ORGANIZATIONAL CULTURE AND RELATIONSHIP SKILLS

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Abstract:

While both the strategic management and the network literature recognize the importance of inter-firm relationships for explaining competitive advantage, the question why firms differ in their ability to benefit from these relationships is rarely addressed. This paper aims to begin to fill this gap in the literature. We argue that organizational culture is an important factor influencing the relationship skills of a firm, defined as a firm’s ability to manage its ties with other firms, whether these are customers, suppliers, or service providers. We assume relationship skills to be especially relevant for the formation and maintenance of close and durable transaction ties. We test our model on a dataset of 127 Dutch inter-firm relations and find general support. Specifically, we find that firms with organizational cultures characterized by an orientation towards stability and predictability, a positive orientation towards innovation, and not characterized by a strong focus on immediate results, score high on relationship skills. Relationship skills, in turn, are found to have a positive influence on the outcomes of inter-firm relationships in terms of learning, achieving innovations and gaining new contacts, but not in terms of immediate (financial) results.

Keywords: organizational culture, inter-firm relationships, networks, alliances

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1. INTRODUCTION

Both internal and external phenomena have been identified in different strands of the literature as important for understanding the sources of competitive advantage of firms. The resource-based view of the firm explains the competitive advantage of firms on the basis of their unique constellation of their physical, human, and organizational resources (Barney, 1991). Resources identified as especially valuable are those that are rare, durable, imperfectly imitable, and nontradable (Barney, 1991, 1995; Wernerfelt, 1984; Dierickx and Cool, 1989). The organizational culture of a firm is supposed to belong to this type of resources (Das and Teng, 2000; Barney, 1986). In addition, in the resource-based view the idea has recently been developed that the potential of a firm to create competitive advantage depends not only on internal resources but also on external relationships (Rumelt, 1984; Dyer and Singh, 1998; Kotabe et al., 2003). This approach suggests that a firm’s critical resources may span firm boundaries and may be embedded in inter-firm routines and processes (Dyer and Singh, 1998, 661).

In a similar vein, the alliances and network literatures have shown that successful external relationships are critical to the survival and success of organizations. Firms that are embedded in a network of inter-organizational relationships have better access to technologies and resources, and thus improved opportunities for learning, as well as increased legitimacy. Although embeddedness undeniably also entails constraints (Adler and Kwon, 2002; Uzzi, 1997; Portes and Sensenbrenner, 1993; Yli-Renko et al. 2001), it is generally regarded as something that helps organizations enhance their competitive position (Dyer and Singh, 1998; McEvily and Zaheer, 1999; Nohria and Eccles, 1992).
Despite this recognition, however, the question why firms differ in their ability to benefit from these factors remains largely unanswered. We tackle this issue by focusing on the relationship between internal characteristics, more in specific organizational culture, and the relationship skills of firms. We define relationship skills as the ability of a firm to manage its inter-firm relationships. We expect relationship skills to be especially relevant for the maintenance of close and durable relationships that include goals like learning and innovation. In our approach organizational culture is taken to influence relationship skills, which in turn have an effect on relationship outcomes.

Our model linking organizational culture, relationship skills and relationship outcomes is tested on 127 inter-firm relationships between Dutch SMEs. The majority of these links are transaction relations between a focal firm and its customers, suppliers, and service providers. The empirical findings largely confirm our model. Firstly, we find that certain aspects of organizational culture are indeed associated with the competence of an organization to manage its external relations. Secondly, we find confirmation for our expectation that relationship skills are important for realizing advantages from external relationships that go beyond immediate (financial) results. In other words, our study suggests that effective management of close and durable inter-firm ties requires relationship skills that are associated with specific organizational culture characteristics.

The outline of this paper is as follows. First, we sketch the theoretical background of our research. We conclude that both the resource-based view and the literature on inter-firm relationships suggest a relationship between internal characteristics and effective relationship management, and that the concept of organizational culture captures crucial aspects of these internal characteristics. Based on our reading of the literature, we posit our model linking organizational culture to inter-firm performance through relationship skills. Second, we describe
our data and empirically test our model. We conclude with a discussion of our findings and with suggestions for future research.

2. THEORETICAL BACKGROUND

In this section we describe the theoretical background against which we develop our ideas. Building on two well-established theoretical frameworks we identify an important gap in the literature concerning the link between a firm’s internal resources and its ability to benefit from external relationships. The two perspectives are the resource-based view of the firm (RBV) and the networks and alliances literature on inter-firm relationships. After describing this gap, we concentrate on the few contributions that have made some initial steps towards exploring the issue. Building on these contributions we discuss the relevance of organizational culture for what we call the relationship skills of a firm. We next formulate two broad hypotheses, which we subsequently test.

2.1 Resource based view

According to the RBV, the competitive advantage of firms derives from the unique constellation of resources and capabilities they control. A firm’s resources and capabilities include all of the financial, physical, human, and organizational assets used by a firm to develop, manufacture, and deliver products or services to its customers (Barney, 1995). The resources that are found to be especially valuable are those that are rare, imperfectly imitable, imperfectly mobile and imperfectly substitutable (Barney 1991; 1995; 2001; Barney et al. 2001; Peteraf, 1993). Imperfect mobility refers to the difficulty or even impossibility of moving certain
resources from one firm to another. Imperfect imitability and imperfect substitutability refer to the barriers for obtaining similar resources from elsewhere.

Recently, the RBV has been extended to the firm’s external relationships (Dyer and Singh, 1998). Building on the RBV, Dyer and Singh (1998) propose a relational view that holds that competitive advantage does not only come from firm-level resources, but also from difficult-to-imitate capabilities embedded in dyadic and network relationships. In other words, the potential of a firm to create competitive advantage does not only depend on its own resources, but also on its relationships with other firms. ‘Thus, idiosyncratic inter-firm linkages may be a source of relational rents and competitive advantage’ (Dyer and Singh, 1998: 661).

The recognition that competitive advantage does not only depend upon a firm’s internal resources but also upon its external relations is an important and relevant extension of the RBV. The question that follows from this extension, however, and which has thus far been scarcely answered in the literature, is why some firms are better able to maintain and benefit from external relationships than other firms. This question is important if one is to account for differences in competitive advantage stemming from external relationships. Most research, however, focuses on the characteristics of existing relations to explain competitive advantage. For example, Rowley et al. (2000) ask the question how firms should shape their network of strategic alliances in the steel and semiconductor industry, focussing on the strength of ties, i.e., strong or weak ties, or a combination of both. But they do not shed light on how firms manage inter-firm ties, or on the factors explaining why some firms benefit more from their relationships than others.

A similar criticism applies to the resource-based theory of strategic alliances proposed by Das and Teng (2000). These authors examine the resource profiles of individual firms that tend to encourage the formation of strategic alliances. However, when claiming that firm differences in alliance proactiveness can be ‘accounted for by the firms’ resource characteristics’ (Das and
Teng, 2000, 39), Das and Teng suggest strategic motives rather than firm-specific characteristics. It is clear, however, that the strategic motives for firms to cooperate or ally are not the same as the resources that explain their ability to do so. Indeed, though the motives for firms to ally or cooperate more intensively with other organizations may be similar, firms may differ in their capability of actually doing so. The general lack of research on the relationship between endogenous organizational variables and exogenous context variables has led Aragon-Correa and Sharma (2003) to call for a contingency perspective in the RBV when assessing the competitive value of organizational resources and capabilities.

2.2 Inter firm relationships

The importance of successful external relationships has led many researchers to identify the distinctive features of close and durable network ties. Three features are mentioned in many contributions to the network literature (e.g., Gulati and Gargiulo, 1999; Powell, 1990; Uzzi, 1996), as well as in the marketing channel or relationship marketing literature (e.g., Mohr and Spekman, 1994; Naudé and Buttle, 2000; Sivadas and Dwyer, 2000; Wilson and Jantrania, 1996): trust, fine-grained information exchange, and joint problem solving. An organization can be said to be ‘embedded’ if the relationships with its transaction partners (buyers, sellers, service providers, as well as competitors with whom the firm cooperates in the context of, for example, research and development) are recurring and characterized by the above-mentioned features.

Similar to the resource-based literature, the network literature has neglected the question why some firms are better able to benefit from embedded ties than other firms. The network literature focuses largely on the general network context and its consequences, rather than on the antecedents of network embeddedness and their differential impact on firm competitiveness. Gulati (1999), for example, explains the proclivity of firms to enter into new alliances on the
basis of their existing network positions. Uzzi (1996) points to third-party referral networks and previous personal relations as sources of further embeddedness. Both contributions use existing network characteristics (at the organizational or individual level) to explain newly emerging network characteristics. Although these approaches reveal path dependencies in network development, they shed no light on factors driving the initial differentiation of embeddedness or the ability to benefit from embedded relationships. It is obvious, however, that if all organizations in a particular field would become equally embedded, and capable of reaping the benefits thereof to the same extent, network embeddedness would have no consequences for their relative competitive positions. As the available literature suggests that embeddedness variance does, in fact, influence competitiveness, this issue must be addressed.

To a certain extent, one may assume that firms are able to shape and deliberately design their network relations (Hung, 2002; Lorenzoni and Lipparini, 1999). Yet, factors at the firm level - beyond managerial deliberation - may also cause differences in network embeddedness. The alliance literature offers a number of important clues in this respect. Recent research in this tradition not only points to "soft" factors such as trust, mutual commitment, and altruism as important for alliance success (Heide and Miner, 1992; Hofmann and Schlosser, 2001), but also suggests that the success of inter-firm collaborations may be a function of partner characteristics (Sarkar et al. 2001a; Hitt et al. 2000; Madhok, 1995; Saxton, 1997), as well as of of pledges (commitments) (Anderson and Weitz, 1992) and norms (Heide and John, 1992).

Despite this recent attention in the alliance literature to the role of alliance management (Das and Teng, 1999; Spekman et al. 1998, Ireland et al. 2002, Kumar and Andersen, 2000), in general, alliance studies have neglected variables pertaining to alliance management and the interaction between alliance managers (Spekman et al. 1998). The focus of this literature tends to be still very much on a restricted set of variables: the importance of goal setting, partner
selection, risk reduction, evaluating similarities and differences in partners’ structures, and specifying how alliance conflicts are to be managed (Ireland et al. 2002). Though relevant, it does not answer the question why some firms are better able to manage and, as a result, to benefit from external relationships than others.

2.3 Organizational culture and relationship skills

The necessity of examining organizational features that influence inter-firm relationships has been recognized recently in the literature (Johnson and Sohi, 2001). It is argued that the management of an inter-firm relationship depends not only on the particulars of this relationship, but also to a great extent on firm-level characteristics or predispositions (Ibid.). It has also been emphasized that organizational-level phenomena have to be addressed in their own right, for they can not be completely reduced to the level of individual actors within the organization, as ‘organization members interact not only as individuals, but also as actors performing organizational roles’ (Lane and Lubatkin 1998, 465).

Despite these observations, few studies focus squarely on organizational characteristics in relation to relationship skills. In this respect, Spekman et al. (1998) observe that the marketing literature tends to focus on the processes that are the precursors to alliance formation, whereas the management and strategy literature emphasizes, instead, the product of the alliance and examines notions of strategic intent and the basic steps through which an alliance progresses. Below we briefly review the few studies that focus on organizational characteristics that help to explain why firms differ in their ability to benefit from close and durable inter-firm ties. Our most important observation from these contributions is that while various factors are identified and divergent labels are used, the role of organizational culture in maintaining and profiting from inter-firm relationships forms an important thread running through all of these contributions.
An important contribution in this respect is Ritter’s (1999) paper, which defines ‘network competence’ as ‘the particular skill that allows companies to handle, use and exploit single relationships and whole networks’ (1999: 467). This construct is measured as the degree of network management task execution and the degree of network management qualification possessed by the people handling a company’s relationships. Studying a sample of German companies operating in the mechanical and electrical engineering, measurement technology, and control engineering sectors, Ritter found that four organizational antecedents account for a company’s network competence: the availability of (financial, physical, personnel and informational) resources, the network orientation of human resource management, the integration of intra-organizational communication, and the openness of the corporate culture. Three of the four antecedents of network competence distinguished by Ritter are related to organizational culture, broadly defined.

Similarly, Day et al. (1998) argue that the creation of a sympathetic internal culture is an important factor in the success of relationship marketing. A sympathetic internal culture is perceived in this study as being innovative and entrepreneurial, while at the same time being focused on the characteristics of relationship marketing (i.e. trust, commitment, intense level of communication, etc). In a similar vein, Brock Smith (1997) studies ‘selling alliances,’ collaborations in which complementary sales organizations join forces. Open communication, trust, and perceived interdependence are found to be important determinants of the effectiveness of selling alliances. Factors like trust, cooperation, open communication, constructive conflict resolution, commitment and fairness were emphasized in company interviews as important ingredients of a ‘partnering culture’ (Brock Smith, 1997, 155). A ‘partnering culture,’ in turn, can be regarded as an aspect of organizational culture.
Takeishi (2001) explores why some firms benefit more than others from outsourcing and collaborative supplier relations. Using data from buyer-supplier relations in the Japanese automobile industry, Takeishi concludes that an integrated problem-solving process of supplier and buyer, together with frequent face-to-face communication between the two firms, facilitates successful collaboration. Interestingly, Takeishi (2001) also finds that integrated problem solving by buyer and supplier is related to effective internal coordination inside the automaker’s organization. Takeishi thus points to an organizational characteristic (internal coordination) as an important factor for success in inter-firm collaboration. Referring to the importance of organizational culture, he points to the vital role played by powerful project leaders in cross-functional, intra-organizational and inter-organizational coordination and in problem solving. This strategy worked at some automakers, but not at those with ‘traditional values,’ where project leaders could not yield sufficient power (Takeishi 2001, 418).

Hewett et. al. (2002) explored buyer-seller relations in the manufacturing sector. They found that those buyers with an organizational culture characterized by a high degree of ‘smoothing’ activities and internal integration were more often in relationships with sellers responding with a repurchase intention to trust and commitment than were buyers with an organizational culture focused on external positioning and competition. Thus, certain cultural orientations seem to reinforce the quality and positive outcomes of inter-firm relations. Spekman et. al. (1998) use the word ‘alliance mindset’ to denote the required capabilities of alliance managers. Das and Teng (1999) refer to the necessity of firms to develop an orientation towards managing alliances and refer to a firm’s alliance orientation. Hastings (1993) talks about the mentality of partnership, which according to him is a new skill that has to be learned especially in organizations that have historically had at best arm’s length market relations. He suggests that
within a collaborative framework a set of norms about joint problem solving and alliance formation will be very important.

In essence, these studies suggest that various firm-level characteristics account for a firm’s relationship skills. At the heart of the identified firm-level characteristics, we find what can best be described as elements of organizational culture, conceptualized as organizational practices. This conceptualization is in accordance with the “etic” stream of cultural research, which argues that organizational culture resides mostly in organizational practices (also called artifacts, expressive symbols, or forms). Etic research treats organizational culture as something an organization "has “ and is concerned with comparison and cultural change (i.e. Hofstede et al., 1990; Chatman and Jehn, 1994; and Denison, 1996). The second important strand in cultural research, the “emic” view, argues that organizational practices represent the more superficial levels of organizational culture and instead suggests the ‘deep’ levels of meanings, beliefs, and values to be the important level of analysis in cultural research. Emic research supports a synthetic approach and treats organization culture as something an organization "is" (i.e. Schein, 1999; Smircich, 1983). The pleas for integration of these two main strands of cultural research (Morris et al., 1999) or for triangulation (Hofstede, 2001) and the fact that much empirical research, to a greater or lesser extent, explores the deeper meanings of the identified practices (i.e. Martin, 1992; Trice and Beyer, 1984; Wuthnow and Witten, 1988) leads us to suggest a broad definition of organizational culture. We thus propose a definition of organizational culture that encompasses not only values and beliefs shared by organization members, but also less value-laden perceptions of organizational processes typical of a given organization (Hofstede et al., 1990). Such a conceptualization would encompass all culture-related intra-organizational characteristics mentioned in the literature discussed above.
Compared to other organizational traits organizational culture is both specific to an organization (Barley, 1983; Gregory, 1983; Smircich, 1983) and relatively constant (Bloor and Dawson, 1994; Christensen and Gordon, 1999; Leonard-Barton, 1992). This makes culture an attractive candidate if we want to identify organizational characteristics that can be linked to relationship skills. Furthermore, the behavior of organization members will be driven by ‘the norms prescribing and sanctioning these behaviors and the values in which the norms are embedded’ (Katz and Kahn, 1978, 43), also when they are dealing with other organizations. Organizational culture will thus influence inter-organizational relations.

Organizational culture also belongs to the firm-level resources identified as rare, durable, nontradable and nonimitiable by the RBV. According to the RBV, among the factors making a resource nonimitable are tacitness (Reed and De Fillippi, 1990), path dependence and social complexity (Barney, 1991; Reed and De Fillippi, 1990). All of these features are integral to organizational culture. Indeed, according to Barney (1995) socially complex resources and capabilities such as organizational phenomena like reputation, trust, friendship, teamwork and culture, while not patentable, are difficult to imitate and, thus, contribute to creating sustained competitive advantage. Moreover, since organizational resources, such as culture and learning capacity are deeply embedded in a firm, they are argued to be characterized by imperfect mobility’ (Das and Teng, 2000, 43).

2.4 Organizational culture, relationship skills, and relationship performance

Based upon this theoretical discussion we arrive at two general hypotheses. First, we assume a link between organizational culture and relationship skills, and secondly, we hold that relationship skills influence relationship performance. Relationship performance should not be confused here with overall firm performance. Overall firm performance depends on a large
number of variables, e.g. debt structure, degree of centralization, industry life cycle, etc., other than inter-firm relationships. Relationship performance in our model refers to the benefits that a firm derives from a specific inter-firm relationship.

Moreover, it seems reasonable to assume that relationship skills are not equally important for all types of inter-firm relationships. We expect that they are especially relevant for relationships that are more durable and close than arms’ length market relationships. As Uzzi argues, the formation of embedded ties is more important for deals in which the costs and prices are less important, and more tacit elements like quality and service are present. When discussing alliances, Das and Teng (1999) make a similar distinction between alliance partners with a short term orientation and those with a long term orientation. Partner firms with a short term orientation view co-operative agreements as transitional in nature and capable of delivering only quick and tangible results (cf. spot market relationship). On the other hand, partnering firms with a long term orientation view the co-operative venture as at least semi-permanent, and as a result more patience, investments in the relationship, and commitment are likely to be generated. Similarly, Kotabe et al. (2003) find that while the effect of ordinary technical exchanges on supplier performance improvement does not vary with relationship duration, the effect of higher-level technology transfer grows more positive as relationship duration increases.

However, tangible results obtained in the short run are also necessary to keep an alliance initiative going and to prevent the loss of support from the partner firms (Das and Teng, 1999). This means that long-term outcomes can only to a limited extent be emphasized over short-term results, and the difference between arms’ length relations and close and durable relations is a matter of degree. In view of this discussion, we will include both short-term (financial) results and more long-term performance of relationships in our model. The first type of results can be characterized as the ‘direct’ performance of the inter-firm relation: to what extent do the partners
achieve the goals they explicitly aimed at in the relationship? These results are relatively concrete and often of a financial nature. In contrast, ‘indirect’ results of a relationship are often unanticipated, and may exist in improved market information, innovation, and learning. The distinction between the two types of relationship performance is not absolute, and depends also on the nature of the relationship. For instance, in a research partnership learning and innovation are part of the ‘direct’ performance criteria of the relationship. But in the exchange relationships we focus on in this paper these achievements are like a supplement to the immediate exchange of goods and services, and hence can be characterized as part of the ‘indirect’ relationship performance. Since, as mentioned above, we expect relationship skills to be relevant especially for durable relationships, delivering more tacit results, we assume relationship skills to have a significant effect on indirect, but not on direct relationship performance.

While acknowledging there is a lively methodological and meta-theoretical debate on organizational culture (Schein, 1996; Denison, 1996; Hatch, 1993; Ashkanasy et al. 2000), that some have referred to as “war games” (Detert et al, 2000) we refrain from this discussion as it is beyond the scope of this paper. We decided to build on Detert et al. (2000) as they provided a synthesis of the general dimensions of organizational culture used most commonly in extant research. This is important given the lack of consolidation in this field. Detert et al. (2000) develop an overarching framework of cultural dimensions that can be used for culture studies. Their position is that by synthesizing the repeatedly emerging key components of culture an overview of the aspects of organizational culture most appropriate for inclusion in future studies can be obtained. Our own reading of the literature and other theoretical and empirical meta-contributions have corroborated the findings of Detert et al. (2000) (e.g., Denison, 1996; Xenikou and Furnham, 1996). Therefore we feel confident to build on Detert et al. (2000) and operationalize organizational culture by the following dimensions: results orientation, employee
or people orientation, open system/communication orientation, innovation orientation, stability orientation, and team orientation. These dimensions are based on large-scale empirical studies by Christensen and Gordon (1999), Hofstede et al. (1990) and O’Reilly et al. (1991).

We refrain from formulating specific hypotheses regarding the effects of separate dimensions of organizational culture on relationship skills. The reason for this is that while there is a strong logic suggesting an effect of organizational culture on relationship skills (as discussed above), existing studies offer few clues regarding the specific dimensions of culture that will or will not have an effect, or the direction of these effects. Hence our study is explorative with regard to this part of our model. The model is graphically represented in Figure 1.

We operationalize our model by testing if relationship skills are related to organizational culture, and subsequently if relationship performance is related to indirect relationship skills (but not to direct relationship skills).

Apart from the variables mentioned in the model in Figure 1, there are also a number of other factors that may influence relationship performance. We have in our analyses included indicators of these factors as control variables. The factors are: cultural fit, relationship advancement, partner importance, trust, size of the focal firm, and type of the relationship. We will discuss these very briefly.

Although we focus on the impact of characteristics of a focal organization’s culture on that organization’s relationship skills in our analysis, we cannot deny that the cultural fit between the partners may also be an issue. The fit between the organizational cultures of firms has been identified as important for alliance success (Douma et al., 2000; Medcof, 1997). Likewise,
cultural dissimilarity has been found to impede the development of trust in channel relationships
(Anderson and Weitz, 1989), and conflicts result from misunderstanding each other’s
organizational cultures (Brock Smith, 1997). In order to control for a possible effect of cultural
differences on relationship performance we will include indicators of cultural fit in our analyses.

In addition, we include an indicator of trust in our analysis. A substantial body of research
now exists (Fukuyama, 1995; Gambetta, 1988; Putnam, 1993; Ring and Van de Ven, 1992, 1994;
Tyler and Kramer, 1996) demonstrating that where relationships are high in trust, people are
more willing to engage in social exchange in general, and cooperative interaction in particular.
This may have an effect on relationship performance independent from relationship skills, thus
potentially confounding our analysis.

We also examine partner importance and relationship advancement. Partner importance
is an important control variable, for the more important a particular inter-firm relationship is, the
more a firm will be prepared to adapt to its partner and to expend the energy necessary to make
the relationship a success (Ping, 1997). Likewise, relationship advancement, defined as the
willingness to invest in a relationship and to view it in a long-term perspective (Ritter, 1999),
should be taken into account. These two factors together may be expected to have an important
impact upon a focal firm’s commitment to a relationship, and, hence, upon the likelihood of its
success, regardless of possible effects of organizational culture or cultural differences (Hewett et
al., 2002; Morgan and Hunt, 1994).

We further include a control variable for the size of the focal firm, as it is possible that
larger firms can manage and control relationships by other means than smaller firms can. For
instance, a large firm may be able to appoint ‘relationship promotors’ with a specific
responsibility for the maintenance of a relationship with a particular partner (Walter, 1999).
Conversely, larger firms may be less transparent to their partners because of higher barriers between departments, making them less attractive as partners.

Finally, we distinguish between relationships with clients, suppliers, service providers and other relations (all seen from the perspective of the focal firm), as firms may have different expectations and employ different criteria in managing and evaluating distinctive types of relationships.

3. EMPIRICAL TEST

3.1 Data and Method

The data we use for testing our model pertain to 127 relations between Dutch SME firms. These firms form a convenience sample from various industries, including biotechnology, the construction industry, food and agricultural products and service firms. Data collection took place between November 2001 and November 2002. In gathering relation-specific information, we used a ‘hub-and-spoke’ approach. We approached a boundary spanner in a firm (the ‘hub’) and asked for five important partners with whom the firm cooperates. Most of these relations (the ‘spokes’) were clients, suppliers, or service providers, in a smaller number of cases the relationship was of a different nature, e.g., a collaborative project with a competitor. Subsequently, we asked the boundary-spanning individual of the hub firm a number of questions relating to these relations. On average, these interviews lasted about one-and-a-half hour. In addition to this hub-and-spoke analysis, we asked the participating firms to cooperate in a study of their organizational culture. We measured organizational culture and relation-specific variables by means of a survey instrument developed on the basis of the existing literature. In the appendix we show the items used to operationalize the six dimensions of organizational culture we
distinguish. The dimensions and items were taken or adapted from Detert et al. (2000), Hofstede et al. (1990), Verbeke (2000), Christensen and Gordon (1999), and O’Reilly et al. (1991). For both surveys (the organizational culture and the relation-specific hub-and-spoke surveys) we pre-tested our questions in various groups of respondents. The organizational culture survey was pre-tested among colleagues from a Dutch university. The relation-specific survey that aimed at measuring characteristics of relations between firms was pre-tested through in-depth interviews with managers in the field. In addition, suggestions for improvement were made by a number of academic specialists on buyer-supplier relations. After these comments were included and the pre-analyses completed, we started the actual interviewing process. We interviewed 30 hub firms, asking each to identify five specific relations. Our analysis was performed on the 30 hub * 5 spokes = 150 relations, although missing data reduced the number of actual usable observations to a maximum of 127. The unit of analysis is the inter-firm relationship.

**Dependent variables**

In order to be adequate the operationalization of our dependent variable, relationship performance, must distinguish between the realization of immediate benefits (e.g., of a financial nature) and less direct benefits (e.g., in the form of enhanced innovation capabilities) (Hogan, 2001; Walter, 1999). We have, thus, operationalized *relationship performance* by measuring direct relationship benefits (such as the financial success of a specific relation, as perceived by boundary-spanning employees), and indirect relationship benefits. The latter was measured by exploring the degree to which a firm benefited in terms of increased competitiveness, whether the relation yielded new clients or contacts, and the extent to which the specific relationship resulted in learning. As we conceived of relationship performance as a multidimensional concept, we used factor analysis to test the multidimensionality and generate our dependent variable(s).
Applying factor analysis on the seven items for the 127 relations, we obtained two dimensions (see table 1 in appendix A). Whereas the first dimension, containing the last five items, captures the indirect performance of the relationship, the second dimension comes closer to a measurement of the direct performance measure of the relationship. While this latter construct includes the financial performance, the first dimension measures non-financial performance. The Cronbach alpha for the indirect relationship performance equals .74; for direct relationship performance this is only .57. However, given the explorative nature of our study, we decided to use the scale for direct relationship performance. The low alpha can be caused by the fact that the scale consists of only two items, and by the relatively small sample.

**Independent variables**

Following the existing literature described above, we operationalize organizational culture by means of six dimensions. The results of our analyses are shown in the appendix, in Table A7. Following Gordon (1991), we control for level of industry competition. The reason is that in industries with fierce competition, there may be less leeway for firms to develop a distinctive culture and to consistently translate this into organizational action. We measured industry competition by asking our key informant to indicate the perceived level of competition in the industry in which he is active.

Our hypothesis is that relationship performance depends on a firm’s relationship skills. As explained in our theoretical framework, we expect the relationship skills of a hub firm to be determined by dimensions of organizational culture. Following this line of reasoning, we operationalized the hub’s *relationship skills*, as perceived by the hub itself. We measure relationship skills by seven items, which do not fit into one scale. Factor analysis indicates that there are two dimensions (see Table A6). The results of the factor analysis led us to choose to
measure relationship skills by the four items loading on the first factor. This factor reflects various general aspects of relationship skills, whereas the second factor more specifically relates to the speed of response. The reliability of the scale based on the four items loading on the first factor (Cronbach’s alpha .72) is also superior to that of the second factor (Cronbach’s alpha .47).

**Control variables**

For the control variables we build on existing measures, and where possible we use multiple items. To check whether the selected items converged into one scale, we performed factor analysis and measured reliability by using Cronbach’s alpha.

*Partner importance* is measured by three items. Factor analysis shows that these three items fit into one scale, explaining 64% of the variation in the mean scores on these items. Calculating a measure for reliability, we come to a Cronbach’s alpha of .70 (see Table A2). The willingness of a firm to ‘invest’ in a relationship is measured by three items that form the construct *relationship advancement*. Factor analysis indicates that all three items fit into one scale, explaining 60% of the variation. These items and the corresponding factor loadings are shown in appendix A (Table A3). Cronbach’s alpha of this three-item-based dimension is 0.64.

To measure *trust*, we aimed to use five items, described in the appendix. Factor analysis indicated that these fit into two dimensions (see Table A4). The first dimension contains the second, third and fifth items, whereas the second dimension contains only the first and fourth items. Cronbach’s alpha for the first dimension is .69, whereas the second dimension scores .12. As the latter Cronbach’s alpha is very low, we choose to measure trust only by the three items included in the first dimension.

Next to partner importance, relationship advancement and trust, as indicated, we measure the degree of fit between the organizational culture of the hub and its partners. We asked two
questions. The first explored the general overlap in organizational culture. The second more specifically probed the fit between work procedures. This reflects the view that organizational culture is embodied in organizational practices. The two items are described in the appendix (Table A5). The results of the factor analysis indicate that both items can be included in one factor, measuring cultural fit. However, calculating Cronbach’s alpha yields a score of only .38. Given this low reliability, we choose to include the two separate items, rather than the constructed scale, in our analyses.

We also control for size by including the sales (in mln euros) of each hub firm. Due to pronounced skewness, we transformed this measure into a logarithmic term. Finally, we control for type of relationship by including dummy measures for the type of partner; i.e., client, supplier or service provider (the default category being that of ‘other’ relationships). The correlation matrix of all variables used in the analysis is shown in Table 1.

[Insert Table 1 about here]

As many of our variables are perception-based, we tested for common method bias by performing a factor analysis on all of the items mentioned above. This factor analysis does not indicate that there is a single background factor that could be seen as an indication of a common method influencing our results. In fact, the factor analysis results in eight factors with an eigenvalue above 1 and a first dimension explaining 24% of the variance, if we look at the non-rotated loadings. In addition, we performed a factor analysis and included the scores of additional background questions that were posed to each respondent in the hub firm (these variables were not used in the analysis reported in this paper). This makes sense when checking for a possible common method bias. Now we obtained 14 factors with eigenvalues above 1, with the first factor
explaining 15%. These results allow us to conclude that our results are rather robust and that the danger of a potential common method bias is limited.

3.2 Results

The statistical approach we take to test the above is a two-stage least-squares regression analysis. This procedure provides better estimates than standard linear regression models when errors in the dependent variable are correlated with the independent variable. In our model relationship performance and relationship skills may have a reciprocal effect on each other, as well-performing relationships may evoke different behavior from the partner firms. The two-stage least-squares regression procedure uses organizational culture dimensions that are conceptually independent from relationship performance to compute estimated values of relationship skills (the first stage), and then uses those computed values to estimate a linear regression model of the ultimate dependent variable, relationship performance (the second stage). Table 2 summarizes the results of our two-step procedure.

[Insert Table 2 about here]

In the first step we related a firm’s organizational culture to its relationship skills. Three of the six dimensions of organizational culture were found to be significantly related to relationship skills: innovation orientation and stability orientation (positively), and results orientation (negatively). The organizational culture dimensions employee orientation, communication orientation and team orientation are statistically unrelated to a firm’s relationship skills. The control variable level of industry competition had no significant effect. We used the model of the first stage of our analysis to derive an estimate of the relationship skills of our ‘hub’
firms. Subsequently in step two these estimated relationship skills were used as a predictor of
direct and indirect relationship performance. In this analysis we also included controls for the
type of relationship, size of the focal firm, relationship advancement, partner importance, trust,
and the similarity of organizational cultures and work procedures.

We started by estimating two base models that did not include the measure for
relationship skills (models 1 and 2). In line with the literature on inter-firm relationships partner
importance, relationship advancement and trust are significantly and positively related to
relationship performance (partner importance related positively only to indirect relationship
performance). The two measures of cultural fit are not significant.

Models 3 and 4 include our measure for relationship skills, obtained in step 1 of the two-
stage analysis. Relationship advancement is significantly related to direct relationship
performance, but not to indirect relationship performance. Partner importance, in contrast, is
significantly related to indirect performance, but not to direct relationship performance. In both
models, trust in the partner is significantly and positively related to relationship performance.
Most important is our finding with respect to the relationship skills of a firm. A firm’s
relationship skills are significantly and positively related to indirect relationship performance, but
not to direct relationship performance. The coefficient in this model is even negative, albeit
insignificant. Hence, a firm’s own relationship skills are important in terms of learning from a
partner, creating new innovations through this partner, and yielding new clients via this partner.
But the financial performance in the relationship and the attainment of stated direct goals (which
are measured by the scale of direct relationship performance) are unrelated to relationship skills.
This corresponds to our theoretical prediction, which expects relationship skills to be especially
relevant for obtaining relationship outcomes that go beyond what can be obtained in arms’ length
market ties, and include aspects like learning, etc. These findings will be discussed in the next section.

4. DISCUSSION

We found general support for our thesis that certain aspects of organizational culture are important sources of relationship skills, which in turn are relevant for deriving certain benefits from relationships, viz., more indirect benefits such as learning about the market and about products or technologies. The finding that an innovative orientation in the organizational culture is related to stronger alliance capabilities is consistent with the idea that employees in innovation-oriented companies are faced with conditions that empower and motivate them to perform boundary-spanning activities and to develop relational power sources. Though measurements may be subject to a strong social desirability bias, given the positive connotations of innovativeness, this finding is not surprising since one of the potential benefits of embedded relations is joint innovation (Gemünden et al. 1996). Innovation-oriented companies have a high R&D intensity and are eager to increase their internal technological know-how through cooperation with external innovation partners (Walter, 1998, 1999; Gemünden et al. 1992; Gemünden et al. 1996). The organizational culture of these companies is argued to be marked by high flexibility and to encourage risk-taking behavior. Innovation orientation is the notion of openness to new ideas, products, processes or services (Walter, 1999, 542). Moreover, employees in innovation-oriented companies are faced with conditions that enable and motivate them to perform boundary-spanning activities and to develop relational power sources (Ibid.). These characteristics of an innovative organizational culture seem to be conducive to joint problem solving, an important characteristic of close inter-firm ties. The innovative organization is not
only strongly motivated to cooperate with knowledgeable partners, but also exhibits flexibility and risk-taking behavior, which equip the firm to solve unexpected problems in a cooperative manner. A positive relationship between the innovation dimension of organizational culture and relationship skills is therefore not surprising.

We also found a strong positive link between a stability orientation in the organizational culture and the relationship skills of a firm. A stability orientation could be argued to impede the formation of trust-based ties, as building up trust always entails some relinquishing of control (Saxton, 1997; Butler, 1991; Mohr and Spekman, 1994). On the other hand, organizations that are more stability oriented are also more predictable, which may cause them to be perceived as trustworthier. Our findings suggest that the latter effect is more important, and that a stability-oriented organizational culture is positively related to the ability to maintain successful inter-firm relations. Predictability and accuracy may increase internal trustworthiness, which subsequently also permeates relations with entities outside the organization. An important element in the relationship skills of firms in general is the keeping of promises and the ability to live up to the expectations of the partner. It can be argued that for these reasons a stable and predictable culture positively affects relationship skills. More research is needed to further substantiate this reasoning.

The negative relationship between results orientation and relationship skills suggests that an organization focusing too much on results may lack the patience, interest, and skills needed to manage close and longstanding inter-firm relationships. Hofstede (2001) already showed at the national level that there is a positive relationship between long-term orientation as a cultural dimension and a focus on stakeholder value (instead of a more narrow result orientation, like shareholder value). This finding is relevant to our research, as it suggests that an organizational
culture that emphasizes concrete results may hamper the development of the long-term view that is often needed in managing longstanding and binding relations with partner firms.

Regarding relationship skills, we found in our sample that this capability is unrelated to direct relationship performance, but is positively and significantly related to indirect relationship performance. The achievement of direct relationship performance requires other capabilities than the realization of indirect relationship performance. In the case of indirect relationship performance, the firm must be willing or have the need to learn from its partners and must be open to possible advantages that are neither initially anticipated nor easily quantified in monetary terms. On the other hand, to achieve direct relationship performance, as defined in our study, a company can more rigidly stick to its initial goals in the relationship, and if necessary put pressure on the business partner to ensure financial success. Thus, although direct and indirect relationship performance need not be negatively related (in fact, the correlation matrix in Table 1 shows a significantly positive correlation between the two), achievement of both types of performance seems to hinge on different capabilities.

It may also be the case that firms concentrate more on direct or indirect results in different types of relationships. This is suggested by the finding for partner importance. In the regression with indirect relationship performance as the dependent variable, partner importance is significantly positive. In contrast, the variable is insignificant in the regression on direct relationship performance. It seems that relationship skills become relevant only in relationships that are seen as having long-term importance, while in other relationships the firm concentrates on direct performance. Our data do not, however, allow us to check the direction of causality between partner importance, relationship skills and relationship performance.

Next to these core results, our analysis confirms that trust is an important variable in explaining the result of a cooperative venture between firms. This fits the common idea on the
importance of trust in inter-firm relationships (Nooteboom et al., 1997). We also found that cultural fit between two firms was not significantly related to either direct or indirect relationship performance. One reason for this counterintuitive result may be that the majority of the relationships in our sample can be considered long-term and binding (or embedded) relations and not pure contract-based agreements. In our interviews with boundary-spanning individuals we frequently heard the following reasoning when we enquired into the importance of similar working procedures: ‘we both know that we are different. But as long as we recognize this and respect each other there is no problem’. This suggests that when relations between partners are based on trust, there need not be a perfect cultural fit. Furthermore, there can be a selection bias, as relationships between firms with strongly divergent cultures may be more likely to be discontinued, and hence have a smaller chance of being included in our sample.

The findings from our analysis present a first step towards an understanding of the factors that cause some firms to be better than others at deriving benefits from external relationships. We have thus begun to fill an important gap in management theory pertaining to causes of variance in relationship performance. We also would like to stress the practical benefits of this type of research as our conclusions provide indications for management to improve a firm’s ability to derive benefits from its longstanding relationships. Evidently, a number of theoretical and empirical weaknesses are present and should be taken into account in future research. Nevertheless, we see our contribution as a first step to fill this gap in the literature.

According to Saffold (1988) it is important to enrich the frameworks we use to relate culture to performance. Also Pettigrew (1985, 36 on cit.) argued, it is ‘not enough to point to a general fog of thick culture and to suggest that in some way this swirling mist boosts performance’. In other words, ‘an adequate culture-performance framework must examine how specific culturally conditioned processes contribute to outcomes’ (Saffold, 1988, 552). Our
analysis linking dimensions of organizational culture to relationship skills showed that specific dimensions of organizational culture are relevant for explaining differences in relationship skills, but other dimensions not. This is an important result, because it shows that organizational culture can be a resource that leads to particular firm capabilities. It also demonstrates that organizational culture can be an important explanatory factor in the analysis of firm competitiveness, if we break open the black box and look at specific dimensions of organizational culture. This is a significant first step into the direction of linking organizational culture to organizational effectiveness. It also has practical relevance, as it suggests managers on which aspects of the culture of their firms they have to pay special attention, if they want to improve the long-term outcomes of their relationships with other firms.

5. SUGGESTIONS FOR FUTURE RESEARCH

In this paper we have identified organizational culture as an antecedent for the successful outcomes of close and durable relationships. However, although we now have a first indication, we need more systematic and confirming evidence concerning the specific elements of organizational culture that play a role. The principal components of a theory of organizational culture, relationship skills and relationship performance need to be integrated in a more thorough manner than has been achieved in this paper. In particular, possible relationships between organizational culture, cultural distance, relationship advancement, and trust need to be explored more systematically. Besides this necessary theoretical strengthening, a number of related issues deserve closer attention.

This paper concentrates on the links between organizational culture, relationship skills and relationship performance. But there is an alternative that must also be taken into account: to
focus on the ‘fit’ between the organizational cultures of two or more firms that have or aim to establish a strong cooperative relationship. While cultural fit (operationalized using two items directly measuring the perceived cultural similarity) was insignificant in our analyses, it would be interesting to repeat the analysis using a more sophisticated operationalization. It is possible that organizational culture differences in some dimensions are more important than in others. If the same instrument is used to measure the organizational culture of each of the firms in a dyad, this question could perhaps be answered more satisfactorily.

In our research we have interviewed one boundary spanner for each relationship, but evidently there are organizations with more than one of its members having contact with the same external partner. In this respect, Macaulay (1963) observed that subcultures may be relevant in the behavior of these spanners. He observed different behavioral orientations among boundary and non-boundary spanners if these were not from the same department (e.g., sales versus controllers). Apparently, the organizational role people fulfill is influenced by their professional background and cannot be assumed to be completely homogeneous across subunits in firms. This corresponds with Daft and Weick’s description of organizations as a series of nested systems, of which each subsystem may deal with a different external sector (Daft and Weick, 1984). A multitude of diverse frames can exist in a single organization, arising from characterizing different job categories, occupations, status, ideologies, and paradigms (Drazin et al, 1999). In this paper we refrained from the notion of subcultures, but in future research this aspect may be incorporated.

Though our study focuses on transaction relations, and hence is not primarily a contribution to the alliance literature, the general idea that differences in organizational culture may explain why some firms are better allies than others may still be relevant. The crucial distinction between regular inter-firm relationships and strategic alliances is the degree of
relational risk involved (Das and Teng, 1999). The risk of unsatisfactory inter-firm co-operation is much higher in alliances. Nevertheless, more in general our results suggest that the degree to which firms are able to manage this relational risk may depend on their organizational culture. Testing this argument in an empirical study of strategic alliances may be fruitful.

The present paper addresses the impact of specific organizational culture features on external relationships but does not examine the mechanisms that cause the development of these specific features. Interesting research questions which could build on our research are whether organizations develop superior relationship oriented organizational cultures when they are in an environment that requires more inter-firm cooperation. Or, alternatively, whether they develop such a culture in response to a strategy involving cooperation or alliances, or whether organizations with such cultures simply cooperate more. These are questions which we were unable to address in this paper, but which would help evolve the field in the direction we have set in this paper.

Finally, as already suggested, future research may develop a dyadic approach to our research question. It would be interesting to confront the relationship skills of a firm as perceived by its managers with the partners’ perceptions of the same. Also, it might be interesting to investigate (the potentially differentially perceived) relationship performance as seen from both sides of the relation, and to explore why there might be diverging views of performance. Relatedly, as Kenis and Knoke (2002) argue, network characteristics like density, multiplexity and hierarchy may influence the formation of dyadic relationships. Future research may take a closer look at the interaction between internal and external factors influencing the relative embeddedness of a firm at a certain point in time, as well as over time. A well-elaborated contingency approach in which also industry effects are better covered, may be promising (cf. Aragon-Correa and Sharma, 2003).
REFERENCES


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Table 1: Correlations between variables

See last page

Table 2: Organizational culture, relationship skills and relationship performance

<table>
<thead>
<tr>
<th>Dependent variable: Relationship skills</th>
<th>Independent variable: Organizational culture dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Stage</strong></td>
<td><strong>Results orientation</strong></td>
</tr>
<tr>
<td><strong>Employee orientation</strong></td>
<td><strong>-1.10 (.49)</strong></td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td><strong>.20 (.22)</strong></td>
</tr>
<tr>
<td><strong>Innovation</strong></td>
<td><strong>.97 (.23)</strong> ** * * **</td>
</tr>
<tr>
<td><strong>Stability</strong></td>
<td><strong>.64 (.19)</strong> ** * * **</td>
</tr>
<tr>
<td><strong>Team orientation</strong></td>
<td><strong>.01 (.39)</strong></td>
</tr>
<tr>
<td><strong>Level of industry competition</strong></td>
<td><strong>-.46 (.22)</strong></td>
</tr>
<tr>
<td><strong>R-squared</strong></td>
<td><strong>.62</strong></td>
</tr>
<tr>
<td><strong>F</strong></td>
<td><strong>3.34</strong></td>
</tr>
</tbody>
</table>

Standard errors are in parentheses. * p < .05, ** p < .01. The unit of analysis is the relation.

**2nd Stage**

<table>
<thead>
<tr>
<th>Model</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method</td>
<td>OLS</td>
<td>OLS</td>
<td>2SLS</td>
<td>2SLS</td>
</tr>
<tr>
<td>Dependent variable</td>
<td>Direct rel. perf.</td>
<td>Indirect rel. perf.</td>
<td>Direct rel perf.</td>
<td>Indirect rel perf.</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>-.55 (.89)</td>
<td>-.17 (.77)</td>
<td>.59 (1.09)</td>
<td>-1.10 (.98)</td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td>.05 (.04)</td>
<td>.03 (.04)</td>
<td>.01 (.05)</td>
<td>.06 (.05)</td>
</tr>
<tr>
<td><strong>Client</strong></td>
<td>-.13 (.33)</td>
<td>-.12 (.28)</td>
<td>-.01 (.34)</td>
<td>.01 (.30)</td>
</tr>
<tr>
<td><strong>Supplier</strong></td>
<td>-.24 (.32)</td>
<td>-.32 (.28)</td>
<td>-.20 (.33)</td>
<td>-.30 (.29)</td>
</tr>
<tr>
<td><strong>Service provider</strong></td>
<td>-.14 (.35)</td>
<td>-.13 (.30)</td>
<td>-.12 (.38)</td>
<td>.09 (.34)</td>
</tr>
<tr>
<td><strong>Relationship advancement</strong></td>
<td>.25 (.10)**</td>
<td>.25 (.09)**</td>
<td>.42 (12)**</td>
<td>.18 (.11)</td>
</tr>
<tr>
<td><strong>Partner importance</strong></td>
<td>-.08 (.10)</td>
<td>.32 (.08)**</td>
<td>-.03 (.10)</td>
<td>.33 (.09)**</td>
</tr>
<tr>
<td><strong>Trust</strong></td>
<td>.45 (.09)**</td>
<td>.22 (.08)**</td>
<td>.46 (.10)**</td>
<td>.22 (.09)*</td>
</tr>
<tr>
<td><strong>Similarity culture</strong></td>
<td>-.11 (.07)</td>
<td>-.08 (.06)</td>
<td>-.12 (.07)</td>
<td>-.09 (.07)</td>
</tr>
<tr>
<td><strong>Similarity work procedures</strong></td>
<td>.04 (.06)</td>
<td>.03 (.05)</td>
<td>-.07 (.07)</td>
<td>.10 (.06)</td>
</tr>
<tr>
<td><strong>Relationship skills</strong></td>
<td>-</td>
<td>-</td>
<td>-.25 (.17)</td>
<td>.40 (.15)**</td>
</tr>
<tr>
<td><strong>R-squared</strong></td>
<td>.27</td>
<td>.40</td>
<td>.35</td>
<td>.43</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>4.77</td>
<td>8.50</td>
<td>4.86</td>
<td>6.66</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>126</td>
<td>127</td>
<td>103</td>
<td>101</td>
</tr>
</tbody>
</table>
Figure 1: Conceptual model of organizational culture, relationship skills, and relationship performance
Appendix A
The following tables show the statistical details of our operationalization of our dependent and independent variables. The numbers in the columns are the factor loadings obtained by applying principle-components analysis. In case of more than one dimension, these reflect the loadings of the (varimax) rotated component matrix. Below each table the reliability scores of the obtained factors are shown. The unit of analysis is the relation. $N = 127$. In case the analysis yields multiple factors, the items included in a specific construct are printed in bold face.

Table A1: Dimensions of Relationship Performance: direct and indirect

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>.033</td>
<td>.809</td>
<td>With this partner we reached the full 100% of the goals we initially wanted to achieve</td>
</tr>
<tr>
<td>.093</td>
<td>.816</td>
<td>The co-operation with this partner is a financial success</td>
</tr>
<tr>
<td>.758</td>
<td>.263</td>
<td>Our organization learnt a lot from the cooperation with this partner</td>
</tr>
<tr>
<td>.658</td>
<td>.436</td>
<td>By co-operating with this partner we considerably improved our competitiveness</td>
</tr>
<tr>
<td>.728</td>
<td>-0.084</td>
<td>By co-operating with this partner our organization gained valuable contacts</td>
</tr>
<tr>
<td>.767</td>
<td>.147</td>
<td>The co-operation with this partner helps us in the achievement of innovations</td>
</tr>
<tr>
<td>.529</td>
<td>-0.026</td>
<td>The co-operation with this partner yields new clients</td>
</tr>
</tbody>
</table>

Cronbach’s alpha factor 1: .74
Cronbach’s alpha factor 2: .57

Table A2: Partner Importance Scale

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>.863</td>
<td>This partner is very important for the continuity of our organization</td>
</tr>
<tr>
<td>.781</td>
<td>This partner is very important for the future development of our organization</td>
</tr>
<tr>
<td>.732</td>
<td>It would be very difficult for us to replace this partner adequately if the relation would for some reason be ended</td>
</tr>
</tbody>
</table>

Cronbach’s alpha factor 1: .70

Table A3: Relationship Advancement Scale

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>.831</td>
<td>We are prepared to do something extra for this partner</td>
</tr>
<tr>
<td>.770</td>
<td>In this relation we are prepared to make investments that pay-off only in the long run</td>
</tr>
<tr>
<td>.680</td>
<td>In case of problems, these are solved in close co-operation with this partner</td>
</tr>
</tbody>
</table>

Cronbach’s alpha factor 1: .63
Table A4: Dimensions of Trust

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>Factor 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>.362</td>
<td>.749</td>
<td><strong>With this partner we exchange confidential information</strong></td>
</tr>
<tr>
<td>.808</td>
<td>-.114</td>
<td><strong>This partner can be trusted</strong></td>
</tr>
<tr>
<td>.793</td>
<td>.023</td>
<td><strong>This partner does what he promises</strong></td>
</tr>
<tr>
<td>-.474</td>
<td>.692</td>
<td>We sometimes doubt if the information this partner gives us is correct</td>
</tr>
<tr>
<td>.673</td>
<td>.145</td>
<td><strong>We have a lot of confidence in the expertise of this partner</strong></td>
</tr>
</tbody>
</table>

Cronbach’s alpha factor 1:  .69  
Cronbach’s alpha factor 2:  .12

Table A5: Cultural Fit Scale (NB: scale not used in analyses)

<table>
<thead>
<tr>
<th>Factor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>-.786</td>
</tr>
<tr>
<td>.786</td>
</tr>
</tbody>
</table>

Cronbach’s alpha factor 1:  .38

Table A6: Relationship skills

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>Factor 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>.172</td>
<td>.786</td>
<td><strong>We always react quickly when our partner needs us</strong></td>
</tr>
<tr>
<td>.775</td>
<td>.272</td>
<td><strong>We always give our partner clear and full information</strong></td>
</tr>
<tr>
<td>.012</td>
<td>.856</td>
<td>It is not difficult for our partners to find the right person in our organization</td>
</tr>
<tr>
<td>.639</td>
<td>-.0029</td>
<td><strong>We inform our partners in time in case of problems</strong></td>
</tr>
<tr>
<td>.657</td>
<td>.255</td>
<td>We systematically keep information of our most important partners</td>
</tr>
<tr>
<td>.823</td>
<td>-.046</td>
<td><strong>We organize collective activities for and with our partner</strong></td>
</tr>
<tr>
<td>.383</td>
<td>.303</td>
<td>Our organization promotes informal contact between our employees and those of our partner</td>
</tr>
</tbody>
</table>

Cronbach’s alpha factor 1:  .72  
Cronbach’s alpha factor 2:  .47
Table A7: Dimensions of organizational culture

<table>
<thead>
<tr>
<th>Results Orientation</th>
<th>Factor 1 (65%)</th>
<th>Where I work ...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.860</td>
<td>there are high demands concerning the results of what I do</td>
</tr>
<tr>
<td></td>
<td>.681</td>
<td>employees are responsible for the results of their work</td>
</tr>
<tr>
<td></td>
<td>-.767</td>
<td>It is not clear to the employees what results are expected (R)</td>
</tr>
<tr>
<td></td>
<td>.900</td>
<td>employees do their utmost</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employee Orientation (lack of)</th>
<th>Factor 1 (47%)</th>
<th>Where I work ...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.341</td>
<td>Employees are allowed to follow seminars only if this benefits the organization</td>
</tr>
<tr>
<td></td>
<td>-.711</td>
<td>there is considerable attention for the internal promotion opportunities of employees</td>
</tr>
<tr>
<td></td>
<td>.742</td>
<td>there is limited attention for the personal problems of employees (R)</td>
</tr>
<tr>
<td></td>
<td>.652</td>
<td>newcomers have to find their own way (R)</td>
</tr>
<tr>
<td></td>
<td>-.880</td>
<td>In case of a vacancy on the managerial level, well-qualified people from inside are first considered to fulfill this vacancy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication Orientation (lack of)</th>
<th>Factor 1 (64%)</th>
<th>Where I work ...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.830</td>
<td>employees share their criticism with direct colleagues, instead with their managers (R)</td>
</tr>
<tr>
<td></td>
<td>-.841</td>
<td>there is good communication from the top-management to lower echelons</td>
</tr>
<tr>
<td></td>
<td>.793</td>
<td>conflicts are ignored instead of openly discussed (R)</td>
</tr>
<tr>
<td></td>
<td>-.781</td>
<td>critique of employees is personally discussed with them by their managers</td>
</tr>
<tr>
<td></td>
<td>.762</td>
<td>employees tend to keep information to themselves (R)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Innovation Orientation</th>
<th>Factor 1 (71%)</th>
<th>Where I work ...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.821</td>
<td>employees are encouraged to make all kinds of proposals for change</td>
</tr>
<tr>
<td></td>
<td>.807</td>
<td>employees are expected to look for new opportunities for the organization</td>
</tr>
<tr>
<td></td>
<td>.880</td>
<td>employees come up with ideas themselves to improve the organization</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Stability Orientation</th>
<th>Factor 1 (53%)</th>
<th>Where I work ...</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>.722</td>
<td>employees are expected to give full detailed declarations of any costs they incur</td>
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<tr>
<td></td>
<td>.819</td>
<td>employees are expected to be dressed properly when they work for the organization</td>
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<tr>
<td></td>
<td>-.648</td>
<td>people do not always follow the strict guidelines (R)</td>
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<table>
<thead>
<tr>
<th>Team Orientation</th>
<th>Factor 1 (73%)</th>
<th>Where I work ...</th>
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<tbody>
<tr>
<td></td>
<td>.897</td>
<td>there is good cooperation in case of projects that concern different departments</td>
</tr>
<tr>
<td></td>
<td>.882</td>
<td>trust and good cooperation between departments is considered normal</td>
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<tr>
<td></td>
<td>-.782</td>
<td>employees identify more strongly with their own department than with the organization as a whole (R)</td>
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Table 1: correlation table

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<tr>
<th>Variable</th>
<th>mean</th>
<th>St. Dev.</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>
<th>11</th>
<th>12</th>
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<tr>
<td>1. Indirect relationship performance</td>
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<tr>
<td>2. Direct relationship performance</td>
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<td>1</td>
<td></td>
<td>.29***</td>
<td></td>
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<tr>
<td>3. relationship advancement</td>
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<td>1</td>
<td></td>
<td>.50***</td>
<td>.32***</td>
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<tr>
<td>4. trust</td>
<td>0</td>
<td>1</td>
<td></td>
<td>.36***</td>
<td></td>
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</tr>
<tr>
<td>5. partner importance</td>
<td>0</td>
<td>1</td>
<td></td>
<td>.53***</td>
<td>.17*</td>
<td>.46***</td>
<td>.24***</td>
<td>1</td>
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<tr>
<td>6. client</td>
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<td></td>
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<td>.31</td>
<td>.46</td>
<td>.19**</td>
<td>.07</td>
<td>.21**</td>
<td>.05</td>
<td>.24***</td>
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<tr>
<td>7. supplier</td>
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<td>.48</td>
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<td>-.08</td>
<td>-.04</td>
<td>-.05</td>
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<td>-.51***</td>
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<td>8. service provider</td>
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<td>.43</td>
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<td>-.05</td>
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<td>-.03</td>
<td>-.12</td>
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<td>-.44***</td>
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<td>9. sales (mln euro)</td>
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<td>386</td>
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<td>-.09</td>
<td>-.02</td>
<td>.03</td>
<td>-.10</td>
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<tr>
<td>10. organizational culture is similar</td>
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<td>.15*</td>
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<td>.18**</td>
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<td>11. way of working is similar</td>
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<td>12. alliance capabilities</td>
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<td>.01</td>
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<td>.11</td>
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<td>-.09</td>
<td>-.32***</td>
<td>-.09</td>
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</tbody>
</table>

10%, ** 5%, *** 1% significance