
Relationship performance dimensions of buyer–supplier exchanges

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Abstract

Whilst there is much research material on buyer and supplier performance assessment and management, a relationship perspective can bring an added dimension, especially to the performance of close, mutual relationships. This article aims to bring a relationship performance understanding to the study of buyer-supplier exchange. Unfortunately, business-to-business relationships are assumed to enhance performance but what little research has been conducted is limited to a few dimensions reflecting a narrow theory or practice assumption. To remedy this we investigate a relationship performance definition that incorporates both non-financial and financial dimensions. The results are developed from seven qualitative interviews followed by a postal survey incorporating the views of 200 industrial buyer respondents in the UK. To examine the relationship among the performance variables, factor analysis was conducted on 21 dimensions of performance included in the research. On this basis, key dimensions of relationship performance are grouped and implications drawn for defining relationship performance and its measurement. The authors conclude that it is meaningful to take a relationship performance position when managing buyer–supplier interactions. However, not all the dimensions identified may be available to all types of relationships. © 2002 Elsevier Science Ltd. All rights reserved.

Keywords: Buyer–supplier relationships; Relationship performance; Industrial exchange behaviour; Performance evaluation; Vendor assessment

1. Introduction

The study of relationships is now a well-developed stream of thought in the literature from both a buyer and supplier perspective. Relationships are seen as having positive links to performance but little is known about the nature of this performance. Relationships themselves can be seen as generic; applying to all buyer–seller exchanges. In this article, relationships are viewed as mutual, two-way, involved exchanges between buyers and suppliers. While it is accepted that most purchasing and supply relationships might not achieve this ideal, or it may not be relevant to their needs, it does provide insights into potential performance areas we believe are neglected in prior research.

The importance of relationships to the conduct of business is widely supported in the literature (Jackson, 1985; Kanter, 1994; Gummesson, 1999), a development that began in the 1970s in a European context within the Industrial Marketing and Purchasing (IMP) group (Hakansson, 1982; Ford, 1997). Relationships between buyer and suppliers have also been underlined with themes such as partnership management (Johnson and Lawrence, 1988; Ellram, 1995), outsourcing (Mullin, 1996) strategic alliances, and supply chain co-operation and collaboration receiving emphasis (Christopher and Juttner, 2000). Indeed the supply chain management literature has linked the management of demand and supply empirically to firm performance (see, Tan et al., 1998; Vonderembse and Tracey, 1999, for recent examples). Authors such as Macbeth and Ferguson (1994) and Watts et al. (1995) have argued for the strategic role and potential of buyer–supplier relationships inherent in the development of co-operative relationships when compared to the traditional role that is directed by the benefits that accrue to one party only. It is apposite, therefore, to bring a relationship performance viewpoint to this key nexus of a firm’s operation.

Our objectives in this paper are:

1. To advance a more comprehensive definition of buyer–supplier relationship performance. To date,
in our opinion, the conceptualisation of relationship performance has often been limited to a narrow set of output measures or normative rules for suppliers or buyers.

2. To identify and test a set of relational performance measures and to assess their relevance to managing buyer–supplier relationships.

This paper concentrates on measures of the output of relationships rather than on relational processes which may, in turn, determine these outputs. For the longer term, we would also like to be able to link performance to individual relationship structural types. Academics and practitioners alike can gain much from knowing that different forms of relationships can yield different performance outcomes for both parties in a relationship.

2. Business-to-business relationship performance

Often the conceptualisation of supplier or buyer performance is limited to easily identifiable bottom line cost savings for one party. Relationship performance is a wider view that incorporates the perspective of the other partner and measures the performance of a wider variety of relationship activities.

Lamming et al. (1996) were among the first to apply relationship principles to buyer–supplier relationship assessment. We extend the relationship paradigm to performance outcomes but in evaluating existing relationship performance research, we see three major problems. Firstly, the remarkable lack of a performance dimension in many of the main theoretical models of relationships. The second problem is the narrow nature of performance that emerges from many of the relational theory schools. The schools seem to rigidly adhere to a narrow performance definition that suits the purposes of their theoretical assumptions. The final problem is that the main contributors to the relational performance theory literature borrow concepts and measures from other literature. While this theoretical borrowing is welcome, it should be complemented by theory research specific to the area itself. Based on an analysis of these issues we develop a composite set of relationship performance dimensions.

2.1. Theme 1—exclusion of relationship performance from models

Relational performance is often excluded from models of relational development, interaction and indeed, networks. The assumption is made that relationships improve performance. The seminal IMP group’s dyadic interaction model (Hakansson, 1982) does not contain a performance dimension but implicitly assumes the performance enhancement quality of relationships. Dwyer et al. (1987) model of relational development neglects a performance motivation while recognising the importance of performance management. Morgan and Hunt’s (1994) classic contribution to relationship theory failed to include a performance dimension in their commitment–trust model. Others who include relational performance in their models do so on a limited number of dimensions, such as Mohr and Spekman’s (1994) model of partnership success, or Anderson and Narus’s (1990) model of distributor–firm and manufacturing–firm working partnership. We conclude that performance needs to be addressed in its own right to determine its effects on relationship structure and strategy.

2.2. Theme 2—relationship theory schools pursue a narrow definition of performance

The empirical domain of research into relational performance has been limited. A selection of studies is listed in Table 1. Studies were evaluated on the basis of the performance dimensions included, whether performance was the major focus, and the theoretical base, if any, for the performance dimensions. As can be seen from the table the amount of studies with a specific theoretical background cited for the performance dimension is rare. Where a theoretical background is given, transaction cost economics is the main field of reference. This limits the conceptualisation of relational performance to a single actor and to an economic definition. Clearly, research using other theoretical schools is desirable.

By developing and testing a wider definition of performance, research can develop and expand the relational performance domain. Transaction cost economics (Williamson, 1985) assumes that performance is optimised in transactional efficiency, and through the performance maximisation efforts of a firm acting alone, a cost perspective. Agency theory, like transaction cost, examines the outcomes of relationships between principals and agents in terms of economic costs, particularly, the cost of potential relational abuses and the monitoring of a partnership (Ross, 1973; Bergen et al., 1992) and this is predominantly a risk perspective. The channel literature also sees economic benefits as the main outcomes of relationships with a particular focus on costs and profits of relationships (Heide and John, 1988; Noordewier et al., 1990). In particular, it concentrates on the power-dependency relationship and the outcomes balance of any change in this relationship; hence, this is a more political perspective. Again, performance is viewed from the perspective of the individual firm. While these benefits are important other schools also see more non-financial performance outcomes as being beneficial. The social exchange school of relationships...
Table 1
Empirical studies on relational performance

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Types of relationships studied</th>
<th>Number of respondents</th>
<th>Performance dimensions included</th>
<th>Performance main aim of study</th>
<th>Relational perspective</th>
<th>Theoretical perspective of performance measures</th>
<th>Business discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heide and John (1988)</td>
<td>Manufacturer–Agent</td>
<td>199 Agents</td>
<td>Sales, costs</td>
<td>No</td>
<td>Agents</td>
<td>Transaction cost economics (TCE)</td>
<td>Channels</td>
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<tr>
<td>Noordewier et al. (1990)</td>
<td>Buyer–Supplier</td>
<td>140 OEM buyers</td>
<td>Acquisition costs</td>
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<td>Buyer</td>
<td>TCE</td>
<td>Industrial marketing</td>
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<td>Kumar et al. (1992)</td>
<td>Supplier–Re-seller</td>
<td>2 Suppliers, 223 re-sellers</td>
<td>Multidimensional</td>
<td>Yes</td>
<td>N/A testing scales</td>
<td>Multiple</td>
<td>Channels</td>
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<td>McNeilly and Russ (1992)</td>
<td>Manufacturer–Dealer</td>
<td>145 Dealers</td>
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<td>Dealer</td>
<td>Not specified</td>
<td>Channels</td>
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<td>Sako (1992)</td>
<td>Buyer–Supplier</td>
<td>3 Buying companies, 36 suppliers</td>
<td>Transaction costs</td>
<td>No</td>
<td>Buyer–Supplier</td>
<td>TCE and industrial economics</td>
<td>Industrial markets</td>
</tr>
<tr>
<td>Mohr and Spekman (1994)</td>
<td>Manufacturer–Dealer</td>
<td>102 Dealers</td>
<td>Satisfaction, sales</td>
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<td>Dealer</td>
<td>Objective and subjective measures—not specified</td>
<td>Channels</td>
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<td>Evans and Laskin (1994)</td>
<td>Manufacturer–Buyer</td>
<td>276 Buyers</td>
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<td>Buyer</td>
<td>Not specified</td>
<td>Industrial marketing</td>
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<tr>
<td>Boyle and Dwyer (1995)</td>
<td>Distributor–Supplier</td>
<td>314 Buyers</td>
<td>Task completion</td>
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<td>Buyer</td>
<td>Not specified</td>
<td>Channels</td>
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<tr>
<td>Heide and Stump (1995)</td>
<td>Manufacturer–Supplier</td>
<td>155 Buyers, 60 suppliers</td>
<td>Transaction-related</td>
<td>Yes</td>
<td>Buyer–Supplier</td>
<td>TCE</td>
<td>Industrial marketing</td>
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<tr>
<td>Joseph et al. (1995)</td>
<td>Manufacturer–Distributor</td>
<td>221 Distributors</td>
<td>Satisfaction, profit, organisational time, effect on other relationships</td>
<td>No</td>
<td>Distributors</td>
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<td>Kalwani and Narayandas (1995)</td>
<td>Supplier–Manufacturer</td>
<td>152 Suppliers</td>
<td>Sales, inventory costs, prices, profits Satisfaction, share of business</td>
<td>Yes</td>
<td>Supplier</td>
<td>Economic outputs—not specified</td>
<td>Industrial marketing</td>
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<tr>
<td>Leuthesser and Kohli (1995)</td>
<td>Buyer–Supplier</td>
<td>454 Buyers</td>
<td>Transaction costs</td>
<td>No</td>
<td>Buyer</td>
<td>Not specified</td>
<td>Industrial marketing</td>
</tr>
<tr>
<td>Dahlstrom et al. (1996)</td>
<td>Buyer–Supplier</td>
<td>189 Buyers</td>
<td>Speed of new product development, quality, inventory costs, profit</td>
<td>No</td>
<td>Buyer</td>
<td>TCE</td>
<td>Channels</td>
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<tr>
<td>Dyer (1996)</td>
<td>Buyer–Supplier</td>
<td>5 Buying companies, 152 suppliers</td>
<td>Yes</td>
<td>Buyer–Supplier</td>
<td>TCE</td>
<td>Industrial marketing</td>
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<td>Young et al. (1996)</td>
<td>Buyer–Supplier</td>
<td>509 Buyers</td>
<td>Satisfaction, productive, worthwhile, carried out objectives</td>
<td>No</td>
<td>Buyer</td>
<td>Not specified</td>
<td>Industrial marketing</td>
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</table>
(Blau, 1964; Cook and Emerson, 1978; Macneil, 1980) includes wider benefits of relational co-operation. Areas such as flexibility, and satisfaction become key outcomes of inter-firm relationships under a social exchange view.

2.3. Theme 3—theoretical borrowing

Table 1 illustrates that performance is not the main concern of studies that include a relational performance dimension. Performance research in industrial relationships is often as a tag-on to a study with another focus or is assumed to be an outcome of ongoing relationships. All the studies cited in Table 1 include performance from, solely, a financial perspective except one. Of the five studies that have performance as the main focus, three take a transaction cost perspective (Noordewier et al., 1990; Heide and Stump, 1995; Dyer, 1996), one a financial perspective from figures reported in two US financial databases, COMPUTSTAT and Compact Disclosure (Kalwani and Narayandas, 1995), and only one study uses a multidimensional view, combining both financial and non-financial elements of performance, in its research (Kumar et al., 1992). Clearly, this broadened perspective should be the place to begin inter-firm relationship performance research.

The three themes identified in this section provide an impetus for research into the buyer–supplier relationship performance domain. We would argue that a relationship performance domain has been neglected in research on business-to-business exchanges.

3. The study

Arising from our critique of previous research, a combination of research methods and frameworks was required. For our study, qualitative and quantitative methods were employed. In the qualitative stage, in-depth interviews were conducted within seven firms to explore the dimensions of relational performance and examine the theoretical practicality of existing measures. The firms included in the study were chosen to represent a diversity of firm sizes and relational perspectives: two small firms, two medium sized, and three large firms were included in the study, and three companies focused on their relationship with their buyer and four on their supply relationship. The companies were all precision engineering firms, supplying components to their buyer, or buying material and/or components from a supplier. The managing director was interviewed in all cases with the input of, where relevant, the purchasing or marketing manager. Discussion centred around how relationship performance was defined and its dimensions. Relational performance dimensions were considered both from the respondent’s perspective and through the researchers presenting ideas and seeking feedback. A judgement sample was used to select the interviewees.

3.1. Qualitative findings

The seven firms in the study evaluated their relationships along financial and non-financial dimensions. In addition, they viewed relational performance in a multidimensional way based both on objective assessment, such as supplier ratings and profit, and on the perceptual assessment of relational performance by managers. When asked about relationship costs one managing director responded: “Costs most definitely come into it but there is a multitude of different outcomes. I mentioned the word confidence before, this is where it all stems from”.

In the seven-firm study, some of the performance concepts mentioned by the respondents had not, to our knowledge, been included as performance measures in previous studies. For example, stability was mentioned as being an important concept by some of the firms in close relationships in the study. Stability as a performance outcome was analysed by the firms as predictability of expectations, confidence in actions of a partner, and as reducing environmental uncertainty. Stability has a parallel in measures of relationship structure which consider expectations of relational continuity to reflect long-term commitment to a relationship, and has been considered as a performance outcome by Aldrich (1979) under conditions of high economic turbulence.

3.2. Quantitative findings

Based on qualitative study findings, a second phase study was conducted using a mail survey of 500 UK industrial buyers in manufacturing (SIC 34, 35, and 36 representing engineering, electronic, and telecommunications). The performance data was collected from buyers with reference to a main supply relationship. The response rate was 47% with 200 respondents included in the analysis. All firms in the study had more than 100 employees and were chosen on a proportionate stratified random basis from a Dun and Bradstreet database. Sixty per cent of the firms were UK owned and no difference was found between firms on the basis of their ownership, employee size, or length of time they were in a particular relationship. The questionnaire was sent to a named respondent, preference being given to the procurement director then the managing director/general manager, using a key informant methodology (Campbell, 1955; John and Reve, 1982). Sixty-two per cent of the respondents were procurement managers/directors, 19% managing director/general manager, 13% manufacturing manager and 6% other titles.
Few studies measure relational performance as their sole concern and, as noted, those who do usually take a narrow theoretical or supplier/buyer only perspective. For this study we combined measures from previous research which included a relational performance dimension (O'Toole and Donaldson, 2000). All previous measures were put into a database and the measures that represented a similar concept placed together then one measure was chosen from the group of measures representing that particular concept. For example, satisfaction is multidimensional and measured in a variety of ways as a performance outcome. We chose “happiness with the relationship” as our measure and tested this in a qualitative way before proceeding to the quantitative study.

The performance scale, therefore, represents a composite measure of items rather than any particular facet of performance. The process of validation of the performance measures followed that outlined by Churchill (1979) and Hinkin (1995). However, the relational performance scale is still at an early stage of this development. The performance elements were measured using a 5-point Likert scale. In total, 21 items measuring performance were included in the study including items measuring satisfaction, profitability, sales, dependence and quality. The performance measures were divided into non-financial and financial groupings on the basis of theoretical perspectives from which they emerged. The non-financial performance statements were generated from studies such as those by Anderson and Narus (1990), Mohr and Nevin (1990), Kumar et al. (1992), Evans and Laskin (1994), and Dalstron et al. (1994). The financial performance measures were developed from studies cited and including: Williamson (1985), Frazier et al. (1988), Heide and John (1988), Hahn et al. (1990), Sako (1992), Droge et al. (1994), and Kalwani and Narayandas (1995). The performance items in the questionnaire are itemised in Appendix A.

Nunnally (1978) suggests that one of the most vital elements of reliability is the internal consistency of measures. The Cronbach’s alpha reliability for all of the performance measures was 0.74, for the non-financial on their own (0.80) and for the financial measures on their own (0.76). All the alpha levels were above 0.70, which is acceptable especially given the early nature of this research work. It is also acceptable given the reductionist way in which the composite scale was constructed. In addition, the factor analysis reported in this paper is another form of validation as to whether the dimensions are related to the construct that they propose to measure.

The factor analysis reported is based on all the performance dimensions together, then on the financial and non-financial separately. A set of correlations for all the variables is provided in Table 2. These show significantly high correlations to allow the research to proceed with factor analysis. All correlations of over 0.3 are significant in large data sets. The table of correlations allowed the removal of one outlier, which measured cost avoidance. We believe this item was difficult to phrase and should be refined. Significance levels are also given in the correlation matrix. In addition, high correlation was found among the variables measuring non-financial elements of performance and among those measuring financial performance giving initial support to the proposed measure of both dimensions of the industrial relationship performance concept.

The factor procedure followed was taken from that outlined by Tabachnick and Fidell (1983) and Kline (1994). To aid in interpretation, the principal components method is used to extract factors which are rotated using the oblimin rotation matrix. The figures reported in the findings are from the resulting pattern matrix. Non-orthogonal rotation (oblique) is used as it is assumed, as in most behavioural research, that factors do correlate with each other and are not completely orthogonal. A loading in the pattern matrix of 0.71 is excellent, 0.66 very good, and 0.55 good. A 50% plus explanation will be deemed acceptable due to the fact that each measure was chosen to represent different elements of performance.

4. Findings and discussion

An examination of the factor analysis for all the performance dimensions is presented in Table 3. From all the performance variables listed, 7 factors explained 63% of the performance variation.

Factors 1 and 5 contained all 10 of the non-financial measures of performance except 2: involvement in design and joint value which were present in a separate factor and related negatively on that factor to the cost of running the relationship. It would appear that the non-financial measures primarily divide along two factors. Financial dimensions of performance were mainly related on three factors. The factors related closely to the theorised structure from which the measures arose. Factor 2 is an agency assessment of performance and factor 3, a measure of dependence. The items on these factors were highly related to each other and may represent very divergent aspects of relationship performance. However, if the number of items included in the measure was increased then the degree of difference between factors 2 and 3 and the other financial performance factors would not be as great. In general, financial performance broadly grouped into factors based on the theoretical school from which they emerged. The factor analysis offers support to broaden the conceptualisation of performance beyond the
Table 2
Correlation matrix with significance levels

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<td>Profit</td>
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<td>0.34</td>
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</table>

Bold type denotes significant correlation at 0.01.
Measures of sampling adequacy support relationships among variables.
Cost avoidance is an outlier (low correlation) and is excluded from further analysis.
Eigen values for each factor were: 4.761; 2.046; 1.398; 1.186; 1.158; 1.119; 1.018.

Figures taken from the pattern matrix.

Highest factor loading of item in bold.

63% of the variation was explained by the seven factors.

Highest factor loading of item in bold.

Figures taken from the pattern matrix.

Eigen values for each factor were: 3.600; 1.239; 1.086.

Table 3
Factor analysis results for all performance variables

<table>
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<td>Satisfaction</td>
<td>0.211</td>
<td>0.022</td>
<td>−0.134</td>
<td>−0.08</td>
<td>−0.439</td>
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<td>Benefits comparison</td>
<td>0.563</td>
<td>−0.041</td>
<td>0.137</td>
<td>−0.186</td>
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<td>Switching</td>
<td>−0.059</td>
<td>0.08</td>
<td>0.731</td>
<td>−0.016</td>
<td>0.203</td>
<td>0.04</td>
<td>0.001</td>
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<tr>
<td>Interdependence</td>
<td>−0.071</td>
<td>0.003</td>
<td>0.75</td>
<td>−0.011</td>
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<tr>
<td>Stability</td>
<td>−0.106</td>
<td>−0.251</td>
<td>0.149</td>
<td>−0.052</td>
<td>−0.663</td>
<td>−0.152</td>
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<tr>
<td>Lead times</td>
<td>0.731</td>
<td>−0.033</td>
<td>−0.192</td>
<td>−0.084</td>
<td>0.059</td>
<td>0.067</td>
<td>−0.028</td>
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<tr>
<td>Quality</td>
<td>0.486</td>
<td>−0.278</td>
<td>0.235</td>
<td>0.05</td>
<td>0.096</td>
<td>0.312</td>
<td>−0.343</td>
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<tr>
<td>Value difficult quan.</td>
<td>0.027</td>
<td>−0.052</td>
<td>0.108</td>
<td>0.1</td>
<td>−0.764</td>
<td>0.043</td>
<td>0.014</td>
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<tr>
<td>Prices</td>
<td>−0.134</td>
<td>−0.06</td>
<td>−0.068</td>
<td>−0.863</td>
<td>0.168</td>
<td>0.04</td>
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<td>Joint value projects</td>
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<td>−0.055</td>
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<td>0.472</td>
<td>−0.433</td>
<td>0.475</td>
<td>−0.076</td>
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<tr>
<td>Flexibility</td>
<td>0.232</td>
<td>−0.02</td>
<td>−0.326</td>
<td>−0.065</td>
<td>−0.675</td>
<td>0.084</td>
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<tr>
<td>Involve in design</td>
<td>0.24</td>
<td>0.236</td>
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<td>Speed of response</td>
<td>0.776</td>
<td>0.109</td>
<td>−0.056</td>
<td>0.078</td>
<td>−0.157</td>
<td>−0.043</td>
<td>−0.004</td>
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<tr>
<td>Confidence abuse</td>
<td>−0.002</td>
<td>−0.844</td>
<td>0.077</td>
<td>−0.022</td>
<td>−0.108</td>
<td>0.055</td>
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<tr>
<td>Sharing info. risk</td>
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<td>−0.782</td>
<td>−0.169</td>
<td>−0.007</td>
<td>0.073</td>
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<td>Cost sharing</td>
<td>0.487</td>
<td>−0.053</td>
<td>0.363</td>
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<td>−0.01</td>
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<td>Costs of running</td>
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<td>ROI</td>
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<td>0.203</td>
<td>−0.54</td>
<td>−0.27</td>
<td>−0.133</td>
<td>0.283</td>
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<td>Bought volume</td>
<td>0.052</td>
<td>0.131</td>
<td>0.046</td>
<td>−0.046</td>
<td>−0.091</td>
<td>0.023</td>
<td>−0.785</td>
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<tr>
<td>Profitability</td>
<td>0.244</td>
<td>0.012</td>
<td>0.092</td>
<td>−0.577</td>
<td>0.032</td>
<td>−0.127</td>
<td>−0.136</td>
</tr>
</tbody>
</table>

59% of the variation is explained by the three factors.

Highest factor loading of item in bold.

Figures taken from the pattern matrix.

Eigen values for each factor were: 3.600; 1.239; 1.086.

narrow focus on one facet and single theoretical school of previous research. It may not be possible to produce a global measure, which explains all performance variation, but it may be possible to produce a measure with a limited number of financial and non-financial performance output dimensions.

Tables 4 and 5 present the results for the factor analysis of the non-economic and financial dimensions of performance, respectively. Ten dimensions of non-financial performance and 10 dimensions of financial performance were included (after the removal of one outlier). Fifty-nine per cent of the variation was explained by the three factors representing non-economic performance and 50% of the variation by the three factors representing financial performance. It must be emphasised that the measures were chosen to represent divergent aspects of performance and as few as possible variables included for each aspect. Therefore, it might be argued that any relationship found enhances the overall explanation.

We suggested that the buyer–supplier relationship performance could be divided along financial and non-financial dimensions. This proposition was broadly supported but needs refinement to the extent that
non-financial performance is conceptualised, in the main, across two factors and financial performance across three. This refinement may not be necessary if the motivation behind the assessment is considered. Parties to any relationship may only consider a certain performance set as being important and, in a study like this, the respondent might view some of the variation in a positive light. On a more positive note, the meaning behind each factor is derived from theory and from the highest individual rating on any factor.

Of the non-financial factors, factor 1 includes speed of response, product quality, benefits comparison, and lead times. It would appear to be a measure of operational relationship effectiveness from the buyer’s perspective. Factor 2 has just one item, involvement in design. This factor may need further development. Perhaps it may not be considered as a performance dimension except for a small number of firms, especially firms in close relationships. It was considered an added-value outcome and expected to correlate with these items. Factor 3 includes stability, satisfaction, value difficult to quantify, and joint value-added projects. This factor would appear to be one of the benefits of long-term interaction and the more strategic of the two main factors of non-financial performance. Note again that this research was tested on a main supply relationship that the buyer had experienced and it would be expected that firms would have a minimum of operational effectiveness but vary on their strategic effectiveness. Or perhaps certain relationship governance structures vary on the two main non-financial performance factors?

The financial factors also divide into three. The first of these is based on dependence—switching, interdependence and cost sharing. Cost sharing was meant to be related to the outlier, and may have been if this variable had proved reliable enough to be included in the analysis, but it does have a conceptual appeal in its uncovered relationship to dependence. Factor 2 is the agency factor representing risks of abuse of confidence and information sharing. The theorised dimensions being supported here. Factor 3 is the primary financial performance factor representing five measures that are all traditional economic measures of performance. The factor includes long-term profitability, prices, return on investment, bought volume and running cost. These financial assessments are usually applied at a relationship level. As with the non-financial factors it would, in further studies, be interesting to assess how these factors relate to the motivation of the parties behind the relationship. For example, dependency would not be regarded as a major performance risk to some firms in close relationships but to other firms, a dimension of performance to be closely monitored. Dependency and agency factors could be further developed as performance measures so as to assess their possible develop-

5. Conclusions

This research demonstrates the potential, a relationship viewpoint can have in the assessment of buyer–supplier partnership performance. An expanded conceptualisation of performance to include financial and non-financial may prove fruitful in evaluating the range of outcomes possible in close relationships. However, this range may not be suitable for all buyer–supplier relationship types. This paper supports a move to assessing buyer–supplier exchanges as relationships rather than from a single actor perspective only. The dimensions of performance provided in this paper are a composite relationship set. Taking a relationship performance position has been under-studied in previous research. It is hoped that this contribution will add to existing methods of evaluating performance of buyer and supplier exchanges.

For relationship performance assessment to develop and grow, a broader conceptualisation of buyer–supplier relationship performance is needed, and is supported in this paper. Combining theoretical perspectives that study buyer–supplier relationship performance would seem a worthwhile research endeavour. Multi-paradigm approaches to relationship performance research as advocated by Eccles (1991) and Ketchen et al. (1996) for business strategy performance research are strongly supported here. This is not to suggest that the performance dimensions found in prior research are not important just that they are too narrow to capture the multidimensional nature of the construct. Indeed measures utilised in prior studies which defined performance from a single theoretical perspective, were incorporated in the current research and were found to be important (see Kalwani and Narayandas, 1995; Dyer, 1996). The importance of a broadened conceptualisation for relationship performance was underscored when the respondents were asked about the relative importance of the financial and non-financial items used to measure performance. The top three measures, which received a ranking were flexibility (total ranking 134), lower costs (125) and stability (118). Two of these items are from the more strategic non-financial factors and one from the more financial. This may reflect the nature of the sample
but gives support to the broadened conceptualisation of buyer–supplier performance by including a relationship theory position.

The non-financial and financial dimensions of the relationship performance construct proved useful as a means for classifying measures and to conduct the research. Within these dimensions key factors were identified. 14/20 dimensions were explained in three factors—one financial and two non-financial. These factors have intuitive internal consistency and operational and strategic relevance. While it is noted that they were only tested within main supply relationships from a buyer’s perspective, they do offer potential for further development. Such dimensions provide a starting point in an expanded conceptualisation of relationship performance. Further work on these dimensions would permit an assessment of their significance and of their importance to individual buyer–supplier relationship types such as those provided by Sinclair et al. (1996).

An explanation of the number of factors found in the financial and non-financial categories may be in the motivation of the party conducting the performance assessment. That is, the relationship type may influence the performance measures considered important and therefore, the pattern of significance of the relevant performance items. This is a possible explanation as to why items such as design involvement factored separately. Design involvement, as a value-added performance outcome, may be important only to certain relationships and may be negative in the performance assessment of others. This may be a reason for the difficulty in interpretation. Relationship motivation appears to affect performance expectations. In the current research all the firms were considering main supply relationships but even these can exhibit significantly different patterns. For example, an arm’s length versus bilateral relationship may have different performance expectations. Further research work will have to be of a type linking relationship-specific dimensions of performance to individual relationship types. In our research we still felt it necessary to include all measures, even if sets of items within financial and non-financial dimensions are more relevant to a particular relationship type than to others.

One of the main problems with the current research may have been the reductivist nature of scale development. Twenty-one dimensions may not be enough to capture the underlying relationship between all the divergent items included. However, there are practical limits in data collection which favour the method used. It has revealed sufficient information on which to build further research and had internal consistency supporting the use of composite scales in measuring performance. It may be easier for managers to evaluate performance in a composite way rather than on the basis of an individual facet. The information required for the latter may be too detailed, a fact borne out in our qualitative research stage. The evaluation of a set of relationship performance dimensions as presented here demonstrates the potential of buyer–supplier exchanges at a strategic level. Consideration of buyer–supplier exchanges from a relationship performance perspective provides many avenues for further enhancing relationship outcomes depending on the buyer or supplier management system deemed appropriate. A relationship understanding of buyer–supplier exchange performance provides an additional rationale for closely aligning purchasing and supply management to the strategy of the firm.

Appendix A

Non-financial performance statements:

“The overall benefits of the relationship are better in comparison to other relationships we are in”
“The lead times for this supplier are shorter than for others”
“The quality of this supplier’s product is higher than others”
“The speed of response to problems by this supplier is quicker than others”
“We are happy with this relationship”
“One of the main advantages of this relationship is its stability”
“A lot of value that is difficult to quantify has been created in this relationship”
“One of the main advantages of this partnership is its flexibility”
“We are constantly working on joint value added projects in the relationship”
“The supplier is involved in the design of our products”

Financial performance statements:

“It would be difficult to switch to an alternative relationship”
“The more interdependent we are in this relationship the better”
“The relationship makes it easy for an abuse of confidence to happen” (reversed)
“The relationship has meant we have to share a lot of information and knowledge that we would normally resist” (reversed)
“The costs we have avoided in this relationship are less than in similar ones” (reversed)
“The prices we pay in this relationship are lower than in comparable ones”
“Return on investment (ROI) is higher in this relationship than in others”
“The long term profitability of this relationship is higher in comparison to alternatives”
“The bought volume in this relationship is higher when compared to others”
“More costs are shared equally in this relationship when compared to others”
“The overall costs of running this relationship are lower in comparison to others”

References


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