Power, Cooperation, Trust and Commitment in Supplier-Buyer Relationships

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Abstract: Facing rapid changes in technology and globalization of markets, firms become very difficult to live alone. The cooperation between buyer-supplier helps to improve the efficiency of the supply chain as a whole for the mutual benefits of both parties involved. Supplier’s exercising power is a critical factor that influences cooperation. This study aims to investigate how supplier’s use of power affects cooperation climate between a buyer and a supplier, buyer’s trust in the supplier, and buyer’s commitment from buyer’s perspective. Their relationships are hypothesized and investigated based on the empirical data collected from companies in the Iran Cosmetics industry. The results demonstrate that use of non-coercive power improve cooperation and trust between the buyer and supplier. The buyer is inclined to make commitment to the supplier when cooperation and trust exist. Practical insights are provided accordingly in this paper to achieve closer buyer-supplier relationships in nowadays highly competitive environments.

Keywords: exercised power, cooperation, trust, commitment

1. Introduction

In the competitive game of short time-to-market and differentiation to achieve customer satisfaction and loyalty, success for individual firms depends on how well the supply chain functions as a whole (Miles and Snow, 2007). A critical element achieving supply chain effectiveness is establishing cooperative relationship between buyers and suppliers (Skinner et al., 1992).

Interaction between two firms results in various contingencies, where the firms modify their resources to each others expectations. Power is the mechanism that can explain the relations of two firms (Emerson, 1962). Power is generally considered important for the understanding of buyer-supplier relationship (Frazier and Antia, 1995). Cooperation refers to situations in which parties work together to achieve mutual goals, leading to outcomes that exceed what any of the firms involved in a supply chain would achieve if they acted solely in their own best interests (Anderson and Narus, 1990; Sahadev, 2005). It is defined as cooperation climate herein because it refers to situations. Cooperation requires two parties in a relationship to participate actively to achieve mutual benefits (Morgan and Hunt, 1994). Despite much discussion about the needs for cooperation, there are few studies considering power impacts on cooperative relationship. Most studies investigate power effects on performance of relationship, such as conflict (Brown et al., 1995; Lee, 2001; Benton and Maloni, 2005; Leonidou et al., 2008), satisfaction (Ramaseshan et al., 2006; Leonidou et al., 2008), commitment (Brown et al., 1995; Maloni & Benton, 1995, Benton & Maloni 2005; Ramaseshan et al., 2006), and trust. In this study, it is tried to find that how exercised powers influence cooperation climate, trust and commitment.

The purpose of this study is, therefore, to examine the roles of two types of exercised power as key driving forces in building buyer’s commitment. The contribution of this study can be justified on three major grounds: (a) it provides an explanation of the exercised power-cooperation-trust-commitment association; (b) it tries to shed light on the role of power sources in building buyer-supplier relationship, which, although critical, have received scant empirical attention within the semiconductor industry context; and (c) it concurrently tests the associations between a set of key behavioural constructs of the buyer-supplier relationship, using PLS.

2. Theoretical Background and Research Hypotheses

We reviewed the multi-disciplinary literature related to power, cooperation, trust and commitment and developed the conceptual framework shown in Figure 1. The framework consists of five basic constructs. The proposed conceptual linkage of these constructs is the following: exercised power (coercive and non-coercive) provides the starting points of the model and directly affects cooperation climate and trust, which act as mediating variables. In turn, these two constructs affects buyer’s commitment.
2.1. Exercised Powers and Buyer-Supplier Cooperation Climate

Bases of power define the resources the supplier has available to influence buyer’s decision in this study. These resources establish the foundation for the sentiments that characterize the behaviour process (Skinner et al., 1992).

Coercive power is based on the perception of one party in a relationship that the other has the ability to mediate punishment (El-Ansary and Stern, 1972). The exercise of this source of power reflects aggressive, forceful and suppressive behaviours, which essentially forces the other party in a relationship to do things that otherwise she or he would not have done. The use of coercive power is most likely to escalate tension and frustration in the relationship, because the one party performs actions of which the other disapprove, does not have the resources to carry out or feels offended by.

Cooperation climate is defined as a situation where similar or complementary coordinated actions are taken by firms in interdependent relationship to achieve mutual outcomes in this study. Exercising coercive power leads to the other party feels threatened. The other party may comply with the firm temporally. However, it will depress a firm’s willingness to cooperate for a long-term because the firm does not feel the benevolence of the firm uses its coercive power (Dapiran and Hogarth-Scott, 2003; Maloni and Benton, 2000). Inevitably, this situation will result in disagreements between the two parties and will elevate conflicts to a manifest state. In turn, coercive power decreases the level of cooperation in a relationship. Dapiran and Hogarth-Scott (2003) contend that use of coercive power only lead to capitulation and will raise a desire, for the other party, to exit the relationship.

Non-coercive power can be derived from four basic sources: (1) reward, based on the perception of one party that the other has the ability to mediate reward; (2) legitimate, based on the perception of one party that the other has a legitimate right to prescribe behaviour; (3) referent, based on one party’s identification with the other, and (4) expert, based on the perception of one party that the other has some special knowledge or expertise (Skinner et al., 1992). Exercising non-coercive power is a signal to demonstrate benevolence. Once other parties perceive the benevolence, it will invest more efforts in the relationship because when a firm demonstrates willingness to establish a benevolent relationship with the other firm, the other firm is under pressure to give much back to the firm. A cooperation situation will be achieved (Dapiran & Hogarth-Scott, 2003; Leonidou et al., 2008). Based on foregoing discussion, the following hypotheses are suggested.

**Hypothesis 1a:** Supplier’s use of coercive power is negatively related to buyer-supplier cooperation climate.

**Hypothesis 1b:** Supplier’s use of non-coercive power is positively related to buyer-supplier cooperation climate.

2.2. Exercised Powers and Trust

Trust has been defined as an expectation or willingness that exists between two parties (Sahadev, 2005). For example, it is defined as “a willingness to rely on an exchange partner in whom one has confidence” in Moorman, Deshpande and Zaltman (1992). The definitions tend to highlight a party’s belief that the other party to the exchange is capable of being relied on in case of any need.

From the interpersonal relationship theory, analogies comparing the development of buyer-supplier relationships to loving relationships and marriage have been advanced for nearly two decades (Dwyer et al., 1987). Similar to a marriage relationship, perdition of how others firm will behave in certain situation determines one’s behaviours. When a supplier uses non-coercive power, such providing...
incents or sharing critical information or resource to the other party in a help manner or favourable actions, it shows benevolence and reliability to the buyer. It of course suggests a positive linkage between non-coercive power and trust. Useful information and resources are quite important for product development and manufacturing to improve time-to-market, especially in cosmetics industry. Leonidou et al. (2008) find that use of non-coercive power decrease conflict and lower disunity between two parties and therefore prompts trust between two parties. However, when a firm exercises its coercive power, the exercised power erodes the trust between interacting parties, mainly because such aggressive behaviour will prevent the formation of a belief that the partner is dependable, honest and fair (Dwyer et al., 1987; Leonidou et al., 2008). A benevolent partner will subordinate immediate self-interest for long range group gain and not take unexpected actions that would have a negative impact on the other firms. Therefore, use of coercive power, such as threaten and punishment, hurts trust (Anderson and Narus 1990). In light of the above reasoning, the following hypotheses are proposed.

**Hypothesis 2a:** Supplier’s use of coercive power is negatively related to buyer’s trust in supplier.

**Hypothesis 2b:** Supplier’s use of non-coercive power is positively related to buyer’s trust in supplier.

### 2.3. Trust and Cooperation Climate

Trust refers the belief that a party’s word is reliable and a party will fulfil its obligation in an exchange (Mohr and Spekman, 1994). As an extension of personal relationship and negotiation theory, trust has been consistently mentioned as a predictor or an antecedent of cooperative behaviour between organizations (Johnston et al., 2004). When the trading partner is more reliable, dependable and benevolent so that its behaviours can be predictable, a firm will tend to invest more in cooperative behaviours and a cooperation situation will be achieved. Exchange relationship featuring trust will be able to manage greater stress and will display greater adaptability. Once trust is established, firms learn that joint efforts will lead to outcomes that exceed what the firm would achieve (Anderson and Narus, 1990). Mohr and Spekman (1994) suggest that the lack of trust will be deleterious to information exchange, to reciprocity of influence, and will diminish the effectiveness of joint problem solving.

We therefore posit a positive causal path from trust to cooperation climate. This path is supported by several researches such as Brunard and Kleiner (1994). In addition, within the context of a trusting relationship, firms sometimes are willing to postpone temporarily the receipt of their own outcomes until some later time (Anderson and Narus, 1990). In sum, we propose the following hypothesis.

**Hypothesis 3:** Buyer’s trust in supplier is positively related to buyer-supplier cooperation climate.

### 2.4. Cooperation Climate and Commitment

Relationships evolve through four phases identified as (1) awareness, (2) exploration, (3) expansion and (4) commitment four phase (Dwyer et al., 1987). Commitment is the most advanced phase. Commitment refers to the willingness of partners to exert effort on behalf of the relationship. It suggests a future orientation in which partners attempt to build a relationship (Mohr and Spekman, 1994). A high level of commitment provides the context in which both parties can achieve individual and joint goals without raising the spectre of opportunistic behaviour. Because more committed partners will exert effort and balanced short-term problems with long-term goal achievement, higher levels of commitment are expected to be associated with partnership success (Leonidou et al., 2008).

Transaction Cost Theory suggests that commitment can be viewed as an investment in transaction-specific asset, which are difficult or impossible to redeploy when a relationship is terminated. Buyer will invest in commitment to reciprocate supplier’s contribution in cooperation. For firms in cosmetics industry, when buyers will receive more technology supports and R&D knowledge from suppliers, then they will be reciprocated by greater access to market information for developing product and manufacturing technology. When both parties receive valued contribution from each other, each partner has strong motivation to build, maintain, strengthen and deepen the relationship (Prahinski and Benton, 2004). That makes it more likely that both buyer and supplier perceive their relationship as a win-win opportunity (Kumar et al., 1995). Therefore, cooperation will enhance buyer’s desire to develop a stable relationship. Specifically, we hypothesize:

**Hypothesis 4:** Buyer-supplier cooperation climate between a buyer and a supplier is positively related to buyer’s commitment in buyer-supplier relationship.

### 2.5. Trust and Commitment

Several researches suggest that the future of buyer-supplier relationships depends on the commitment made by the partners. In commitment relationship, short-term sacrifices are normally necessary to realize long-term benefits (Dwyer et al., 1987). Because commitment involves potential vulnerability and sacrifice, parties will seek only trustworthy partners and firms are unlikely to be committed unless trust is already established. Trustful
partners refrain from their opportunistic behaviors, so trust can reduce the risk to make commitment from the perspective of transaction cost theory. Also, when a partner won’t take unexpected behaviors, the other party will have higher motivation to deepen their relationship. In accordance with the theory of transaction cost theory and interpersonal relationship theory, it is considered the trust as a precursor of commitment (Morgan and Hunt, 1994), so the following hypothesis is posited.

Hypothesis 3: Buyer’s trust in supplier is positively related to buyer’s commitment.

3. Research Methodology
3.1 Sampling and Data Collection

Data were collected via a questionnaire sent to companies in the cosmetics industry in Iran. The target informants were the managers or staffs having experiences in supply chain management or supplier interaction. These target populations were mostly in the department of purchasing, R&D, production planning and control, and supply chain management according to the practices in the cosmetics industry. The target populations were then asked to select a relationship in which the buying company had most contact frequencies with its suppliers.

The population included 261 cream package design firms, 13 shampoo production firms, 34 beauty raw material providers, 4 quality control companies, and few companies providing other kinds of materials in Iran. An informant was selected from a company. 207 informants agreed to receive the questionnaires and questionnaires were received after several follow-up calls. The usable data used in this study were completed by 124 informants. The response rate was 57.14% based on the number of questionnaires distributed.

3.2 Questionnaire Design

This study includes five constructs, and they are use of coercive power, use of non-coercive power, cooperation climate, trust climate, and buyer’s commitment. Scale items to measure supplier’s use of coercive power, use of non-coercive power were adopted from Leonidou et al., (2008). Relationship climate constructs of cooperation climate, trust and commitment were all adopted from Maloni and Benton (2000). Trust refers to one party’s confidence in honesty and integrity of the other partner (Anderson and Narus, 1990). The measurement items are designed to measure buyer’s perception of honesty and integrity of the supplier, that is, buyer’s trust on the supplier. Commitment refers to the feeling of being emotionally impelled to maintain a long-term relationship (Benton and Maloni, 2005). Being same as the constructs of cooperation and trust, commitment is measured by capturing buyer’s willingness to develop long-term relationship with its supplier.

4. Analysis Results

The partial least squares method is used to analyze the research framework. Industry of focal companies and the number of employees are used as control variables to control the variances derived from different industries and firm’s scale.

4.1. Convergent and Discriminant Validity

Although all the constructs have been assessed for their unidimensionality in Section 3.2, this does not guarantee an acceptable measurement model (Lee, 2001). Convergent and discriminant validity are tested accordingly.

In PLS, alternative ways of judging multiple-item consistency are used. The methods look at (1) the reliability of the individual items that make up the measures (2) composite reliability of the items as a group and (3) the average variance extracted form the manufactured by each of the items (Fornell and Larker, 1981). Table 1 shows the summary of convergent validity checks. Individual item reliability is assessed using the item’s loading on the production. 0.7 is the suggested minimum level for items loadings (Fornell and Larker, 1981). Composite reliability assesses the inter-item consistency, which should have a minimum value of 0.7. All of the scales demonstrated acceptable stability on this basis. The third standard for reliability is that the average variance extracted (AVE) from the production by the items should exceed 0.5 so that the items share at least half of their variance with the production. All scales performed acceptably on this standard. Therefore, the measures in this study demonstrated adequate support for convergent validity.

4.2. Hypotheses Testing

Path coefficients of the structural model are illustrated in Figure 2. All of paths were significant except the path between use of coercive power and trust.

Given the loadings in Figure 1, H1a was supported ( $=0.252$, $t=-2.42$), that is, supplier’s use of coercive power hurts cooperation climate between buyer-supplier relationships. However, H1b was not supported ( $=0.135$, $t=-1.59$). Although the relationship direction is consistent to our prediction in the hypothesis, the use of coercive power had no significant effect on trust.

H2a ( $=0.372$, $r=3.92$) and H2b ( $=0.466$, $r=2.37$) were both supported. Use of non-coercive power will promote cooperation climate and trust.
between buyer and supplier. In the contrary to using coercive power, it is a positive way to exercise power. It is noted that the impact of use of non-coercive power on trust is higher than that on cooperation climate and trust has significant effects on cooperation. It can be inferred that trust partially mediates the effects of exercised non-coercive power on cooperation climate. H3 was also supported in this model (β =0.354, t =3.76). Exercised power explained considerable amount variance of cooperation climate and trust with $R^2=0.339$ and 0.278, respectively.

Given the loadings between commitment and its predictors, cooperation climate and trust, it is found that both two constructs have positive and significant effects on buyer’s commitment. The analysis results supported H4 (β =0.455, t =3.48) and H5 (β =0.430, t=2.33). Higher level of cooperation climate and trust within a relationship lead to buyer’s higher commitment and cooperation climate had higher effect. Cooperation climate has higher loading on buyer’s assessment of commitment than does trust. Two predictors provide an $R^2$ of 0.242 for commitment. Overall, the conceptual model gained considerable support from the data.

Table 1. Convergent validity checks of constructs

<table>
<thead>
<tr>
<th>Latent variables</th>
<th>Loadings</th>
<th>Composite Reliability</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of coercive power</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UCP1</td>
<td>0.746</td>
<td>0.84</td>
<td>0.664</td>
</tr>
<tr>
<td>UCP2</td>
<td>0.922</td>
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<tr>
<td>UCP3</td>
<td>0.903</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of non-coercive power</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNP1</td>
<td>0.871</td>
<td>0.92</td>
<td>0.580</td>
</tr>
<tr>
<td>UNP2</td>
<td>0.915</td>
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<td></td>
</tr>
<tr>
<td>UNP3</td>
<td>0.862</td>
<td></td>
<td></td>
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<tr>
<td>Cooperation climate</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CC1</td>
<td>0.749</td>
<td>0.88</td>
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<td>CC2</td>
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<td>Trust</td>
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<tr>
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<td>0.86</td>
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<tr>
<td>TR2</td>
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<td>TR3</td>
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<tr>
<td>Commitment</td>
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<td></td>
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<tr>
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<td>0.91</td>
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<tr>
<td>CM2</td>
<td>0.829</td>
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<td></td>
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<tr>
<td>CM3</td>
<td>0.933</td>
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</tbody>
</table>

5. **Discussion and Conclusions**

The associations among exercised power, cooperation climate, trust and commitment are studied in this study. Assuming cooperation and trust are the desired climate in buyer-supplier relationship, this study suggests that exercise non-coercive power has positive and significant effects on cooperation and trust. This usage of power should be used whenever possible. When using non-coercive power, both the cooperation climate level and trust will be improved. The results are similar to the finding in Benton and Maloni (2005), Maloni and Benton (2000), Dapiran and Hogarth-Scott (2003) and Skinner et al. (1992).

On the contrary, excised coercive bases of power were found to decrease the level of cooperation climate in the relationship. It is noted that use of coercive power has no significant influence on trust. We proposed several reasons in cosmetics manufacturing context. Respondents reported that the level of coercive power usage is not as high as that of the non-coercive power usage. The low usage frequency might not sufficient to catch respondents’ attention or the extent of punishment.
might not severe enough to erode trust between buyer and supplier. Usually, suppliers give punishment for contract issues with legitimacy, so the buyer won’t think punishment is unreasonable. When the power is exercise under justice, it will be acceptable for the other side.

In the proposed model, trust influences cooperation and commitment positively and significantly. Trust leads to cooperation. Firms would not undertake cooperation without a sufficient level of trust initially (Johnston et al., 2004) and higher trust will results in higher cooperation. This result is also supported by Brunard and Kleiner (1994) and Kumar (1996).

Trust leads to commitment as well. The result is consistent with Leonidou et al. (2008) and trust-commitment theory (Morgan and Hunt, 1994). Frequent face-to-face contact, sharing of vital and proprietary information, exchanges of personnel and exposure to opportunistic behaviors, which derive trust, will help to increase buyer’s commitment in staying and continuously investing in the relationship.

Cooperation climate is also positively related to commitment. When supplier invests more in cooperation, buyer will reward the supplier in accordance to basic concept of social exchange theory. Commitment is a typical form of reward to retain a buyer-supplier relationship. Cooperation helps buyer and supplier to achieve win-win situation, as mentioned in Kumar et al. (1995).

In the future, strategies to increase cooperation between suppliers and buyers will grow in important. This study provides some initial guidance toward more cooperative relationships. Several strategies can be inferred from the testing results. From the testing result, it is found that the degree and source of power should be carefully used by the supplier in buyer-supplier relationships, because its direct and indirect effects on atmosphere constructs can lead to either harmonious or problematic results. Exercised coercive power reduces cooperation but exercised non-coercive power increases both cooperation climate and trust in the relationships. Only non-coercive powers are conductive to healthy buyer-supplier relationships.

References


