A Study on the Relationship Orientation of Supply Companies in Construction Industry

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Abstract

In industrial markets, effort to improve the efficiency and effectiveness of both marketing and purchasing has increased.

This research has several goals as follows. Firstly, buyer-supplier relationship orientation in construction industry could be conceptualized to sum by means of behaviours for information exchange, coordination efforts, cooperative norms, operational linkages which are induced from resource dependence theory, transaction cost theory, relational contracting theory. Secondly, this is to develop a framework of relationship orientation in reviews of these theoretical perspectives. Trust and dyadic profit performance as causes of relationship orientation are examined to construct a research model. Additionally, relationship maintenance intent is examined as a consequence. Finally, by using data from the managers of single license construction companies as supply companies in construction industry, this research demonstrates relationship orientation conceptually and empirically in construction industries. Data was collected from 268 single license construction companies in Korea by using questionnaire and examined by structural equation modelling.

Keywords: Relationship orientation, trust, profit performance, and relationship maintenance intent
I. Introduction

In business-to-business markets, companies are seeking ways to perform these critical functions better in their markets by shifting their focuses from discrete transactions to long-term relationships. Managers in business-to-business markets try to make relationships with their business suppliers and buyers more productive and enduring. In short, relationships between suppliers and buyers has attracted from a wide range of perspectives (Zolkiewski & Turnbull 2002), including business-to-business marketing, supply chain management, services marketing, and customer product marketing (Hakansson 1982, Grönroos 1983, Turnbull & Valla 1986, Dwyer, Schurr & Oh 1987, Frazier, Spekman & O’neal 1988, Morgan & Hunt 1994, Möller & Willson 1995, Gummesson 1999).

The literatures on marketing channels offer several different conceptualizations of the nature of relationship between partners. However, an overview of major perspectives on the nature of channel relationships such as structural modes of exchange relationship and process models of exchange relationships, resource dependence theory, transaction cost theory, and relational contracting theory are needed to provide. In particular, relationship orientation as behavioral efforts can play a mediating role between inputs and outputs of relationship. In this respect, this research has goals like the below.

Firstly, this research is supposed to provide promotional factors by reviewing several disciplines to define buyer-supplier relationship orientation. Secondly, this is to develop a framework of relationship orientation in reviews of these theoretical perspectives. Thirdly, through data from the managers of supply companies in construction industry, a validity of scales for measuring the constructs is demonstrated in order to furnish some empirical support.

This research demonstrates that relationship orientation makes senses conceptually and empirically and that the mediating roles of relationship orientation are confirmed in construction industries.

II. Theoretical Approaches to Inter-firm Relations

Different theoretical frameworks make somewhat different assumptions about the nature of relationship building processes. Initially, the research reviews the traditional research paradigms from the marketing channels literature. Subsequently, this research discusses the perspectives on interfirm relations that follow from resource dependence, transaction cost, and relational contracting theory.

2.1 Marketing Channels Literature

According to Stern and Reve (1980), the traditional marketing channels literature consist of two main research streams, namely, the microeconomic and the behavioral paradigms.

The original microeconomic paradigm (for example Bucklin (1970); Baligh and Richartz (1967))
draws on elements of functional and institutional marketing theory as well as neoclassical economics in explaining the manner in which individual marketing functions are allocated across types of institutions. Several microeconomic models subsequently have been criticized for failing to account for the processes that characterize relationships between channel members.

As responses to the identified limitations of the microeconomic models, a behavioral research paradigm evolved the primary focus of which was on the design of mechanisms for controlling the role performance of individual channel members. Inter-firm relationship building in this paradigm is related to a matter of establishing and employing power and a matter of coordinating the efforts of different channel members. Despite the important insights provided, the behavioral research paradigm also has been a subject to criticize most commonly for focusing on behavioral phenomena in isolation from their antecedent conditions and outcomes (Anderson and Weitz, 1983).

### 2.2 Resource Dependence Theory

According to the resource dependence theory, inter-firm relationship as a strategic respond to conditions of uncertainty and dependence (Pfeffer and Salancik, 1978). Given the underlying assumption that few organizations are internally self-sufficient with respect to their critical resources, two potential problems are created. Firstly, a lack of self-sufficiency creates potential dependence on the parties from whom the focal resources are obtained. Secondly, it introduces uncertainty into a firm's decision making to the extent that the firms cannot control and predict accurately the flows of resources.

The main premise of resource dependence theory is that firms will seek to reduce uncertainty and manage dependence by structuring their exchange relationships by means of establishing formal or semiformal links with other firms (Pennings, 1981). For present purposes, the main implication of resource dependence theory is its identification of dependence and uncertainty as the key antecedent variables motivating the establishment of inter-firm relationships. However, this theory offers only limited insight into the specific mechanisms that can be used to govern relationships, beyond global strategic alternative. Although the strategies discussed in the literature could serve to deal with uncertainty and dependence in a general sense, they vary greatly in terms of the requirements they impose on a firm and the benefits they offer (Scott, 1987).

### 2.3 Transaction Cost Theory

The main premise of transaction cost theory is that there are potential costs associated with carrying out safeguarding, adaptation, and evaluation processes. Recent theoretical extensions have shown that the governance features of internal organization can be achieved within the context of inter-firm relationships.

Transaction cost theory parallels resource dependence theory in that it views no market governance as a response to environmental uncertainty and dependence. The two theories differ, however, in that the transaction cost theory explicitly accounts for the efficiency implications of organizing relationships, whereas the resource dependence theory essentially limits the treatment of performance to effectiveness or the ability to satisfy the demands of external parties (Pfeffer and
2.4 Relational Contracting Theory

Macneil (1980) developed a formal typology of "discrete" verse "relational" exchange. Discrete exchange is consistent with the underlying of neoclassical economic theory, in which individual transactions are assumed to be independent of the past and the future relations between the contracting parties and constitute nothing more than the transfer of ownership to a product or service. Under discrete exchange, the individual parties remain autonomous, pursue their interests vigorously, and rely to a large extent on economic and legal sanctions for the purpose of enforcing contractual obligations. On the other hand, relational exchange accounts explicitly for the historical and social context in which transactions take place (Dwyer, Schurr, and Oh, 1987).

III. Relationship Orientation Concept Building

3.1 Behavioral Factors which Construct the Relationship Orientation Concept

The identification and specification of relationship orientation concept began with a review of key theories and frameworks that have guided empirical research in business-to-business relationship. Several approaches have guided much of the research into the nature of buyer-seller relationships. With roots in social psychology, social exchange theory and power and dependence theories emphasize processes that lead to satisfaction for the exchanging parties and emphasize techniques for managing dependence and uncertainty. Transaction cost theory focuses on identifying efficient structures for governing transactions, and relational contracting adds a sociological perspective to classical contract law. Each of these theories and frameworks emphasizes different important aspects of commercial exchange. Therefore, in order to provide a comprehensive representation of buyer-seller relationships, the relationship orientation concept in this research is relevant to business practice and a series of interviews with marketing and purchasing managers were conducted. The preliminary interviews focused on our attention on the operational elements of relationships.

3.1.1 Information Exchange

Information exchange in this research is defined as expectation of open sharing of information that may be useful to both parties. Open sharing of information is indicated by the willingness of both parties to share important information. In practice, this might include involving the other party in the early stages of product design, opening books and sharing cost information, discussing future product development plans, or jointly providing supply and demand forecasts. Recent advances in technology and an increasing emphasis on quality in manufacturing organizations have caused many firms to reexamine the risk versus reward trade-off of more extensive information sharing. Greater sharing of information can improve product quality and facilitate new product development (Cannon and Perreault, 1999). Kelley and Thibaut (1978) told that through information sharing, exchanging parties come to understand better the outcomes of their mutual behaviors. Clopton
(1984) thought that more open information sharing leads to jointly optimal outcomes. Williamson (1985) suggested that when information is impacted, market failure could be more, and Macneil (1980) argues that free exchange of confidential information is a characteristic of more relational exchange.

### 3.1.2 Coordination Efforts

When buyers and suppliers strive to produce mutually beneficial strategic outcomes, they must consider creatively how to leverage the unique environment, respective competencies, and human resources available to them. They recognise and understand that each firm's success depends on part on the other firm. As such, their coordination efforts, the regular pattern of similar or complementary actions and activities, enable them to share information, opportunities, and processes in such a way as to facilitate the achievement of competitive advantages. Coordination efforts within the dyad may be manifested in the formation of joint projects in terms of the dyad's needs.

### 3.1.3 Cooperative Norms

Cooperative norms is related to expectations the two exchanging parties have about working together to achieve mutual and individual goals jointly. Cooperative norms do not imply one party's acquiescence to another's needs but rather that both parties behave in a manner that suggests they understand that they must work together to be successful. Cooperative norms could cut across many of the relational norms proposed by Macneil (1980), including flexibility in response to changing conditions where the preservation of the relationship is an important end. Some authors suggest that the development of such norms reflects trust and operates as a mode of governance in commercial exchange (Cannon and Perreault, 1999). It plays a central role in achieving coordination in channels of distribution. A high degree of cooperation suggests behaviors consistent with the bilateral power system described by Bonoma (1976), in which the exchange parties act to maintain the union as well as fulfill individual hedonic plans.

### 3.1.4 Operational Linkages

Operational linkages are defined as the degree to which the systems, procedures, and routines of the buying and selling organizations have been linked to facilitate operations. With operational linkages, activities and processes between the firms facilitate the flow of goods, service, or information. These include computerized inventory or order systems and just-in-time delivery as well as cooperative marketing programs. Operational linkages may involve the routine of individual activities. Service or sales representatives can develop routines to integrate themselves more closely into a buying organization by conducting regular maintenance checks on equipment or monitoring inventory and placing orders. As Stern and Reve (1980) suggest in the context of their political economy framework, operational linkages may contribute to facilitate exchange or reduce transaction costs.
IV. The Causes and Consequences of Relationship Orientation

4.1 The Causes of Relationship Orientation

4.1.1 Trust

Trust has been thought as a key construct in a wide range of studies area such as business marketing (Dwyer, Schurr & Oh 1987, Anderson & Weitz 1989, Moorman, Deshpand, & Zaltman 1992, Morgan & Hunt 1994, Doney & Cannon 1997), Social psychology (Lewicki & Bunker 1995), Sociology (Lewis & Weigert 1985) and economics (Dasgupta 1988, Williamson 1991). This is conceptualized as a constituent component of relationship quality (Dwyer, Schurr & Oh 1987) or as a necessary requirement and determinant of sound business relationships (Hakansson, Harrison & Waluszewski 2004). In addition to this, some researchers try to distinguish trust as several sub-concepts. For example, some researchers think that trust can be distinguished from reliance (Hardin 1991; Mouzas, Henneberg, & Naude 2007), while the others discuss difference between impersonal trust and personal trust (Doney & Cannon 1997).

Trust in this research could be defined as existing when one party has confidence in an exchange partner's reliability and integrity. The literatures on trust told that confidence in the part of the trusting party is reliable and has high integrity, which is associated with such qualities as consistent, competent, honest, fair, responsible, helpful, and benevolent. Anderson and Narus (1990) focus on the perceived outcomes of trust when they define it as the firm's belief that another company will perform actions that will result in positive outcomes for the firm as well as not take unexpected actions that result in negative outcomes. Indeed, I would expect such outcomes from a partner on whose integrity one can rely confidently. Confidence that a partner can rely on another indeed will imply the behavioral intention to rely. When we think of willingness in a measure of trust, willingness is unnecessary or redundant in its definition. Therefore, behavioral intention is best
viewed as an outcome of attitude and willingness should be viewed as an outcome of trust. Therefore, there is a positive relationship between trust and relationship orientation.

H1: Trust will be positively related to relationship orientation.

4.1.2 Profit Performance

Profit performance refers to the profits that result from the dyadic collaboration effort as opposed to those profits earned by the efforts of one firm alone. It is not merely a summation of the two firms' individual profits but instead refers to the financial outcomes that result from the interdependence of effort and investments that reside within the dyad. This definition is consistent with the interest in the dyadic process that occurs between firms. Therefore, there is a positive relationship between profit performance and trust and there is a positive relationship between profit performance and relationship orientation.

H2: Trust will be positively related to profit performance.

H3: Profit performance will be positively related to relationship orientation.

4.2 Consequences of Relationship Orientation

4.2.1 Relationship Maintenance Intent

Researchers in the area of organizational theory and economics have suggested that governance structures can be arrayed on a continuum of relationalism, which ranges from marketing literature, researchers have attempted to define the characteristics of relationalism. One of characteristics proposed by Noordewier, John, and Nevin (1990) is the expectation of continuity of a relationship which captures the probability of the future interaction between a retailer and a vendor. This definition could be said that at one side there is a low probability of future interaction and at the other side there is high probability of future interaction. In contrast, long-term relationship maintenance intent includes the element of future interaction but also focuses on the desire of the parties toward long-term relationship. It refers to relationship maintenance intent toward a specific vendor, not generalized relationship intent toward all vendors. Therefore, there is a positive relationship between relationship orientation and relationship maintenances intent.

H4: Relationship Orientation will be positively related to relationship maintenance intent.

The model of this study including 4 hypotheses is reported in Figure 2.

V. Measurement
5.1 Data Collection and Sample

The unit of analysis for this research is a specific buyer-seller relationship on the construction industry. The conceptualization of relationships as multidimensional concepts required a substantial amount of information regarding each relationships as well as cooperation from people who could provide the needed information competently. Data is collected about buyer-seller relationship from supplier’ perspective. Construction industries in Korea are composed of the main construction companies and single license construction companies. The main construction companies could be buyer companies and single license construction companies could be supplier companies in a contract situation. For collecting data, questionnaires were posted to 700 single license construction companies. Finally, 268 suppliers’ questionnaires (a 38% response rate) were used in the analysis.

5.2 Relationship orientation measure

5.2.1 Measurement and statistical result

All questions used a 7-point (Strongly disagree-Strongly agree) Likert-type scale. Information exchange scale, cooperative norms scale and operational linkages employed each 2 items from Cannon and Perreault (1999). Coordination Efforts scale and employed 2 items from Jap (1999). Through examination of these items, relationship orientation is measured by second-order factors. This research define relationship orientation concept by using second order factor analysis of LISREL. All items for this model are reported in Table 1.

Statistical procedures used to validate measures included assessment of items and scale reliability, convergent and discriminant validity. These were examined by using LISREL (Joreskog and Sorbom, 1993). Scale reliability is reported in Table 1. All items that reported above 0.75 exhibit high reliability. Using confirmatory factor analysis, I evaluated convergent and discriminant validity. Exploratory factor analysis was conducted using both orthogonal and oblique rotations to ensure high loadings on hypothesized factors and low cross loading. Results of the confirmatory factor analysis showed that each item loaded highly on its hypothesized factor with on high cross-loading.

<table>
<thead>
<tr>
<th>Table 1 Scale items and Reliability</th>
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<tbody>
<tr>
<td>Factor</td>
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<tr>
<td>1</td>
</tr>
<tr>
<td>Information Exchange</td>
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<tr>
<td>x2</td>
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<td>x3</td>
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<td>x4</td>
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| Coordination Efforts | x3 | They work on join projects tailored to their needs | 0.886 |
| x4 | Both companies are always looking for synergistic ways to do business together | 0.795 |
### 5.2.2. Second-order factor Analysis

Second-order factors are factors of factors. These factors posit a higher-order general ability dimension that draws from more specific ability competencies. If those specific competencies are defined as factors, then the model is a factor defined by those factors or a second-order factor. Each of the more specific ability competencies is a factor that can be assessed through a measurement procedure. By contrast, the general ability dimension is assessed through the specific factors rather than through any measures. If it were directly measured and had its own indicators, then the model would not be a second-order factor model.

Marsh and Hocevar (1985) provided an illustration of second-order factor models for modeling self-concept. They contrasted a first-order factor model for seven self-concept domains with different second-order models.

The survey items that correspond to the four relationship orientation behavior factors were rested in a four-factor confirmatory model. An acceptable fit was achieved. The next step was to assess whether these four constructs were an adequate reflection of a single higher-order construct. For this purpose, a second-order factor structure was tested, and an acceptable fit for this model was found. In this research, relationship orientation is conceptualized as a second-order factor. The confirmatory factor analysis and the second-order model provide the evidence of two important points: Firstly, each dimension has good measurement properties and is distinct from the order dimensions. Secondly, the dimensions can be combined to form one higher-order construct. I evaluated the measures through confirmatory factor analysis procedures. GFI=0.97, AGFI=0.93, RMR=0.062, CFI=0.98, IFI=0.98 are respectively. Therefore, it can be said that the results suggest that these data provide a reasonable fit with the hypothesized measurement model.

As result, relationship orientation is conceptualized to sum by means of behaviors for information exchange, coordination efforts, cooperative norms, and operational linkages.

### 5.3 Other concepts measure

All questions used a 7-point (Strongly disagree-Strongly agree) Likert-type scale.

Trust scale employed 2 items from Anderson and Narus (1990), Morgan and Hunt(1994). Profit performance scale employed 2 items from Jap (1999). Relationship maintenance intent scale employed 2 items from Ganesan (1994). Relationship orientation is measured by second-order factors. All items for this model are reported in Table 3.

### 5.3.1 Reliability and Convergent and Discriminant Validity
Scale reliability is reported in Table 3. All items that reported above 0.80 exhibit high reliability. Using confirmatory factor analysis, I evaluated convergent and discriminant validity. I conducted exploratory factor analysis using both orthogonal and oblique rotations to ensure high loadings on hypothesized factors and low cross loading.

<table>
<thead>
<tr>
<th>Table 3 Scale items and Reliability</th>
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<tbody>
<tr>
<td>Trust V1 V2</td>
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<tr>
<td>Profit Performance V3 V4</td>
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<tr>
<td>Relationship Orientation V5 V6 V7 V8</td>
</tr>
<tr>
<td>Relationship Maintenance Intent V9 V10</td>
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5.3.2 Result
I evaluated the measures through confirmatory factor analysis procedures. The chi-square statistic was statistically significant ($\chi^2(31)=74.28; P<0.01$). GFI=0.95, AGFI=0.91, RMR=0.084, CFI=0.97, IFI=0.97 are respectively. The results suggest that these data provide a reasonable fit with the hypothesized measurement model.

The parameter estimates for this model are reported in Figure 3.

All hypotheses are accepted. As measured in our study, trust between buyer and seller and profit performance have a positive effect on buyer-seller relationship orientation. Trust has a positive effect on profit performance. Relationship orientation between buyer and seller has a positive effect on relationship maintenance intent.

VI. Conclusion

6.1 Summary of the Research
This research could be summarized like below.
Firstly, in this research, buyer-supplier relationship orientation is defined to provide promotional
factors by reviewing several disciplines. Relationship orientation is conceptualized by means of information exchange, coordination efforts, cooperative norms, operational linkages which are induced from resource dependence theory, transaction cost theory, relational contracting theory.

Secondly, I develop a framework of relationship orientation in reviews of theoretical perspectives. Trust, dyadic profit performance as causes of relationship orientation and relationship maintenance intent during long-term as consequences of relationship are explored to construct a research model. Finally, by using data from the managers of supply companies in construction industry, the validity of scales is demonstrated in order to measure the constructs.

This research demonstrates that relationship orientation makes senses conceptually and empirically and that the mediating roles of relationship orientation are confirmed in construction industries.

6.2 Theoretical and Managerial Implication
This research has theoretical and managerial implications like below.

Firstly, as relationship orientation is constructed to several behavioral construct factors, relationship orientation is defined as key word in the relationship marketing.

Secondly, relationship orientation as managerial factor is built between dyadic firms by behavioral factors. Dyadic firms have to strive to build relationship orientation by information exchange, coordination efforts, cooperative norms, operational linkages.

Thirdly, one of key findings of this research is that trust of a buyer firm is positively related to the likelihood the relationship orientation. According to the previous literature, buyer firm's trust to the supplier firm is key factor in relationship marketing. As result of this research, supplier firm's trust to the buyer firm in the construction industry has positive effect on relationship orientation. Therefore, buyer firms have to strive to be trust from supplier firm in relationship marketing.

Fourthly, as a result, dyadic profit performance has a positive effect on buyer-seller relationship orientation. The more dyadic profit performance is, the more bonds between firms are.

Finally, relationship orientation between buyer and seller has a positive effect on relationship maintenance intent. According to firms manage behavioral factors; firms will be bond in the future.

6.3 Limitations and Future Research
This research is subject to several shortcomings that limit the results. Certainly future researchers might consider additional predict variable such as environment factors and market orientation. In addition to this, this study has been made in the supplier's perspective. Future researchers might consider dyadic firms perspective.

Reference


