The Effects of Influence Strategies on the Flexibility and Performances in Industrial Relationships*

Seong-goo, Ji** · Young-man, Kim*** · Sang-deok, Kim****

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< ABSTRACT >

This paper presents the results of an empirical study on antecedents and consequences of flexibility. The primary objective is to examine the connections among influence strategies, flexibility, and relationship performances. According to the structural equation models, all noncoercive influence strategies have positive effects on flexibility, and flexibility has positive effects on performances. On the other hand, coercive influence strategies are shown to have mixed effects. Implications of the findings are considered and future research directions identified.

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** Main(First) Author, Full Time Lecturer, Dept. of Business Administration, Hanbat National University, South Korea, E-mail : kiunman@paran.com.

*** Co-Author, Professor, Dept. of Business Administration, Kyungnam University, South Korea, E-mail : kimyma@kyungnam.ac.kr.

**** Corresponding Author, Assistant Professor, Dept. of Business of Administration, Kyungnam University, South Korea, E-mail : sdkim@kyungnam.ac.kr.
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I. Introduction

The exchange between buyers and sellers in the industrial market is changing from short-term relationships into long-term relationships. Long-term relationships are governed mainly by formal contracts or informal agreements, but many scholars are now asserting that controlling relationships by using formal contracts under environmental uncertainty is inappropriate (Heide, 1994; Cannon, Achrol, and Gundlach, 2000; Ferguson, Paulin, and Bergeron, 2005).

In this case, partners will depend on each other’s flexibility (Ivens, 2005). Flexibility provides a general frame of reference, order, and standards against which to guide and assess appropriate behavior in uncertain and ambiguous situations, thus motivating the value-oriented performance goals shared between partners. It is based on social sacrifices, which can minimize any opportunistic behaviors (Cannon, Achrol, and Gundlach, 2000, p.184).

Scholars argue that flexibility is related not only to behavioral performances such as satisfaction, trust, and commitment (Dwyer, Schurr, and Oh, 1987; Heide and John, 1992; Ivens, 2005), but also to financial performances such as ROI, ROS, and market share (Sanchez and Perez, 2005). However, flexibility is formed through repetitive interaction. Without it, conflict, suspicion, and selfishness are likely to appear rather than cooperation, trust, and mutuality (Ivens, 2005). In this way, flexibility is formed through repetitive interaction. The most frequent form of repetitive mutual interaction between buyers and sellers is inter-firm communication and it usually makes its appearance in the form of influence strategies (Mohr and Nevin, 1990).

Now, how do the influence strategies affect the flexibility and commitment between partners under environmental uncertainty? How do they affect financial performance? Due to the lack of studies dealing with influence strategies, flexibility, and performances, it is very difficult to explain the complex mechanisms which influence strategies and
flexibility have.

This study's purpose is to examine the connections among influence strategies, flexibility, and relationship performances. More concretely, the study verifies structural equation models by setting the seven influence strategies as its antecedents and setting the commitment and profitability of target partners as its consequences.

II. Background

1. Influence strategies

Influence strategies refer to the structure and contents of communication carried out by the boundary personnel of source firms which try to change the behavior of target firms (Frazier and Summers, 1984, p.44). On these influence strategies, Frazier and his colleagues conceptualized six influence strategies including promise, threat, legalistic plea, request, information exchange, and recommendation throughout the study, having as industries the American automobile industry, the Indian cutter industry, and American material distribution (Frazier and Summers, 1984; Frazier, Gill, and Kale, 1989; Frazier and Rody, 1991). Payan and McFarland (2005) defined the influence strategies dealt with in the prior studies as follows:

* Promise: The source promises the target a reward if the target complies with a request.
* Threat: The source threatens the target with a future penalty if the target does not comply with a request.
* Legalistic plea: The source contends that target compliance is required by formal agreement.
* Request: The source simply states the actions it would like the target to take.
* Information exchange: The source discusses general issues and exchange procedures to try to alter the target's general perceptions without stating a request.
* Recommendation: The source predicts that the target will be more profitable if the target follows the source's suggestions.
These six influence strategies stated above have been categorized as either coercive or noncoercive; coercive influence strategies are defined that a source firm directly forces a target firm to take certain actions, emphasizing the negative results of noncompliance; and noncoercive influence strategies are defined that a source firm does not make direct pressure on a target firm, instead of focusing on beliefs and attitude toward general business issues. The former includes promise, threat, and legalistic plea, and the latter includes request, recommendation, and information exchange (Frazier and Sheth, 1985; Frazier and Summers, 1986; Boyle, Dwyer, Robicheaux and Simpson, 1992).

Recently, Payan and McFarland (2005) suggested a new influence strategy called ‘rationality’ in addition to the pre-existing six influence strategies. The term ‘rationality’ means that the source presents reasons accompanied with supportive information for the target to comply with a request (Payan and McFarland, 2005, p.68). And this, unlike other noncoercive influence strategies, is an influence strategy with the form that the source directly requests an action, offers related evidence, and consequently acknowledges the fact that their request is fair.

According to the findings of Payan and McFarland (2005)’s study, this kind of rationality appeared to attract target partners’ compliance more effectively than any other noncoercive influence strategies including even recommendation and information exchange. In this study, research was carried out with the category of rationality included as a noncoercive influence strategy.

Mohr and Nevin (1990) offered four different aspects of communication-frequency, direction, modality, and content, by using the pre-existing communication theory and structure theory as well as the influence strategies belonging to the content of communication. Mohr and Nevin (1990) asserted that there exists a deep relation between the indirect influence strategies, or, in other words, noncoercive influence strategies and relational channel structures and climates. Moreover, Kim (2000) derived the empirical results that the distributor-supplier relationship has its’ reciprocity, that coercive influence strategies between them weakens dyadic solidarity, and that noncoercive influence strategies reinforce it.

Thus, the use of noncoercive influence strategies stimulates mutual positive reaction, and if it occurs repetitively over a long period of time, it forms relational norms with others (Ganesan, 1994; Kim, 2000; Lambe, Wittmann, and Spekman, 2001). These norms,
defined as the behavioral pattern which is expected by the other (Lipset, 1975; Macneill, 1980), reinforce relationship performances between exchange partners (Dwyer, Schurr, and Oh, 1987; Ganesan, 1994; Sanchez and Perez, 2005).

2. Flexibility

Flexibility, which has long been studied in the field of management, has been studied in the field of marketing in the form of relational norm based on relational contracting theory (Macneill, 1980; Heide and John 1992; Heide 1994; Lusch and Brown, 1996; Cannon, Achrol, and Gundlach, 2000; Ivens, 2005).

The extant literature contains numerous definitions. They refer to three different dimensions: actor’s capability of reacting to another actor’s demand for modifications in a flexible manner, the actor’s willingness to do so, and the actual behavior the actor shows (Ivens, 2005, p.567). In this study, however, we focus on the actual behavior of the supplier because we investigate the connection between influence strategies and flexibility, and influence strategies are compliance-gaining tactics which actors use to achieve their desired actions from another actor (Frazier and Summers, 1984). From a supplier’s perspective in an industrial market, it represents an insurance that the relationship will be subject to good-faith modification if a particular practice proves detrimental in the light of changed circumstances.

Generally, this flexibility does not count with in the short-term relationship. However, in a long-term relationship like an industrial market, it really matters. This is because of the facts that the exchange relationship between partners can be affected by external environments; that the contracts made in the past can be inappropriate for the present and the future; and that, when making the initial contract, it is impossible to include all the unforeseen situations in an uncertain future (Macneill, 1975; Thompson, 1967; Cannon et al., 2000). Especially in the case of high-tech industry which shows extreme uncertainty, this flexibility is more important. Even Williamson (1993), who is skeptical of the role of social mechanism in governing exchange, commented that the flexibility is needed under the characteristics of the high degree of asset specialization and uncertainty.

Another important reason flexibility is important in a long-term relationship under an uncertain environment is that it can be the effective governance. Because flexibility
provides general frames of reference, order, and standards against which to guide and assess appropriate behavior in uncertain and ambiguous situations, it forces partners to concentrate on the shared value and to minimize passive cooperation with opportunism, and therefore it protects the continuance of exchange (Cannon et al., 2000).

Recently, Sanchez and Prez (2005) maintained in their study that the flexibility in a supply chain has a close relation to the financial performance of the business. According to their study, the aggregate flexibility, which means the flexibility among the members of the chain has positive relation with ROI, the ROI growth rate, market share, the growth rate of the market share, ROS, and the ROS growth rate.

3. Relationship performances

1) Commitment

Dwyer et al. (1987) offered the five stages of developmental models in the buyer-seller relationship: (1) awareness, (2) exploration, (3) expansion, (4) commitment, and (5) dissolution. They then conceptualized the major characteristics by each stage and preceding conditions. Here, commitment refers to an implicit or explicit pledge of relational continuity between exchange partners. Furthermore commitment can be seen as the satisfaction which is the overall fulfillment in a relationship; minimal opportunism, which is the low tendency to shirk obligations and distort information; and as the stage which includes the trust, i.e. expectations that the other desires coordination and will meet obligations (Dwyer and Oh, 1987). However, after the study of Morgan and Hunt (1994), it is a dominant tendency to view the stage of commitment as an independent variable.

Commitment is a key factor in the long-term relationship. This is because commitment includes the intention to bear short-term sacrifice so as to accomplish long-term performance. In other words, while the exchange partners with a high level of commitment try to invest on the valuable assets which maintain their relationship, the ones with lower level can be exposed to the others’ opportunism.

2) Financial performance

Financial performance in the buyer-seller relationship can be defined as the degree
that it contributes to the sellers' objective fulfillment (Gaski and Nevin, 1985). In addition, according to Stern and El-Ansary (1992, p.291), it, being a multi-dimensional concept, can be composed of effectiveness, fairness, and efficiency.

The practical index to see this distribution channel is financial performance. This is more objective and practical than perceived or predicted performance. The variables to measure financial performance in the past studies are profitability from Pelham and Wilson (1996), Jap (1999), ROI, ROS, and ROA from Song, Xie, and Dyer (2000), profitability, sales, and market share from Hewett and Bearden (2001), contribution to sales, contribution to profit, and contribution to growth from Hibbard, Kumar, and Stern (2001), and finally ROI, ROS, and market share from Sanchez and Prez (2005). In this study, among these financial variables, profitability, which can be said to be the main interest of a business is selected as the financial performance variable.

### III. Research Hypotheses

1. Influence strategies and flexibility

As we mentioned above, there exist very few studies on the antecedents of flexibility in the field of marketing (Ivens, 2005). The study of Boyle, Dwyer, Robicheaux, and Simpson (1992) is the only one which verified the relation between relationalism and influence strategies. There, solidarity, mutuality, and flexibility were the measured variables of relationalism. Similarly, Kim (2000) studied the influence strategies, having solidarity as its antecedent.

Just as shown above, the reason these influence strategies can be regarded as antecedent of these relational norms, including flexibility, is that the relational norms are formed through repetitive interaction (Ivens, 2005), and the interaction between industrial buyers and sellers appears in the form of influence strategies (Mohr and Nevin, 1990).

Generally the companies in a long-term exchange relationship do not thoughtlessly use coercive influence strategies. These strategies can be used to make short-term behavioral changes, but when used during a long-term period, there is a likelihood to damage flexibility (Boyle et al., 1992).
To be more concrete, negative sanctions communicated in threats are apt to alienate the target partners, thus weakening the relationship, which in turn has the tendency of weakening the flexibility of the target partners. Also the legalistic plea acts upon the contract violation in accordance with the situation of the time the contract was made, so this also reactivates sanctions. This goes against the flexibility-this attitude which willingly tries to adjust the prior contract. Hence, the legalistic plea weakens the flexibility of the target partners as well. This assertion is coherent with the study results of Boyle et al. (1992).

However, promise can strengthen the attractiveness and credibility of the source partner. But it can also weaken the flexibility of the target partners. The reason for this is that it makes the target partners focus on the short-term, contingent outcomes explicit in promises, and thus they do not risk taking the source partner's adjustment on the contract by sacrificing short-term gains (Frazier and Summers, 1984).

Accordingly, putting direct pressure on the target partners to perform a specific behavior by stressing the adverse consequences of noncompliance can weaken the partner's flexibility by making the partner think that the source partner is trying to accomplish his opportunistic objective through their sacrifice (Kim, 2000). We posit:

**H1:** Threat, legalistic plea, and promise by the source partner will negatively affect the target partners' flexibility.

On the other hand, noncoercive influence strategies such as request, information exchange, and recommendation can strengthen the target partners' flexibility. For example, requesting, unlike threatening, does not require sanctions on the target partner, and it is usually happens in expectation of the partners' compliance in a good-faith manner. Also, exchanging information such as long-term forecasts, market information, and business strategies means that they are willing to share the knowledge essential for vertical coordination (Noordewier, John, and Nevin, 1990). Because this makes it possible to have shared objectives and an increased understanding between partners, it makes others have the attitude of risking the short-term sacrifice willingly for other partners (Frazier and Summers, 1984). Making recommendations is the phenomena that can happen because of the high commitment in a long-term relationship with target partners. Recommendation makes it possible to strengthen the relationship with the target partners and to willingly
adjust the prior contract for the source partner (Boyle et al., 2000).

On the other hand, the rationality, offered by Payan and McFarland (2005) had a
significant positive relation with recommendation and information exchange, and was
sorted into the category of noncoercive influence strategy by their study. This rationality
can be said to have similar effect to that of recommendation and information exchange
because it contains the functions of recommendation and information exchange.

In addition to this above, because noncoercive influence strategies such as
recommendation and information exchange have reciprocity (Frazier and Rody, 1991),
they sometimes become the basis of the formation of relational norms including
flexibility, by making positive interaction repetitively happen (Dwyer, Schurr, and Oh,
1987; Lambe, Wittmann, and Spekman, 2001). We posit:

H2: Request, recommendation, information exchange, and rationality by the source
partner will positively affect the target partners' flexibility.

2. Flexibility and relationship performance

Flexibility as a relational norm has been studied in the field of relational contracting
theory, but there have been few studies on consequences (Ivens, 2005). Although some
relationship marketing studies made it possible to suppose the relation between relational
norms and consequences (Dwyer et al., 1987; Ganesan, 1994; Lusch and Brown, 1996), the
connection between flexibility and consequences was carried out only recently by Ivens (2005),
and Sanchez and Perez (2005). Ivens (2005) studied satisfaction, trust, and commitment as
behavioral consequences, and Sanchez and Perez (2005) studied ROI, ROS, and market
share as financial consequences. These studies focused on commitment and profitability
of the two kinds of variables. The reason for selecting commitment among the behavioral
variables was that it is the most important variable in relationship marketing (Dwyer et al.,
1987), and the reason for selecting profitability among the financial performance
variables was that it is the most practical interest on the side of the firm.

1) Flexibility and commitment

Commitment refers to an implicit or explicit pledge of relational continuity between
exchange partners (Dwyer et al., 1987). That is, it does not change frequently, it further strengthens heavily committed exchange partners' higher values in the exchange relationship; and it is not involved in the relationship with alternative partners who are considered to have less value (Moorman, Deshpande, and Zaltman, 1993; Morgan and Hunt, 1994). Anderson and Weitz (1992) maintained that commitment among exchange partners urges cooperation for having more profit, and that the desire for a stable relation makes each partner willing to submit to any short-term sacrifice to maintain the relationship.

Flexibility positively affects this type of commitment. This is because the higher the possibility adjusting prior contracts without conflicts becomes, the less motivation there is for finding alternative partners (Ivens, 2005).

Finding other partners is not attractive because it causes another searching cost which restricts business efficiency. Besides, because flexibility reinforces interdependency by forcing other necessary investment upon the partners for better performances, it strengthens commitment (Dwyer et al., 1987; Ganesan, 1994). We posit:

**H 3:** The flexibility of the target partners will positively affect the commitment of them.

2) Flexibility and financial performance

Dahlstrom, McNeilly, and Speh (1996), in their study targeting the distribution industry, asserted that flexibility increases business performance by having an impact on the distribution performance. More concretely, the flexibility between buyers and sellers of the distribution industry decreased the uncertainty and increased the safety of the business, thus reducing the total distribution cost. Moreover, Sanchez and Prez (2005) argued in their study targeting the auto industry that flexibility in the supply chain made it possible to cope well with the environmental changes, and thus increased the market share. Also, flexibility becomes particularly relevant when the whole supply chain, consisting of a network of supply, production and delivering firms is considered (Giannoccaro, Pontrandolfo and Scozzi, 2003). These three studies have identical study results, namely that flexibility increases business profitability.

Therefore, flexibility can increase profitability by making exchange between
partners efficient and by making it possible to cope rapidly with external environments. We posit:

H 4: The flexibility of the target partners will positively affect the profitability of them.

< Figure 1 >

IV. Methodology

1. Measures

Influence strategies are the communicated portion of influence attempts that one channel member uses to gain the compliance of another channel member (Payan and McFarland,
The influence strategies are rationality, recommendation, information exchange, request, threat, promise and legalistic plea. We revised measurements which were used in Payan and McFarland (2005)'s research, and measured by 18 items. However, we measured legalistic plea by three items after removing Boyle et al. (1992)'s items. We constructed 21 items to measure seven influence strategies.

Flexibility was measured by six items with measurement that Ivens (2005) recently used, and they were revised to be suitable for this research. Commitment was measured by the affective commitment's three items which were used in Kumar, Scheer and Steenkamp's (1995) research with five points Likert scale. Financial performance was measured by five items with the scale that Pelham and Wilson (1996) used. The five items were revised to be suitable for this research. Respondents were asked to rate overall financial performance using the following measures: operating profits, the profit to sales ratio, cash flow, return on investment (ROI), and return on assets (ROA). As for using managerial perceptions in our research, past researches have found that managerial assessments are consistent with objective internal performance (Sanchez and Prez, 2005; Venkatraman and Ramanujam, 1986).

2. Sampling and Data collection

This study was confined to the type of high-tech industry which has the characteristics of rapid technology change and short product lifecycle. Flexibility among the firms of this industry, having the characteristic of hard and rapid growth, is more important here than among any other industry. Thus, a variety of influence strategies can be activated by them. The industries above were confined to the electronic parts, metal product, computer, electric machine, automobile, and medical precision manufacturing industries.

Data were collected through two steps. During the first survey, the researchers managed to obtain the list of parts suppliers of 2 companies, N and L; Of companies with an international competitiveness in the mobile phone manufacturing industry; and of the suppliers in a business relationship with S company, a semiconductor manufacturing company. They were asked to respond to the survey via telephone and e-mail. During the two month period of February-April 2006, we were able to collect data from 44 companies. The respondents were restricted to direct dealing authorities and subcontractor
company (the supplier) staff with at least three months of dealing experience with a manufacturer (an industrial material buyer). For the second survey, to overcome the limit of the samples and to obtain samples of a vast quantity of industries, the research was asked to be done by a professional research organization. By requesting the aid of P company, which has the most panels in Korea, 300 copies of questionnaires were collected during the 26 days beginning 20 May, 2006. 273 copies, after excluding 27 inappropriate ones among these were collected. Data were collected through a key informant technique. The use of key informants in evaluating firm activities is consistent with a prior study (Stump and Heide, 1996) and should not threaten measurement validity.

Thus there are altogether 317 copies. The statistical characteristics of these 317 respondents were as follows (see Table 1). Industrial distribution of the responding firms were; electronic part, film, sound and communication device manufacturers (34.1%), assembly metal product manufacturers (21.1%), computer and office device manufacturers (16.4%), electric machine and electronic transmission device manufacturers (11.0%), automobile and trailer manufacturers (11.4%), and medical, precision, optical instrument and watch manufacturers (6.0%).

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The test of non-response bias was carried out through the process of Zhaoa and Cavusgil (2006). The assessment of non-response bias was centered on two different procedures: (1) a comparison of sample statistics and known values of the population, such as annual sales volume and number of employees, and (2) a comparison of first wave and second wave data. Neither procedure showed significant differences.
V. Analysis and Results

1. Measurement validation

The procedures included scale reliability, and discriminant and convergent validity were used to validate measures (Akgün, Lynn, and Yılmaz, 2006). Also, the reliability measurements traditionally employed, such as the Cronbach’s alpha (see Table 1), were used. All the reliabilities were greater than .70 (Nunnally, 1978). A series of exploratory factor analyses were conducted. We included all items in a factor analysis (the principal component) that included ten factors. The analysis showed that the factors explained 73 percent of the variance in the material (see Table 2). Factor loadings were over 0.5, using an eigenvalue of 1 as the cut off point (this indicates that the measurement scales used in this study were unidimensional).

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<tr>
<td>Promise</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inf_St_17</td>
<td>0.870</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Inf_St_18</td>
<td>0.811</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Inf_St_16</td>
<td>0.754</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Legallistic plea</td>
<td></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>
We conducted confirmatory factor analyses to assess the validity of our measures (Anderson and Gerbing, 1988). A series of chi-square difference tests were conducted so that the discriminant validity could be ensured. For each pair, we estimated two models—an unconstrained model (φ estimated) and a constrained model (φ constrained to 1.0)—and compared the two model fits (Δχ²(1, 00) > 3.84) (Klein, Ettenson and Morris, 1998). For example, the comparison between rationality and threat generated significant chi-square (Δχ² = 399.41(1, 00) > 3.84), suggesting that these measures were distinct. All these tests supported discriminant validity.

Anderson and Gerbing (1988) noted that convergent validity demonstrated a statistically significant path coefficient (t > 1.96). All items loaded significantly on their respective constructs (with the lowest t-value being 1.52), providing support for convergent validity (Sujan, Weitz, and Kumar, 1994).

We then examined composite reliability and average variance extracted (AVE). The composite reliability of each construct was greater than .70 (Bagozzi and Yi, 1988). The AVE of each construct was greater than .50 (except for information exchange and flexibility) (Hair et al., 1995).
< Table 3 > Composite reliability, AVE and Confirmatory Factor Analyses

<table>
<thead>
<tr>
<th>Variables</th>
<th>Items</th>
<th>Composite reliability</th>
<th>AVE</th>
<th>Factor Loading</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationality</td>
<td>3</td>
<td>.848</td>
<td>.653</td>
<td>.71 - .92</td>
<td>23.8(t&lt;27.1)</td>
</tr>
<tr>
<td>Recommendation</td>
<td>3</td>
<td>.811</td>
<td>.588</td>
<td>.74 - .78</td>
<td>23.8(t&lt;24.9)</td>
</tr>
<tr>
<td>Information exchange</td>
<td>3</td>
<td>.717</td>
<td>.458</td>
<td>.65 - .70</td>
<td>17.2(t&lt;18.4)</td>
</tr>
<tr>
<td>Request</td>
<td>3</td>
<td>.847</td>
<td>.649</td>
<td>.73 - .88</td>
<td>16.9(t&lt;18.6)</td>
</tr>
<tr>
<td>Threat</td>
<td>3</td>
<td>.858</td>
<td>.669</td>
<td>.76 - .86</td>
<td>21.1(t&lt;23.3)</td>
</tr>
<tr>
<td>Promise</td>
<td>3</td>
<td>.844</td>
<td>.646</td>
<td>.69 - .86</td>
<td>17.5(t&lt;21.2)</td>
</tr>
<tr>
<td>Legalistic plea</td>
<td>3</td>
<td>.822</td>
<td>.607</td>
<td>.69 - .82</td>
<td>18.6(t&lt;21.3)</td>
</tr>
<tr>
<td>Flexibility</td>
<td>6</td>
<td>.849</td>
<td>.486</td>
<td>.64 - .76</td>
<td>15.2(t&lt;16.4)</td>
</tr>
<tr>
<td>Commitment</td>
<td>3</td>
<td>.933</td>
<td>.625</td>
<td>.76 - .81</td>
<td>16.7(t&lt;17.2)</td>
</tr>
<tr>
<td>Profitability</td>
<td>5</td>
<td>.900</td>
<td>.644</td>
<td>.71 - .87</td>
<td>16.3(t&lt;17.7)</td>
</tr>
</tbody>
</table>

χ²(530)=1291.33, χ²/df=2.436, p<0.01, RMSEA=0.06, NNFI=0.99, CFI=0.99, GFI=0.97 AGFI=0.96

< Table 4 > Descriptive statistics and correlation analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>S.D</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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</thead>
<tbody>
<tr>
<td>1. Flexibility</td>
<td>3.468</td>
<td>.534</td>
<td>1</td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2. Commitment</td>
<td>3.356</td>
<td>.649</td>
<td>.644**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Profitability</td>
<td>3.215</td>
<td>.634</td>
<td>.574**</td>
<td>.586**</td>
<td>1</td>
<td></td>
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</tr>
<tr>
<td>4. Rationality</td>
<td>3.326</td>
<td>.594</td>
<td>.466**</td>
<td>.351**</td>
<td>.237**</td>
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<tr>
<td>5. Recommendation</td>
<td>3.360</td>
<td>.575</td>
<td>.388**</td>
<td>.555**</td>
<td>.433**</td>
<td>.523**</td>
<td>1</td>
<td></td>
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<tr>
<td>6. Information exchange</td>
<td>3.223</td>
<td>.554</td>
<td>.387**</td>
<td>.348**</td>
<td>.332**</td>
<td>.363**</td>
<td>.421**</td>
<td>1</td>
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<tr>
<td>7. Request</td>
<td>3.030</td>
<td>.695</td>
<td>.075</td>
<td>.032</td>
<td>.054</td>
<td>-.203**</td>
<td>.029</td>
<td>.033</td>
<td>1</td>
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<td></td>
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<td>8. Threat</td>
<td>2.781</td>
<td>.772</td>
<td>-.181**</td>
<td>-.226**</td>
<td>-.155**</td>
<td>-.092</td>
<td>-.174**</td>
<td>-.016</td>
<td>.329**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Promise</td>
<td>2.846</td>
<td>.742</td>
<td>.057</td>
<td>.032</td>
<td>.129**</td>
<td>.207**</td>
<td>.122**</td>
<td>.138**</td>
<td>.436**</td>
<td>1</td>
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<td></td>
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<tr>
<td>10. Legalistic plea</td>
<td>2.932</td>
<td>.672</td>
<td>-.106</td>
<td>-.10</td>
<td>-.049</td>
<td>-.221**</td>
<td>-.101</td>
<td>-.021</td>
<td>.291**</td>
<td>.505**</td>
<td>.366**</td>
<td>1</td>
</tr>
</tbody>
</table>

**p<0.01, *p<0.05

3. Structure Equation Model Results

We tested our model using LISREL 8.5. The correlation matrix was used as input for the analysis. The estimation of the structural equation model revealed an acceptable fit of the model to the data (χ²/df=2.44, RMSEA=0.06, NNFI=0.99, CFI=0.99, GFI=0.97, AGFI=0.96). Except for χ²/df, fit indexes were within acceptable intervals. However, χ²/df is sensitive to sample size, and thus when all 317 complete responses are used, the
fit indexes RMSEA, NNFI, CFI, and GFI more correctly reflect model fit (Hair et al., 1995). Thus, we concluded that the model fit was considered acceptable.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path</th>
<th>Path Coefficient</th>
<th>t-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Threat → Flexibility</td>
<td>-.23</td>
<td>-5.00**</td>
<td>accepted</td>
</tr>
<tr>
<td></td>
<td>Legalistic plea → Flexibility</td>
<td>.04</td>
<td>1.01</td>
<td>rejected</td>
</tr>
<tr>
<td></td>
<td>Promise → Flexibility</td>
<td>.05</td>
<td>1.52</td>
<td>rejected</td>
</tr>
<tr>
<td>H2</td>
<td>Request → Flexibility</td>
<td>.14</td>
<td>4.51**</td>
<td>accepted</td>
</tr>
<tr>
<td></td>
<td>Recommendation → Flexibility</td>
<td>.52</td>
<td>9.71**</td>
<td>accepted</td>
</tr>
<tr>
<td></td>
<td>Rationality → Flexibility</td>
<td>.10</td>
<td>1.89</td>
<td>accepted</td>
</tr>
<tr>
<td></td>
<td>Information exchange → Flexibility</td>
<td>.18</td>
<td>4.73**</td>
<td>accepted</td>
</tr>
<tr>
<td>H3</td>
<td>Flexibility → Commitment</td>
<td>.86</td>
<td>20.01**</td>
<td>accepted</td>
</tr>
<tr>
<td>H4</td>
<td>Flexibility → Profitability</td>
<td>.70</td>
<td>18.71**</td>
<td>accepted</td>
</tr>
</tbody>
</table>

χ²(df=24.44, RMSEA=0.06, NNFI=0.99, CFI=0.99, GFI=0.97, AGFI=0.96
**p<0.01, *p<0.05

Hypothesis 1 predicted negative effects of coercive influence strategies on flexibility. This hypothesis was partially accepted as threat (β₁₁ = -0.23, t = -5.00, p < 0.01) negatively affected flexibility. However, legalistic plea and promise did not significantly affect flexibility.

Hypothesis 2 was accepted as all noncoercive influence strategies positively affected flexibility (request: β₁₄ = 0.14, t = 4.51, p < 0.01, recommendation: β₁₅ = 0.52, t = 9.71, p < 0.01, rationality: β₁₆ = 0.10, t = 1.89, p < 0.05, and information exchange: β₁₇ = 0.18, t = 4.73, p < 0.01).

The positive relationship between flexibility and commitment proposed in Hypothesis 3 was also accepted (β₂₁ = 0.86, t = 20.01, p < 0.01). Supporting Hypothesis 4, flexibility positively affected profitability (β₃₁ = 0.70, t = 18.71, p < 0.01).
VI. Conclusion

1. Discussion and Conclusion

Findings from the analysis of the 317 responses from high-tech industry are as follows; First, threat, which is a coercive influence strategy, had a negative effect on flexibility. This finding is consistent with previous findings. Thus, a source partner in a long-term relationship should refrain from using threat and this will enhance the target partners’ flexibility.

However, promise and legalistic plea showed different results from what we had expected. Promise and legalistic plea had no significant effects on the target partners’ flexibility. In the case of promise, we conjecture that promise has mixed effects on flexibility. To be concrete, as mentioned above, though promise makes the target partners focus on short-term outcomes, promise can also strengthen the attractiveness and credibility of the source partner. This is especially true in Korea, where most of the suppliers to high-tech industry are small-scale companies with little capital. These companies show a tendency to focus on economic incentives, and for them receiving more promises from manufacturers is important for survival in the highly competitive environment. In the case of legalistic plea, we suppose it to be because manufacturers rarely use legalistic plea for influence strategy in Korea. Contrary to the United States, legalistic plea in Korea means a dissolution of the relationship. In Korea, manufacturers usually rely on implicit contracts with mutual trust rather than explicit contracts. Explicit contracts are used when there are conflicts between partners or when they distrust each other. We think it is cultural difference.

On the other hand, noncoercive influence strategies, such as request, rationality, recommendation, and information exchange have positive effects on the target partners’ flexibility. Likewise with threat, the findings are consistent with previous findings. Thus a source partner in a long-term relationship should use noncoercive influence strategies more frequently, as this will enhance the target partners’ flexibility. This result is consistent with past researches. Though high-tech industry possesses a huge power asymmetry between manufacturers and suppliers, noncoercive influence strategies are more effective to strengthen flexibility.
Secondly, the target partners' flexibility has a positive effect on commitment. This result is similar to Lvens(2005), who recently studied flexibility in industrial service relationships. This study has expanded its range to the relationship between industrial buyers and sellers. Thirdly, the target partners' flexibility has positive effect on profitability. This result is similar to Dahlstrom, McNeill and Speh(1996) who deal with a distribution industry. This study has expanded its range to high-tech industries.

2. Implications and Limitations

As conceptualized, we found that flexibility of target firm was decreased by threat of source firm, but increased by noncoercive ones, such as request, recommendation, rationality, and information exchange. Furthermore, flexibility increased commitment and profitability of target firms. These findings support the argument that noncoercive influence strategies are more effective to increase flexibility which has positive connections with not only financial but also behavioral performance of industrial relationships.

The finding that legalistic pleas of source firms are not related to flexibility of target firms is consistent with the observation that because legalistic plea is entailed mostly in dissolution stage of business partnership in Korea. It's a kind of Korean commercial practices, we think.

Also, we found that promises of source firms were not related to flexibility of target firms. The finding is not consistent with fast researches and very interesting. As mentioned above, we think it is because of the mixed effects that promise strategy has. We think the mixed effects can be investigated by future researches having more elaborated models.

The main theoretical and practical contributions of this study are as follows: First, looking into the theoretical aspect, this study makes its contribution in the point of view that this is a rare study on antecedents and consequences in the field of marketing. Especially, this study verified the influence strategies (the antecedents) which continually occur in the industrial buyer-seller relationship. Also, it empirically tested how flexibility affects commitment and financial performance (the consequences). The results showed that flexibility in a working relationship is weakened by the use of threat, which is
frequently used in high-tech industry; and is strengthened by the use of request, rationality, recommendation, and information exchange. Also, the results showed that flexibility is an important factor for increasing relationship performances—not only behavioral, but also financial performances.

Furthermore, this study has another contribution in terms of practical aspect—namely that even though the flexibility is one of the key variables of a business’s success in the case of high-tech industry, a number of manufacturers still require unfair of their subcontractors by using their dominant power and maintain their relationship through the method of threat. However, threat can obstruct the business partners’ flexibility and has negative effects on the commitment and financial performance of the partners.

On the contrary, this study offers the point that noncoercive influence strategies such as request, recommendation, information exchange, and rationality strengthen the flexibility of the partners and also further strengthen commitment and financial performances. This is in opposition to the results achieved by coercive influence strategies. In other words, although the noncoercive influence strategies seem to be less effective over a short period of time, as they repetitively occur, the target partner may better understand the source partner, and thus share values and flexibly cope with the requests of the source partner. Therefore, this would be the principal method of reinforcing competitiveness in the supply chain high-tech industry—strengthening communication based on noncoercive influence strategies.

This study has several limitations. First, about the research setting, the study was conducted with high-tech industry, in which the direction of the change in the power balance of supply chain dyads is usually determined by manufacturers. So, we have a difficulty with generalization. We need to control the power structure between partners in a future study. Secondly, about cross sectional research, influence strategies have characteristics of continuance and there is a frequency difference relative to the period of the relationship; therefore, we need to control the length of the relationship or do longitudinal research. Thirdly, about flexibility, we treated it throughout the paper as positive, but it can also be negative, i.e. violating an agreement or moving, but in the wrong direction, etc. Finally, legalistic pleas can be pressures for flexibility, i.e. the supplier demanding change as specified in the contract. Therefore we need to investigate the multi-dimensionality of flexibility in future research.
REFERENCES


연구는 산업체의 구매자와 판매간의 관계에서 영향력 전략과 유연성 그리고 성과 간의 관계를 규명하여 시사점을 제공하고자 하는 목적으로 수행되었다. 기존 연구를 검토하여 강압적 영향전략과 비강압적 영향전략의 유연성에 미치는 영향을 가설을 수립하였고, 유연성이 성과에 정의 영향을 미치는 가설을 설계하였다. 연구결과, 비강압적 영향전략이 유연성에 정의 영향을 미치는 반면, 강압적 영향전략은 유연성에 부의 영향을 미치고, 유연성은 성과에 정의 영향을 미치는 것으로 나타났다. 이러한 연구결과를 바탕으로 시사점을 논의하고, 연구의 한계와 미래 연구방향을 제시하였다.

주제어 : 영향력 전략, 유연성, 성과, 산업체