

## **Non-Trading Relationships**

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### **Abstract**

Non-trading relationships are an important part of the fabric of a network. These relationships exist between competitors, as well as in various ownership structures (such as, subsidiary-parent, co-owners, siblings etc) and in authority relationships (government organisations, unions, and associations). Non-trading relationships also exist between business which provide complementary activities in the same industry, for example, plumbers and electricians in the building industry. Despite the ubiquity of the non-trading relationship little is known about them. This paper seeks to address this in an empirical study of relational mechanisms (and in particular information exchange) in non-trading relationships.

### **The Nature and Importance of Non-Trading Relationships**

Not all important business relationships involve economic exchange. Firms may be linked through exchanges of information, personal ties of staff, past trading and/or a range of other factors. While the greater focus of interfirm relationship research has been on the trading relationships, the non-trading relationship (NTR) is also important, e.g. partners in alliances, cross-referring/sharing customers, providing key business intelligence. However rather than good/services and money, different resources will be needed to sustain and manage these relationships. Theories of social exchange (Blau, 1964), suggest that admiration, information and obligation might drive NTRs and similarly resource theorists such as Foa and Foa (1972) propose love, status and information are central. These commonalities are in line with interaction theory (Håkansson, 1982) which argues that all business relationships comprise the exchange of information and social interaction. In line with this we agree with Easton (1992, p. 12) that “information is the common currency of interfirm relations” and more specifically, that such exchange constitutes the primary mechanism through which non-economic exchange is maintained (Easton and Araujo, 1992). We agree but would turn the argument around, NTRs exist largely to trade information. Thus, this paper considers the informational properties of non-trading relationships. The results of a study focusing on NTRs comprise the bulk of the paper which concludes with a discussion of the implications for the management of these relationships.

There is considerable work that explores the relational context in which trading occurs, based on the foundation work of the interfirm relations research of the 1980s and early 1990s (Anderson and Narus, 1990; Håkansson, 1982; Morgan and Hunt, 1994). Cooperation, trust, opportunism and commitment consistently emerge as important drivers of buyer-seller relationships. Extending theories of social exchange and resources of a firm we contend that these same factors will be important in relationships where buying and selling does not occur and will drive the exchange of information, however the relationships between them and hence the character of the relationship may be different.

Cooperation is the behaviour and affect embedded within the joint and collaborative working together for business and social goals (Anderson and Narus 1990, (Argyle, 1991), (Dahlstrom and Nuggaard, 1999),(Mohr and Nevin, 1990)Mohr et al. 1996). Committed relations include a mutual recognition of continuity and often involve mutual adaptation (Dwyer, Schurr and

Oh, 1987, p. 19), (Ford, 1980; Håkansson, 1982). Trust is the cognitive and emotional reliance upon exchange partners and is based upon competence, motivation and credibility (Doney and Cannon, 1997; Moorman, Deshpandé and Zaltman, 1993; Morgan and Hunt, 1994; Young and Daniel, 2003). Opportunism is the deliberate violation of expected behaviour and/or promises (John, 1984, p. 279).

Commitment is frequently cast as the outcome of favourable relational interactions such as trust (Crotts and Turner, 1999; Wilson and Vlosky, 1998) and cooperation as emerging from patterns of commitment and trust within the relationship (Morgan and Hunt, 1994). There is considerable work which suggests opportunism will have a damaging effect on trust (Hallén, 1989; John, 1984; Morgan and Hunt, 1994). It is our contention that these relationships will hold in non trading relationships therefore we hypothesize:

- H1: Commitment has a positive impact on cooperation
- H2: Trust has a positive impact on cooperation
- H3: Trust has a positive impact on commitment
- H4: Opportunism has a negative impact on trust

We assert that differences in non trading relationships will emerge (at least in part) from the nature and impact that information exchange plays. Relational norms have been established as significant in the development of interfirm relationships. We define information exchange norms as “a bilateral expectation that parties will proactively provide information useful to the partner” (Heide and John, 1992, p. 35). In line with an emerging body of work (Brown, Dev and Lee, 2000; Joshi and Stump, 1999) which examines the significance of relational norms on commitment, trust and opportunism within the relationship we hypothesize that in NTRs:

- H5: Information exchange norms have a positive impact on commitment
- H6: Information exchange norms have a positive impact on trust
- H7: Information exchange norms have a negative impact on opportunism

In examining the nature of information exchange itself, we distinguish between the transfer activity and the resource which is transferred (Axelsson and Easton, 1992). Following Reve (1981) we therefore consider the complexity, variability, frequency and regularity of the information exchange activity and the complexity, variability (or novelty), diversity and scope of the information resources. We hypothesize that:

- H8: Information exchange resource/activity intensity will have a positive impact on the formation of information exchange norms.

### **Study of Information Exchange in Relationships**

Data were collected using self-administered questionnaires as part of a larger project examining a broad cross section of interfirm relationships. Informants were identified using personal networks and the focal relationship was randomly selected from a set of four relationships where the focal firm was (i) a seller, (ii) a buyer, (iii) a competitor, and (iv) engaged in another non-trading relationship. Here we focus on 88 non-trading relationships, including relationships between competitors (n=32), ownership relationships (subsidiary-parent, co-owners, siblings etc, n=19) as well as other relationships (government

organisations, unions, professional associations, same industry, n=37). Table 1 shows sample items for the relational context variables, information norms and information resource and activity intensity.

Data was analysed using smartPLS (Ringle, Wende and Will, 2005). Partial least squares (PLS) based procedures aim to maximising the predictive power of the model (c.f. AMOS/LISREL where the goal is to account for observed covariances) (Fornell and Bookstein, 1982). These models make few distributional and sample assumptions and are advisable when samples sizes are small and/or when formative measures are used in combination with reflective measures (Chin, 1998; Fornell and Bookstein, 1982). In PLS the measurement and structural models are simultaneously evaluated. Here we consider the measurement model. Sample items, composite reliability (CR) and average variance extracted (AVE) are summarized in Table 1, the full measurement model (outer loadings and weights and relevant t-statistics) are available from the corresponding author.

**Table 1: Measurement Model/Operationalisation**

Coefficient or Weight	T-Test	Items
<b>Cooperation (Reflective, CR = 0.8760, AVE = 0.5445) – Sample item</b>		
0.8280	23.22	My firm/Firm X is generally very fair in working with other
<b>Trust (Reflective, CR = 0.9263, AVE = 0.7164) – Sample item</b>		
0.9284	78.48	My firm/FIRM X behaves in a trustworthy manner towards OTHER
<b>Commitment (Reflective, CR = 0.8991, AVE = 0.6016) – Sample item</b>		
0.8811	29.27	My firm/FIRM X has agreed to make decisions that benefit OTHER
<b>Opportunism (Reflective, CR = 0.8760, AVE = 0.5445) – Sample item</b>		
0.8227	23.59	Sometimes it is necessary to hold back information from OTHER to get things done
<b>Information Exchange Norms (Reflective, CR = 0.8697, AVE = 0.5751) – Sample item</b>		
0.8388	28.38	OTHER can always rely on being informed by my firm/FIRM X in areas of importance to them
<b>Information Exchange Transfer Activities (Formative)</b>		
0.6235	4.48	Less COMPLEXITY (Complex–Straight forward)
0.5117	2.98	Greater FREQUENCY (Infrequent exchanges–Frequent exchange)
0.4215	2.36	Greater REGULARITY (Irregular exchanges–Regular exchanges)
0.1930	1.40	Less VARIABILITY (Changes frequently–Changes infrequently)
<b>Information Exchange Transfer Resources (Formative)</b>		
0.9291	6.32	Greater SCOPE (Small in amount–Large in amount)
0.2704	1.01	Greater DIVERSITY (Similar in type– Different in type)
-0.1658	0.56	Greater VARIABILITY (Changes infrequently–Changes frequently)
-0.0037	0.01	Greater COMPLEXITY (Straight forward– Complex)

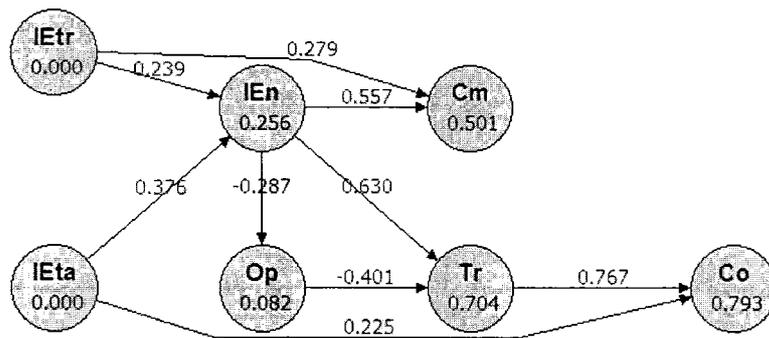
Note: Outer weights are used for formative indicators while outer loadings are provided for reflective measures. CR and AVE are available for reflective measures only.

As indicated in Table 1, each of the reflective measures has good reliability (CR = 0.85 to 0.93) and performs adequately in terms of variance extracted (AVE = 0.54 to 0.72). The formative measures do not perform as well. The outer weights for a number of the items are not significant. In particular, only the scope of information loads significantly on information exchange resources. The information exchange activity construct performs much better with only the variability of the exchange activity being not significant. In the final model all items were retain as they comprised a theoretically derived set. However, further work is required here to strengthen the operationalisation of these constructs.

Next the structural model was considered. This involved evaluating each of the hypothesised relationships as well as a number of alternative models. These alternative models included (i)

alternative causal paths and (ii) unmediated effect of information exchange activities and resources on other aspects of the relationship. Full details of this analysis are available from the author(s). Figure 1 shows the final structural model, with relevant path coefficients and r-square statistics for each of the endogenous variables (all paths are significant,  $|t| > 3.02$ ,  $df = 199$ ).

**Figure 1: Final Structural Model: Path Coefficients and R-Squared Statistics (inside constructs)**



Note: Path coefficients are based on the original sample. In the bootstrapping procedure path coefficients remained similar in magnitude and direction. All indicated paths are significant at  $p > 0.05$ .

As shown in Figure 1, nearly 80% of the variation in cooperation is explained by the structural model. However, only trust has a direct positive impact on cooperation (H2, supported). The hypothesised effect of commitment on cooperation is not supported (H1). It is evident that trust plays a crucial role in the development of a cooperative orientation between firms engaged in non-trading relationships. This contrasts with the study of distributor relationships conducted by Morgan and Hunt (1994) where commitment was found to positively impact cooperation. Information exchange activity intensity was also observed to have an unanticipated direct positive impact on cooperation (H8a, none of the other possible direct effects were significant). As information exchange activities became more frequent and regular, cooperation increased. This has important implications for the management of NTRs, offering managers a specific mechanism for influencing these relations.

The model accounts for a great deal of the variation in commitment observed in the sample (approximately 50%). As hypothesised information exchange norms are important predictors of commitment (H5, supported). However, the predicted connection between trust and commitment was not supported (H3) nor was there evidence of an alternative causal path (H3a, between commitment and trust). An unanticipated direct effect was observed between the intensity of information exchange resources and commitment (H8a, none of other possible direct effects were significant). As information exchange resource intensity increased (i.e. increased in scope) then the level of commitment within the relationship increased. It is possible that the more intense the information resource the more valuable it is to exchange partners thus encouraging greater investment/commitment to the relationship.

Trust forms a key part of the model of non-trading relationships. The structural model explains approximately 70% of the variation in trust, with significant direct positive effects from information exchange norms (H6, supported) and negative effects from opportunism

(H4, supported). This confirms some of the mechanisms reported by extant empirical work for non-trading relationships (Friman *et al.*, 2002; Morgan and Hunt, 1994).

Although information exchange norms have a direct negative impact on opportunism (H7, supported) the overall structural model explains very little of the variation in opportunism (less than 10%). Clearly, information exchange norms mitigate against opportunism but do not explain its presence, *per se*. Importantly, the intensity of information exchange activities and resources did not directly impact on opportunism.

As hypothesised information exchange resource and activity intensity has a direct positive impact on information exchange norms (H8, supported). However, in addition to the indirect impacts of resources and activities on the broader relationship, direct effects were also observed (as previously discussed). Most research in trading relationships deals with the role of relational norms on the relationship but not the formation of relational norms. Here we find that information exchange plays at least some part in this process for the non-trading relationship. Overall, some 25% of the variation in norms can be attributed to variations in the intensity of information exchange activities and resources.

### **Implications and Conclusion**

It is striking is that despite the absence of economic-based activity the substance of non-trading relationships is substantially the same as that reported in the literature for relationships in which buying and selling occurs. In this study most of the hypothesised relationships are supported and many of the relational mechanisms reported for trading relationships have been found to apply to non-trading relationships. Points of departure from trading relationships are found in respect to the lack of connection between (i) the commitment and cooperation and (ii) trust and commitment.

In respect to the frequently researched connection between trust and commitment (Friman *et al.*, 2002; Morgan and Hunt, 1994). We found no connection between these two relational constructs. The hypothesised relationship was not supported nor was there evidence of an alternative path which reversed the causal direction. The connection between commitment and cooperation is less well researched, although the extant literature provides evidence of a positive causal path from commitment to cooperation (Anderson and Weitz, 1989; Morgan and Hunt, 1994). The hypothesised relationship was not significant, nor was an alternative relationship which reversed the causal direction. We speculate that in non-trading relationships commitment and cooperation/trust may be distinct relational outcomes each being driven (though somewhat differently) by precursor process within the relationship (*esp.* relational norms, information exchange and so forth)

Of particular significance to the manager engaged in non-trading relationships are the observed direct connections between the intensity of information exchange activities on cooperation and information exchange resource on commitment. These unanticipated direct impacts provide an important means by which the manager engaged in non-trading relationships may seek to affect relational outcomes. Further research providing a direct comparison of the performance of trading and non-trading relationships is indicated.

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