the female respondents.

Regarding the age distribution, the 91(41.2%) respondents were in their 30s, which was the largest number in the study, the 69 (31.2%) respondents were in their 20s, 51(23.1%) respondents were in their 40s, and the 10 (4.5%) respondents were in their 50s or more.

With regard to their marital status, the 73 (35.7%) respondents were married, while the 142(64.3%) respondents were singles. When it comes to their job title in their organizations, the 91 (41.2%) respondents were entry level employees, the largest number in the sample, the 83 (37.5%) respondents were acting section chiefs/section chiefs, the 38 (17.2%) respondents were deputy heads of department/heads of department, and the 9 (4.1%) respondents were directors (board members). Their average employment period was 6-7 years for the 93 (42.1%) respondents, 2-3 years for the 69 (31.2%) respondents, 4-5 years for the 48 (21.8%) respondents, and 1 year or less is for the 11 (4.9%) respondents, respectively.

## IV. Results

### 1. Exploratory Factor Analysis

For this study, Exploratory Factor Analysis is carried out with SPSS Windows 23.0 and the confidence interval is estimated with Cronbach's alpha>0.6. Principle Component Analysis is employed for Factor extraction and Varimax Rotation is used for the factor rotation. The questionnaire items are modified in line with the purpose of the study. Single dimensional factor analysis is conducted for the Factor Loadings (FL>0.6) that represents correlations between the evaluation factors.

Table 1. Results of exploratory factor analysis

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Cronbach's α
Knowledge sharing and utilization	.831 .814 .801 .782 .781 .778 .772 .741 .724 .682 .550 .511						0.961
Contract Compliance		.848 .847 .840 .807 .685 .666 .548 .543 .483					0.924
Management autonomy			.743 .742 .722 .672 .606 .561 .555				0.891
Motivation and Willingness				.747 .668 .652 .619 .590 .512 .486			0.895
Organizational culture					.647 .642 .812		0.619
Joint Venture Performance						.722 .711 .700 .685 .663 .645	0.925

First, exploratory factor analysis is conducted for the questionnaire items, using the SPSS 23.0, and this has resulted in the extraction of the 6 factors that are knowledge sharing and utilization, contract compliance, management autonomy, motivation and willingness for business participation, organizational culture and joint Venture performance.

## 2. Analysis of the Structural Model

Correlations are used to represent how the factors are related each other [13]. Covariance structure analysis is employed in the study to analyze their correlations between the 6 factors that are knowledge sharing and utilization, contractual responsibility, managerial autonomy, motivation & willingness for business participation, organizational culture and joint performance.

The structural model testing with AMOS 18.0 for the correlations between all the actors has resulted in  $\chi^2 = 192.995(df=7)$ ,  $p = 0.000$ ,  $\chi^2/df = 27.571$ ,  $GFI = 0.787$ ,  $RMR = 0.108$ ,  $NFI = 0.767$ ,  $CFI = 0.771$ , and general goodness-of-fit indicators,  $GFI$ ,  $AGFI$ ,  $RMR$ ,  $CFI$ ,  $RMSEA$ , etc. have not been found to meet their baseline values.

But despite that the analysis data have not met the criteria; the model can still be modified with modification index, assuming that there are also other aspects that can also interact between the variables [14]. So to this end, the Modification index is employed in the study [15], [16].

Table 2. Results of the fit statistics for the models

Fit Index	$\chi^2$	d.f.	$\chi^2/d.f$	RMR	GFI	NFI	CFI
				<0.05	>0.9	>0.9	>0.9
Model 1	192.995	7	27.571	0.108	0.787	0.767	0.771
Model 2	116.495	6	19.416	0.087	0.865	0.859	0.864
Model 3	76.589	5	15.318	0.065	0.906	0.907	0.912
Model 1= Initial Model							
Model 2= Adjusted model after adding from Contract compliance to Attention Motivation and willingness							
Model 3= Adjusted model after adding from management autonomy to organizational culture							

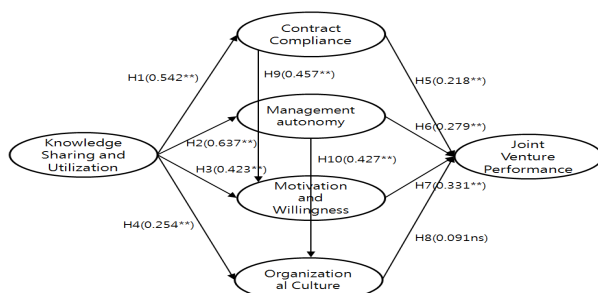


Fig. 2. Research Results

The <Table 2> and <Table. 3> show standardized coefficients and significance levels. According to the findings of the study, knowledge sharing & utilization is found to have positive effects on the contract compliance (H1), management autonomy (H2), motivation & willingness for business participation (H3) and on the organizational culture (H4), and, furthermore, contract compliance (H5), management autonomy (H6), motivation & willingness for business participation (H7) are found to have positive effects on joint venture performance. And contract compliance is found to have positive effects on motivation and willingness (H9), while management autonomy is found to have positive effects on organizational culture (H10).

But organizational culture is found to have no effects on joint venture performance (H8).

Table 3. Results of hypotheses

Hypothesis	Path	FL	t-value	p-value	Hypothesis Supported
H1	Knowledge sharing and utilization → Contract Compliance	0.542	10.096	0.000	**
H2	Knowledge sharing and utilization → Management autonomy	0.637	12.924	0.000	**
H3	Knowledge sharing and utilization → Motivation and Willingness	0.423	8.763	0.000	**
H4	Knowledge sharing and utilization → Organizational Culture	0.254	3.914	0.000	**
H5	Contract Compliance → Joint Venture Performance	0.218	3.592	0.000	**
H6	Management autonomy → Joint Venture Performance	0.279	4.889	0.000	**
H7	Motivation and Willingness → Joint Venture Performance	0.331	5.235	0.000	**

H8	Organizational Culture→ Joint Venture Performance	0.091	1.662	0.096	ns
H9	Contract Compliance→ Motivation and Willingness	0.457	9.476	0.000	**
H10	Management autonomy→ Organizational Culture	0.427	6.583	0.000	**

\*: P<0.05, \*\*: P<0.01, ns: not significant

## V. Conclusions

The findings can be summarized as follows: knowledge sharing & utilization has positive effects on contract compliance (H1), management autonomy (H2), motivation & willingness for business participation (H3) and organizational culture (H4), and, therefore, contract compliance (H5), management autonomy (H6), motivation & willingness for business participation (H7) have positive effects on joint venture performance.

Contract compliance has positive effects on the motivation & willingness for business participation (H9), and management autonomy also has positive effects on the organizational culture (H10).

And these findings are considered to be in line with the findings of existing studies. However, organizational culture (H8) doesn't appear to have significant effects on joint performance, and this finding confirms the characteristics of the corporations whose organizational culture is dissimilar with other participating corporations and that do not want to share their business technology and managerial know-how because they consider them as their core specialty. To speak of some limitations of the study, the sample of the corporations leans too much towards corporations with a history of participations in and the characteristics of, joint ventures, to be generalized for broader range of corporations.

Therefore, it is necessary for future studies to use a larger pool of data enough to reflect the characteristics of all the industries.

## REFERENCES

- [1] WHLee, "The effects and role of control on the performance of International Joint Venture," Pukyong National University, p23, 2017.
- [2] WHLee, and JYMoon, "A Study on the Effect of Knowledge Sharing and Utilization on Field Project Performance," Journal of The Korea Society of Computer and Information, Vol. 23, No. 8, pp. 151-156, 2018.
- [3] J. H. Dyer, P. Kale, and H. Singh, "How to make strategic alliances work," Sloan Management Review, Vol. 42, No. 4, pp. 37-43, 2001.
- [4] K. M. Eisenhardt, and F. M. Santos, "Knowledge-based view: A new theory of strategy," Handbook of strategy and management, pp. 139-164, 2002.
- [5] H. Taco, L. R. Annette, and L. A. Garry, "An interpretive systems view of knowledge investments," Academy of Management review, Vol. 34, No. 3, pp. 382-400, 2009.
- [6] R. Mitchell, and S. Nicholas, "Knowledge Creation Group: The Value of Cognitive Diversity, Transactive Memory, and open-mindedness Norms," The Electronic Journal of Knowledge Management, Vol. 4, No. 1, pp. 67-74, 2006.
- [7] A. Hilmi, S. Iman, S. Kadarsh, S. and G. Rajesri, "Knowledge Sharing Behavior, Antecedent and Their Impact on the Individual Innovation Capability", Journal of applied Sciences Research, Vol. 5, No. 12, pp. 2238-2246, 2009.
- [8] M. A. Lyles, and R. K. Reger, "Managing for autonomy in joint ventures: A longitudinal study of upward influence", Journal of Management Studies, Vol. 30, pp. 383-404, 1993.
- [9] Y. S. Cho, "The Role of Relational Assets and Management Autonomy on the Path to the Performance of Technology Transfer," Korean Corporation Management Review, Vol. 22, No. 6, pp. 251-270, 2015.
- [10] I. Nonaka, and H. Takeuchi, "Knowledge and Management" Chapter 2 of Ikujiro Nonaka and Hirotaka Takeuchi, The Knowledge Creating Company: How Japanese Companies Create the Dynamics of Innovation, New York: Oxford University Press, pp. 21-55, 1995.
- [11] M. J. Kim, N. S. Kim, and Y. J. No, "A Study on the Effects of Organizational Culture Types on Organizational Effectiveness," Industry Promotion Research, Vol. 2, No. 1, pp. 15-29, 2017.
- [12] J. H. Lee, "Global Learning and Firm Performance," International Business Studies, Vol. 12, No. 1, 2001.
- [13] G. S. Kim, "AMOS Structural Equation Model Analysis," Hannarae, 2006.
- [14] S. G. Kim, and M. S. Chae, "An Empirical Study On The Impact Of The Strategic Human Resource Development On Organization

Effectiveness : Focusing On Intermediating Effect Of Learning Organization," Korea Academy of Human Resource Management, Vol. 15, No. 4, pp. 21-55, 2008.

- [15] B. S. Kang, "The Research Methodology for Causal Analysis", MuYugGyungYung: Seoul, 2002.
- [16] G. S. Kim, "The Analysis of Amos 7.0 Structural Equation Modeling", Hannarae, Seoul, 2007.

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