



International Food and Agribusiness Management Review
Volume 7, Issue 2, 2004

Buyer-Supplier Relationships: An Investigation of Moderating Factors on the Development of Partnership Characteristics and Performance

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Abstract

The contemporary view of competitiveness and strategy is based on the foundation that customer value is created by firms working together for common aims and not created by firms working in isolation. Therefore there is increasing recognition that firms who engage in co-operative long-term partnerships, improve the operation of the supply chain as a whole for the mutual benefit of all parties involved. However researchers have suggested that the degree of partnership that develops between a buyer and a supplier, and the performance outcomes achieved, are likely to be moderated by firm, market or product characteristics. Therefore using data collected from a survey of UK fresh produce suppliers, this study investigates how differences, in terms of size, type of product supplied, number and type of customers supplied, and the length of the customer relationship, influences the development and performance of buyer-supplier relationships in the UK fresh produce industry.

Keywords: partnerships, performance, and UK food industry

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Introduction

The UK food industry has seen a concerted move towards fewer and more co-operative buyer-supplier relationships as retailers have attempted to gain more control over their supply chains. This has been done to ensure the integrity of their own label products, in terms of quality and safety issues, and to reduce supply chain costs in an effort to increase their competitiveness in a highly competitive retailing environment (Fearne and Hughes 1999). These efforts have been accelerated in recent years by the introduction of Efficient Consumer Response (ECR), which promotes the development of collaborative partnerships between retailers and suppliers as a way to remove unnecessary costs from the supply chain and to add value to products by identifying and responding to consumer needs more effectively (Mitchell 1997, Fiddis 1997).

The tight gatekeeper roles that the major retailers now enjoy, by controlling access to consumers, means that they are in an increasingly powerful position as manufacturers and suppliers have no other viable means of setting up distribution that offers the same scale and economic benefits. The power relationship that exists between two firms has implications for the development of partnerships as several researchers suggest that the structure of the power-dependence relationship determines the level and features of a trading relationship and the performance outcomes achieved (i.e. Frazier and Antia 1995, Kumar Scheer and Steenkamp 1995, Gattorna and Walters 1996). Therefore relationships in the UK retail industry, where the market is dominated by a small number of retail customers, are likely to differ from those in other food sectors, such as processing or food service where the number of customers is much larger and the market less concentrated resulting in a different market power structure.

As retail concentration has increased, so too has supplier rationalisation as retailers realise that purchasing costs can be reduced by dealing with fewer suppliers. Research in the fresh produce industry shows that UK retailers are continuing to reduce the number of suppliers for each product, to concentrate on larger more technically efficient and innovative suppliers (Fearne and Hughes 1999, Hingley 2000). As such, smaller growers are likely to be excluded from the market by lack of size or facilities, as they will not be able to meet the volume requirements or service levels specified by the multiple retailers (Dawson and Shaw 1989). Smaller growers may also be disadvantaged as profit margins in the fresh produce sector are generally low and so, in many cases, profits can only be maintained and increased through volume growth (Fearne and Hughes 1999).

As retailers reduce the number of suppliers they deal with there is an increasing trend for suppliers to concentrate on the needs of fewer customers in order to provide the service and quantity required. In many cases retailers prefer to do business with suppliers that do not supply their main competitors (Duffy, Fearne

and Hornibrook 2002) and increasingly insist on some element of exclusivity in terms of products and/or service. This normally involves having a set of growers that only grow fruit for one retailer or by sourcing and developing varieties of fruit and vegetable that are only available in their stores (Fearne and Hughes 1999). The number of customers that a supplier does business with affects the power-dependence relationship, as a supplier that supplies many customers will be less dependent on any one customer than a supplier that relies on one customer for all its business. Therefore the number of customers that a supplier does business with is likely to affect the type of customer relationships that a supplier develops.

The degree to which a partnership can be developed is also influenced by the nature of the product market. For example, Spekman and Salmond (1992) suggest that collaborative relationships are not likely to be suitable for commodity purchases (even in high volume) or low value-added goods. They state that partners involved in the purchase of these types of products may be linked through an inventory management system but the linkages may not pervade any other aspects of their business. Simply, they state that the buyer and seller have few expectations of the other beyond the transaction. This is echoed by Anderson and Narus (1991), who suggest that for commodity products, long-term contracts and 'just-in-time' inventory programs may generally represent the extent of potential collaboration.

In the food industry buyer-supplier relationships of 30 years or greater are not uncommon (Duffy 2002), with many suppliers having grown and developed their businesses to meet the needs of the multiple retailers (Fearne and Hughes 1999). The length of a customer relationship could have an influence on the degree of partnership that has developed as some researchers suggest that the longer a supplier has been doing business with a customer, the more likely it is that the parties engage in joint activities (Lusch and Brown 1996).

Therefore there are a number of factors that are suggested to influence or have a moderating affect on the extent to which buyer-supplier partnerships might develop in the food industry. To investigate the influence that these different firm and relationship characteristics have on the development of partnerships and their performance the relationships between these categorical firm and relationship characteristics and key partnership characteristics are empirically tested. The next section presents the theoretical framework. The constructs specified in this framework are the variables that are the dependent variables in this study, while the different firm and relationship characteristics mentioned previously are viewed as the independent variables.

Theoretical Framework

The framework used to investigate buyer-supplier relationships was developed from two key disciplinary orientations in channel theory: the behavioural approach and the political economy paradigm. The key premise of the behavioural approach, as

related to performance, is that performance is not solely determined by the structural arrangement of the channel but also by channel member behaviour (El-Ansary 1975, Haytko, 1994). The majority of behavioural channel research has concentrated on power and conflict as the key behavioural constructs that influence performance (Reve & Stern 1979).

In this way the behavioural approach has traditionally viewed relationships between channel members as power struggles, in which the power and dependence of each party controls the decisions and subsequently the performance of other firms (Gassenheimer et al 1989, Skinner et al 1992). Other behavioural constructs such as co-operation, trust, commitment and satisfaction have also been widely studied due to their perceived influence on performance (Haytko 1994).

The political economy framework, as developed by Stern and Reve (1980) for the analysis of distribution channels, advocates the division of an interorganisational dyad into an internal economy and an internal polity, which interact to jointly influence collective behaviour and performance. In this way the political economy framework, integrates the behavioural power theories of organisations with the economic efficiency theories of organisations to gain a deeper understanding of the internal functioning of a distribution channel.

Specifically, the framework builds on the empirical work of Reve and Stern (1986) and the conceptual work of Robicheuax and Coleman (1994) who took a behavioural approach to the traditional structure-conduct-performance relationship.

The premise of the model is that the structural elements of a buyer-seller relationship, such as activities and information flows, measured in the internal

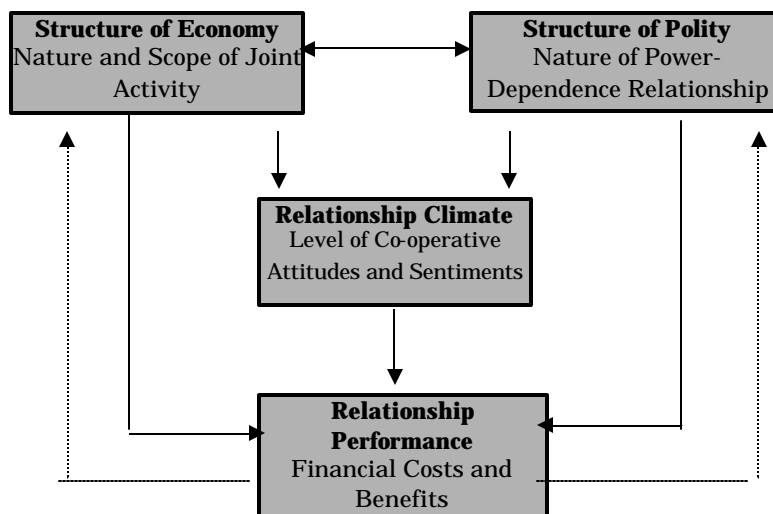


Figure 1: Theoretical Framework for Investigating Buyer-Supplier Relationships

economy, and the nature of the power-dependence relationship, measured in the internal polity, influence each other but also influence the dominant attitudes and sentiments in the relationship and the performance outcomes achieved. Each part of the framework is briefly discussed in the following sections. For a full discussion regarding the development of the model and its validation through factor analysis see Duffy (2002).

Conceptualization of the Structure of the Economy

The internal economy is defined in terms of the types of activities, resources and information flows that are used to support and co-ordinate the operation of the buyer-supplier relationship (Arndt 1983, Reve and Stern 1986, Robicheaux and Coleman 1994, Cannon 1992). As such, the economy is conceptualised as existing on a continuum representing the more tangible and observable aspects of relationships. At one end, firms engage in low levels of joint activities and have low levels of operational integration and at the other they engage in high levels of joint activities and have high levels of operational integration.

Conceptualization of the Structure of the Internal Polity

The internal political structure is conceptualised as the level and nature of interdependence that exists in a relationship (Kumar, Scheer and Steenkamp 1995). A comprehensive view of interdependence encompasses both the asymmetry and magnitude of interdependence (i.e. Kumar et al 1995, Frazier and Antia 1995, Geyskens et al 1996). Therefore, an examination of the relationship polity directs attention to the level of total interdependence in the relationship (i.e. the sum of both firms' dependence) and the level of dependence asymmetry in the relationship (i.e. the difference in the firms' dependence scores).

Conceptualization of the Climate

In line with Reve and Stern (1986) the climate examines the dominant attitudes and sentiments that exist in a buyer-supplier relationship. Researchers such as Stern and Reve (1980) and Skinner Gassenheimer and Kelley (1992) suggest that conflict and co-operation are the two dominant sentiments that regulate exchange relationships.

Four theoretical constructs are used to capture whether the dominant attitudes and sentiments in relationships are co-operative or adversarial in nature. These are trust, commitment, relational norms and functional conflict resolution methods, which are constructs that indicate the presence of co-operative behaviour directed towards collective as opposed to individual goals (i.e. Dwyer, Schurr and Oh 1987, Heide and John 1992, Morgan and Hunt 1994, Cannon and Perreault 1997, Sigauw, Simpson and Baker 1998). Functional conflict resolution is measured instead of measuring the level of conflict in a relationship as researchers suggest that conflict

is not always detrimental to a relationship (i.e. Robicheaux and El-Ansary 1976, Michie and Sibley 1979). Instead it is the manner in which partners resolve conflict that has implications for partnership success (Mohr and Spekman 1994).

Conceptualization of Performance

The aim of this part of the framework is to examine the financial costs and benefits associated with different forms of buyer-supplier relationships. Because the focus of this study is concerned with the impact of partnerships on supplier performance, performance is viewed from the perspective of individual channel members. More specifically, the focus of performance concerns the supplier's overall view of the performance outcomes of a specific customer relationship. This view is taken because suppliers often have many customers. As such it would be difficult to isolate the impact of any individual relationship on overall performance at the firm level.

Methodology

Data Collection

Data was collected via a questionnaire sent to the managing directors of 337 UK fresh produce suppliers in March 2001. In addition to collecting information on each of the theoretical constructs in the framework, the questionnaire also collected information on firm characteristics and background information on the chosen customer relationship. A total of 173 questionnaires were returned and 155 of these were deemed usable, resulting in a usable response rate of nearly 46 percent.

Suppliers were instructed to answer the questionnaire in relation to the customer with whom they had been doing business for the longest period of time. This was done to increase the likelihood that suppliers commented on a relationship that was properly formed and had established patterns of behaviour (Leuthesser 1997). The decision to specify the customer about whom suppliers should comment on was made as Ellram and Hendrick (1995) suggest that if the decision is left to the supplier the results will be biased in favour of high performing relationships as given the choice, suppliers are most likely to pick their best customer arrangements to discuss.

It was believed that the selection of enduring relationships would not bias the responses towards relationships with more partnership characteristics, as researchers such as Leuthesser (1997) and Blois (1996, 1997) state that the established patterns of behaviour in the relationship may or may not be relational in nature. The extent to which this approach provides an unbiased method for selecting customer relationships is investigated by examining the influence of relationship length on each of the constructs in the theoretical framework.

Construct Measurement

All theoretical constructs were measured using multiple item scales and are listed in the appendix. The structure of the economy was measured using a 22-item scale designed to capture the task-related flows of activities, resources and information in a relationship. Following approaches in previous research, dependence was measured using parallel multiple item scales; one to measure the suppliers view of its dependence on the chosen customer and the other to measure the supplier view of their customer's dependence on their own firm (i.e. Buchanan 1992, Kumar et al 1995, Lusch and Brown 1996).

To measure the dominant attitudes and sentiments in the exchange separate scales were developed to measure levels of trust, commitment, relational norms and functional conflict resolution methods. Trust was measured using a four item scale that captured trust in a partner's honesty and trust in a partner's benevolence (Kumar et al 1995). Commitment was measured using three items that captured the attitudinal and temporal components of commitment (Kumar et al 1995, Wilson and Vlosky 1998).

Relational norms were measured using eight items that measured four norms most frequently used to operationalise the construct of relationalism. These were solidarity, flexibility, mutuality and information exchange (i.e. Kaufmann and Stern 1988, Noordewier, John and Nevin 1990, Dant and Schul 1992, Heide and John 1992, Lusch and Brown 1996). Functional conflict resolution was measured using items that identify whether problems are resolved amicably or by resorting to threats using items drawn from previous studies (Salmond 1987, Gundlach et al 1995, Morgan and Hunt 1994).

Finally, performance was measured using nine items that captured commonly cited benefits of partnerships. These items measured whether there had been a reduction in costs and a sharing of realised benefits (IGD 1996, Fiddis 1997, Mitchell 1997) and changes in sales and profits, which Frazier, Spekman and O'Neal (1988) and Nielson (1997) suggest are the most important outcomes of partnerships. In addition, items were developed which captured the supplier's beliefs and expectations regarding the future prospects for the relationship and its future viability as Woo and Willard (1983) and Stern and El-Ansary (1992) suggest that performance cannot be measured solely by past or current levels of sales and profitability, but should also include indicators of how the firm will do in the future.

Validation and Modification Of Measures

After the data had been collected all measures were tested for their reliability and validity, using Cronbach's alpha and factor analysis. A factor analysis of each

multiple item scale identified ten distinct and separate inter-organisational constructs that were used in all subsequent statistical analyses. These had alpha values ranging from 0.6298 to 0.9311 indicating that all scales were reliable (Duffy 2002). These are listed below in Table 1.

Table 1: Key Dimensions Of Buyer-Supplier Relationships

Variable	Description
Economy	Sum of Economy Factors 1 to 4
Economy Factor 1	Focus On Supply Chain Efficiency
Economy Factor 2	Exclusive Offerings
Economy Factor 3.	Scope And Level Of Communication and Joint Activities
Economy Factor 4	Involvement in Decisions And Planning
Polity	Total Interdependence and Dependence Asymmetry
Total Interdependence	Supplier Dependence + Customer Dependence
Dependence Asymmetry	Supplier Dependence - Customer Dependence
Climate	Sum of Climate Factors 1 to 3
Climate Factor 1	Trust and Relational Norms
Climate Factor 2	Commitment
Climate Factor 3	Functional Conflict Resolution Methods
<i>Performance</i>	Future growth and current costs and sales

All of these variables were found to exist in higher amounts in relationships classified as partnerships as opposed to relationships classified as having limited co-ordination (Duffy 2002). These variables were also all found to have significant and positive relationships with performance. The exception was the level of dependence asymmetry, which in accordance with the theory, was lower in customer relationships classified as partnerships and had a significant negative relationship with performance (Duffy 2002).

Results

ANOVA was used to assess the relationship between each of the theoretical constructs in Table 1 and several potential influential variables namely: (1) relationship length, (2) firm size, (3) number of customers supplied, (4) customer type and (5) type of product supplied.

Differences Attributable to the Duration of the Trading Relationship

The results show that the duration of the chosen customer relationship, which ranged from 1 to 50 years, was only significantly related to climate factor three

(functional conflict resolution). However this relationship is not linear and so the results do not show that as the age of the relationship increases, firms use more functional methods of resolving conflicts. The results of the post hoc tests, calculated using the Scheffe test in SPSS, tested the differences between all possible combinations of groups.¹ These tests did not identify any combinations of groups that were significantly different at the one or five per cent levels of significance. Therefore, the duration of a buyer-supplier relationship does not appear to influence the degree of partnership that develops in the relationship or the performance of the relationship.

Table 2: Results of the One Way ANOVA for Relationship Length (mean scores)

	1-5 years n = 15	6-10 years n = 42	11-15 years n = 30	16-20 years n = 24	21-25 years n = 16	26-30 years n = 14	>30 years n = 14	F Statistic	Sig. ** = sig. at 0.01 * = sig. at 0.05
Total Interdependence	3.7926	3.7831	3.6704	3.7407	3.9722	3.7350	3.7778	.502	.806
Dependence asymmetry	.4967	.3702	.6967	.9021	.5688	.5615	.8214	.911	.489
Economy Factor 1	3.4889	3.4524	3.5222	3.1944	3.5000	3.4872	3.4286	.438	.853
Economy Factor 2	3.0222	3.1587	2.6889	3.1389	3.1875	3.2051	3.3810	1.181	.320
Economy Factor 3	3.5667	3.7238	3.7300	3.6000	3.9062	3.7923	4.0071	.620	.714
Economy factor 4	3.6667	3.5833	3.3583	3.2500	3.6719	3.8269	3.7500	1.463	.195
Climate Factor 1	3.5111	3.5933	3.4889	3.1979	3.5365	3.6923	3.6667	1.326	.249
Climate Factor 2	4.1111	4.1429	4.1667	3.8056	4.2708	4.1282	4.1905	1.053	.394
Climate Factor 3	3.2667	3.7063	3.1111	3.2083	3.4167	3.7949	3.4762	2.987	.009*
Performance.	3.6444	3.7566	3.6074	3.3056	3.7431	3.5983	3.7937	1.917	.082

Economy Factor 1 = focus on supply chain efficiency, Economy Factor 2 = exclusive offerings, Economy Factor 3 = level and scope of communication and joint activities, Economy Factor 4 = Involvement in decisions and planning, Climate Factor 1 = Trust and Relational Norms, Climate Factor 2 = Commitment, Climate Factor 3 = Functional conflict resolution

Differences Attributable to Firm Size

An examination of the group means in Table 3 shows that as turnover increases there was a general increase in levels of exclusive offerings (economy factor 2), communication and joint activity (economy factor 3), commitment (climate factor 2) and interdependence. All of these relationships were significant at the 0.05 level and above, except for the level of exclusive offerings. Therefore, these results suggest that as a firm increases in size it is able to increase its investment in the relationship.

Table 3 also shows that three other constructs varied significantly across groups. These were involvement in decisions and planning, performance and functional conflict resolution. However, none of these constructs were found to have a linear relationship with supplier turnover and so the nature of the relationship could not be interpreted without an examination of the multiple group comparisons. The examination of the multiple pairwise comparisons, carried out in the post hoc tests, only identified where significant differences occurred for one of the six constructs

¹ Due to the length of output associated with these tests, the results of the post hoc tests are not included.

Table 3: Results of the One Way ANOVA for Supplier Turnover (mean scores)

	£<10m n = 65	£11-25m n = 33	£26-50m n = 26	£51-100m n = 18	£100m+ n = 10	F Statistic	Sig. ** = sig. at .01 level * = sig. at .05 level
Total Interdependence	3.5573	3.8519	3.8932	4.0494	4.0000	4.506	.002**
Dependence asymmetry	.4354	.9470	.5346	.4389	.5850	1.605	.176
Economy Factor 1	3.2667	3.6869	3.3718	3.6852	3.4333	2.010	.096
Economy Factor 2	2.8667	3.1717	3.0641	3.3889	3.6667	2.342	.058
Economy Factor 3	3.1708	4.0576	4.1308	4.3667	4.2600	24.832	.000**
Economy factor 4	3.3231	3.7803	3.6923	3.7639	3.4500	2.813	.028*
Climate Factor 1	3.4462	3.6818	3.4776	3.6713	3.1500	1.776	.137
Climate Factor 2	3.9128	4.2222	4.2308	4.3148	4.3333	2.843	.026*
Climate Factor 3	3.2923	3.7172	3.5128	3.4444	3.0333	2.625	.037*
Performance.	3.4940	3.7744	3.7137	3.8827	3.4667	2.639	.036*

Economy Factor 1 = focus on supply chain efficiency, Economy Factor 2 = Exclusive offerings, Economy Factor 3 = Level and scope of communication and joint activities, Economy Factor 4 = Involvement in decisions and planning, Climate Factor 1 = Trust and Relational Norms, Climate Factor 2 = Commitment, Climate Factor 3 = Functional conflict resolution

found to have significant differences across groups. This was the level of communication and joint activities (economy factor 3) which was shown to be significantly lower in small firms who had a turnover of less than £10m, then in large firms who had a turnover of more than £100m. This is likely to be due to the fact that small firms would not have the resources necessary to engage in joint activities such as category management.

Differences Attributable to the Number of Customers Supplied

The number of customers that a firm supplies has been used as an objective measure of dependence in previous research. This is based on the theory that as the number of customers supplied increases, the dependence on any one customer decreases (Provan and Skinner 1989). Therefore supplier dependence was included in this ANOVA analysis to identify if there was any correspondence between these two measures of dependence.

Three constructs varied significantly at the 0.05 level when suppliers were grouped according to the number of customers they supplied. These were supplier dependence, total interdependence and the level of exclusive offerings. The multiple pairwise comparisons, showed that supplier dependence was the only variable for which significant differences were found for a specific combination of groups and was found to differ significantly between groups of suppliers that had one customer and groups of suppliers than had four or five customers (Sig. value of 0.03).

With the exception of economy factor three, suppliers that had only one or two customers had higher mean scores of all variables than suppliers who had more than four customers. This indicates that focusing on the needs of fewer customers is conducive to the formation of partnership characteristics. The results also indicate that increased supplier dependence is not detrimental to relationship performance

Table 4: One Way ANOVA For Number Of Retail Customers (mean scores)

	1 Customer	2 Customers	3 Customers	4-5 Customers	6+ Customers	F Statistic	Sig. ** sig. at .01 * sig. at .05
Supplier Dependence	4.8333	4.3625	4.4783	3.9696	4.1241	5.060	.001**
Total Interdependence	4.3148	3.9375	3.9855	3.7271	3.8123	2.463	.049*
Dependence asymmetry	1.1667	.9562	1.1087	.5457	.7017	1.834	.127
Economy Factor 1	3.8889	3.8542	3.4638	3.3768	3.5057	1.617	.175
Economy Factor 2	3.6111	3.5417	3.4638	2.9203	2.9080	2.781	.030*
Economy Factor 3	4.1000	4.0000	3.8348	3.8652	4.0828	.664	.618
Economy factor 4	3.7083	3.6563	3.3478	3.6630	3.4569	.869	.485
Climate Factor 1	3.7222	3.7396	3.2754	3.5199	3.4109	1.634	.170
Climate Factor 2	4.3333	4.3750	4.1449	4.1014	4.1379	.636	.638
Climate Factor 3	3.7222	3.7292	3.3188	3.3768	3.2874	1.325	.265
Performance	3.8333	3.8750	3.5217	3.6184	3.6513	1.097	.362

Economy Factor 1 = focus on supply chain efficiency, Economy Factor 2 = exclusive offerings, Economy Factor 3 = level and scope of communication and joint activities, Economy Factor 4 = involvement in decisions and planning, Climate Factor 1 = Trust and Relational Norms, Climate Factor 2 = Commitment, Climate Factor 3 = Functional conflict resolution

as suppliers with only one or two customers had higher levels of performance than suppliers who had more than two customers.

Differences Attributable to Customer Type

Due to the fact that the majority of suppliers commented on customer relationships with retailers, the number of suppliers who commented on relationships with customers in other sectors, such as food processing and food service, was quite small. In order for the groups in the analysis to have adequate sample sizes only two groups were created: (1) relationships with retail customers, and (2) relationships with other customers.

Table 5 shows that suppliers who commented on relationships with retail customers had higher mean scores for all of the dimensions of the relationship economy and higher levels of interdependence, dependence asymmetry, performance and commitment. However, they had lower mean scores for trust and relational norms and functional conflict resolution techniques. Five constructs were found to be significantly higher in retail relationships than in relationships with other customers. These were the scope and level of communication linkages and joint activities, a focus on supply chain efficiency, commitment, interdependence and dependence asymmetry.

The significant differences in terms of the scope and level of communication linkages and joint activities and emphasis given to supply chain initiatives indicate that relationships with retail customers are significantly more developed than relationships with food service companies and food processors. These greater investments in the relationship help explain why levels of interdependence and commitment are higher in relationships with retailers than other types of customers.

Table 5: One way ANOVA for Type of Customer Supplied (mean scores)

	Multiple Retail Customers n = 124	Other Types of Customer n = 31	F Statistic	Sig. ** sig. at .01 level * = sig. at .05 level
Total Interdependence	3.8555	3.4552	13.490	.000**
Dependence asymmetry	.7752	-.0037	18.133	.000**
Economy Factor 1	3.5041	3.1828	3.962	.048*
Economy Factor 2	3.1220	2.9140	1.135	.288
Economy Factor 3	3.9398	2.9710	47.332	.000**
Economy factor 4	3.5610	3.4355	.629	.429
Climate Factor 1	3.4831	3.6290	1.211	.273
Climate Factor 2	4.1762	3.8495	6.002	.015*
Climate Factor 3	3.3957	3.5269	.740	.391
Performance	3.6603	3.5341	1.153	.285

Economy factor 1 = focus on supply chain efficiency, Economy Factor 2 = exclusive offerings, Economy Factor 3 = level and scope of communication and joint activities, Economy Factor 4 = Involvement in decisions and planning, Climate Factor 1 = Trust and Relational Norms, Climate Factor 2= Commitment, Climate Factor 3 = Functional conflict resolution

The results also show that dependence asymmetry was significantly higher for the group of suppliers commenting on relationships with retailers. This indicates that a reason that relationships with retailers are more sophisticated is due to the fact that retailers are able to place greater demands on their suppliers due to their immense buying power. Table 5 also shows that the mean score for dependence asymmetry for suppliers of other types of customers is negative. This negative value indicates that in other food sectors, customers are often more dependent on their suppliers than their suppliers are on them.

These differences in power could explain why levels of the less tangible aspects of partnerships, such as trust and relational norms and functional conflict resolution techniques, were lower in retail relationships than in relationships with other types of customers. For example, researchers have suggested that relationships dominated by a more powerful customer will have lower levels of trust and relational norms as the more powerful partner erodes these behaviours through the use of threatening and forceful behaviour (i.e. Gundlach and Cadotte 1994, Kumar, Scheer and Steenkamp 1995).

Differences Attributable To the Type Of Product Supplied

The final ANOVA analysis tested to see whether differences could be identified between suppliers of commodity products and suppliers of luxury or added value products. Three groups of suppliers were identified. The first group consisted of suppliers who only supplied commodity items, such as traditional loose fruit and vegetables. This group consisted predominately of small suppliers with a turnover of less than £10 million.

Group two was a middle category and consisted of suppliers whose products were difficult to classify as either commodities or value added products as some products, although grown and supplied in the UK by a number of firms, are either more expensive products (i.e. raspberries, strawberries and plums) or require more sophisticated growing facilities, such as greenhouses (i.e. tomatoes, cucumbers). This group consisted primarily of small suppliers although it had a greater number of medium sized suppliers than group one. Finally group three consisted of suppliers who supplied a range of added value or luxury and exotic products. This group consisted primarily of medium to large companies. Group two was omitted from the analysis to ensure that only distinctly different groups of suppliers were compared.

Table 6 shows that, with the exception of economy factor two (exclusive offerings) and climate factor three (functional conflict resolution) the group means were higher for suppliers of premium items than suppliers of commodity items. Four variables were significantly higher for suppliers of premium products than commodity products. These were interdependence, performance, communication and joint activities and commitment.

Table 6: One Way ANOVA Results for Type of Product Supplied (mean scores)

	Suppliers of Commodity Items n = 65	Suppliers of premium Items n = 39	F Statistic	Sig. ** sig. at .01 * sig. at .05
Total Interdependence	3.6434	3.9778	9.866	.002**
Dependence asymmetry	.5604	.5675	.001	.972
Economy Factor 1	3.3881	3.6583	2.815	.096
Economy Factor 2	3.1542	3.1167	.036	.850
Economy Factor 3	3.4701	4.2675	26.860	.000**
Economy factor 4	3.4478	3.6750	2.123	.148
Climate Factor 1	3.4465	3.6083	1.407	.238
Climate Factor 2	4.0050	4.3500	6.600	.012*
Climate Factor 3	3.4776	3.4661	.005	.943
Performance.	3.4842	3.8528	10.925	.001**

Economy factor 1 = focus on supply chain efficiency, Factor 2 = exclusive offerings, Factor 3 = level and scope of communication and joint activities, Factor 4 = Involvement in decisions and planning, Climate factor 1 = Trust and Relational Norms, Climate factor 2= Commitment, Climate factor 3 = Functional conflict resolution

The finding that suppliers of commodity products had significantly lower levels of performance than suppliers of premium products, supports the theory that suppliers of commodity products are in a weaker bargaining position as they can only differentiate themselves in terms of price. For example, Fearn and Hughes (1999) state that suppliers of commodity items are forced to accept low prices in order to achieve volume growth, which does little to improve their immediate and long-term financial performance. In addition, they state that the downward pressure on prices for suppliers of commodity items is exacerbated by a fragmented supply base and over capacity of raw material given the static demand for traditional fruit and vegetables.

Table 6 also shows that the level of communication and joint activities is significantly higher in the group of suppliers supplying premium products than in the group of suppliers supplying commodity products. This result supports suggestions made by Hughes (1996) who stated that collaboration was more likely in the area of innovative premium products than for price-based goods where questions of economic efficiency were likely to be more important.

The two other variables that were found to differ significantly between the two groups were the level of interdependence and the level of commitment in the relationship. These were found to be significantly lower for suppliers of commodity products than suppliers of premium added value products. The lower level of interdependence indicates that commodity suppliers realise that other suppliers who offer their customer a comparable product could easily replace them. The lower level of commitment in the relationships also indicates that suppliers of commodity items take a shorter-term view of customer relationships than suppliers of added value and exotic products.

Conclusions

This analysis has provided evidence that firm and product characteristics can have an influence on the development of partnership characteristics and performance. These findings are relevant to the development of inter-organisational theory and are potential issues relating to partnership formation.

Implications for Practitioners

Larger firms appear to be better placed to invest in their customer relationships, which could be an advantage in the long term as supplier rationalisation continues. The ability to invest in a customer relationship is likely to be an important factor that retailers consider when allocating suppliers. This is because retailers increasingly want to deal with fewer, larger and more technically efficient suppliers who can offer them a greater variety of services. This finding highlights the need for suppliers to increase their critical mass, particularly if they supply a relatively undifferentiated product. This trend is already evident in the UK with existing suppliers restructuring into larger companies through mergers and acquisitions.

The research also highlights some important implications for suppliers who are considering concentrating on fewer customers or becoming dedicated suppliers. By definition, being a dedicated supplier means that the dependence of a supplier on that customer will be high. Due to the relative power advantage that a customer has over a dependent supplier this situation would appear to be risky and leave the supplier vulnerable to the demands of the customer.

However, the research indicates that although dedicated suppliers perceive themselves to be in a position of greater relative dependence than suppliers with more customers it is not detrimental to their performance. In fact the results showed that suppliers with only one or two customers reported higher levels of performance than suppliers with more than two customers. Therefore concentrating on the needs of fewer customers should be viewed as a viable option for suppliers who are currently supplying many customers and struggling to serve any of them adequately. Indeed as the retail environment becomes more competitive it is likely that retailers may request a greater degree of exclusivity in their supply arrangements in order to differentiate their product offering from their competitors.

Suppliers of commodity products reported significantly lower levels of performance than suppliers of value added or exotic products. This finding supports conclusions reached in previous research, which suggested that growth in the fresh produce industry is most likely to be achieved in the value added sector (Fearne and Hughes 1999). This is due to the fact that retailers value suppliers who provide them with products that differentiate them from their competitors. By adding value to the product, or by offering the retailer a differentiated offering, suppliers provide themselves with the opportunity to appropriate value for themselves rather than passing it all to the retailer.

Fearne and Hughes (1999) state that in order to compete in the added-value sector firms need to build more collaborative trading relationships with customers. They state that this is because the continued development of innovative value added products requires suppliers to take a long term perspective on investment and innovation focusing on the future needs and wants of customers. This research supports these views as suppliers of value added products were found to have higher levels of all partnership characteristics than suppliers of commodity products.

Therefore, if suppliers wish to improve their performance they must break out of the commodity trap. However this requires a more long term and strategic focus to ensure that future growth areas are identified and innovative products offered. This is likely to present a big challenge to many fresh produce suppliers as in order to drive value in the fresh produce industry, and not just volume, suppliers will be required to adopt strategies typically associated with branded manufacturers.

The results also show that relationships with retail customers have a higher degree of partnership characteristics than relationships with food service companies and food processors. This result is not surprising given the fact that multiple retailers have been driving the development of supply chain partnerships through initiatives such as ECR, to add value and remove costs from the supply chain and to increase their competitiveness. This type of initiative has been less evident in the food service sector. However, if competitive pressures in the food service industry

increase, developments in customer-supplier relationships could mirror those developments in the retail industry. If this is the case, food service firms are likely to rationalise their supply base in the same way as food retailers. To help ensure the continued viability of customer relationships this research indicates that suppliers should seek to develop their relationships with their food service customers in advance of what many regard an inevitable process of re-structuring.

Implications for Theory

The findings with regard to the duration of a relationship are consistent with the findings of previous research, which has found the impact of relationship length on a number of important channel constructs to be minimal (i.e. Lusch and Brown 1996, Ganesan 1994, Kumar, Scheer and Steenkamp 1995). Therefore the decision to the use relationship length to select a customer relationship in the survey would appear to have not biased the responses for any of the constructs in the study.

The study also helps our understanding of the measurement of the dependence construct. For example, researchers have stated that the measurement of dependence has been hindered by the wide variety and measures used to operationalise the construct. In particular, Heide and John (1988) state that the use of different empirical indicators, that have been used interchangeably as measures of dependence, makes it difficult to make generalisations from the literature. This is because different aspects of dependence do not necessarily co-vary or have the same affect on the outcome variables.

However, this study found that a significant relationship exists between two commonly used measures of dependence. For example, the perceptive dependence measure of replacability used in this study (i.e. Heide and John 1988, Dant and Schul 1992, Kumar, Scheer and Steenkamp 1995, Buchanan 1992) was found to be significantly related to an objective measure of dependence, which was the number of customers supplied (Provan and Skinner 1989, Jacobs 1974). This finding could help researchers to make better generalisations from the dependence literature in the future.

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Appendix: Measurement Scales

Focus on Supply Chain Efficiency: Economy Factor One

S2.q8 – We work together with this customer to identify where waste and excessive costs are occurring in an ongoing effort to make the supply chain more efficient.

S2.q12 – Consumer demand is forecast jointly with this customer to help minimize waste and reduce stock-outs.

S2.q14 – Production is planned jointly with this customer, and produce grown according to these requirements.

Exclusive Offerings: Economy Factor Two

S2.q19 – Our company offers this customer exclusive product varieties and brands.

S2.q20 – Our company provides this customer with an exclusive set of growers.

S2.q22 – Our company has invested in production facilities that are exclusively for this customer.

Level and Scope of Communication and joint activity: Economy Factor Three

S2.q1 – Our company communicates on a daily basis with this customer (e.g. phone, fax).

S2.q2 – Our company has EDI systems in place with this customer.

S2.q3 – Members of our company frequently meet face to face with their operational counterparts from this customer's organization.

S2.q4 – Our company has a dedicated customer team assigned to this customer account.

S2.q5 – Communication is restricted to the interface between our sales department and this customer's purchasing department. (R)

S2.q9 – We have regular strategic meetings with this customer, in which we discuss our future requirements and goals for the relationship.

S2.q15 – This customer shares EPOS data with our company.

S2.q16 – We undertake market research and discuss the findings with this customer.

S2.q17 – Sales data and promotional activities are analysed jointly with this customer.

S2.q18 – New product varieties, packaging and presentation ideas are developed in conjunction with this customer.

Involvement in Decisions and Planning: Economy Factor Four

S2.q7 – When negotiating prices this customer tries to force the price down as low as possible without any consideration of our costs. (R)

S2.q10 – In meetings our company has an input into any decisions that are taken by this customer concerning this business relationship.

S2.q11 – In meetings this customer is not interested in our advice or opinions, and just tells us what to do. (R)

S2.q13 – There is rarely any warning of promotions or special events that this customer has organized, which makes it difficult to plan supplies. (R)

Supplier Dependence

S3.q1 – It would be difficult to replace the sales and profits generated by this customer.

S3.q2 – This customer is more important than other customers we supply.

S3.q3 – Investments we have made in this customer would make it costly to end the relationship.

S3.q4 – It would be very disruptive to our company's operations to end the relationship with this customer.

S3.q5 – This customer could be easily replaced with another customer. (R)

Customer Dependence

S3.q6 – This customer would find it difficult to identify a supplier that could offer

them products and a service that are comparable to our own.

S3.q7 – This customer views us as being significantly better than our closest competitors.

S3.q8 – This customer has made investments in our company that would make it difficult for them to terminate business with us. (deleted from scale)

S3.q9 – This customer would experience severe disruption to supply if it ended its relationship with our company.

S3.q10 – This customer could easily replace us with another supplier. (R)

Commitment

S4.q1 – We expect our relationship with this customer to continue for a long time.

S4.q2 – We expect our relationship with this customer to strengthen over time.

S4.q3 – We are willing to make investments to develop our business with this customer.

Trust

S4.q4 – This customer's staff is dependable and honorable and stands by their word.

S4.q5 – We believe that this customer would not try to deceive us.

S4.q6 – This customer would not deliberately take action that would negatively affect us.

S4.q7 – This customer would not use confidential information to take advantage of us.

Relational Norms

S4.q8 – If either of us has a problem, we can count on each other's support to find a solution.

S4.q9 – We are happy to do this customer favours, as we know that such action will be reciprocated in the future.

S4.q10 – When an unexpected situation arises that proves detrimental to either party, we would both rather work out a new deal than hold each other to the

original terms.

S4.q11 – If either of us encounters unexpected problems or needs, we are both able to be flexible and adapt to the changing circumstances.

S4.q12 – We receive a fair proportion of the benefits that are generated from this relationship.

S4.q13 – We believe that this customer strives to take action that benefits the relationship as a whole, rather than looking for ways to fulfil its own interests at our expense.

S4.q14 – This customer keeps us informed about events or changes that may affect us.

S4.q15 – We are confident this customer does not withhold information that could be of use to our firm.

Functional Conflict Resolution

S4.q18 – When disagreements arise in this relationship, people tend to spend time shifting blame for the problem. (R)

S4.q19 – There are lingering feelings of resentment and frustration resulting from problems that have not been satisfactorily resolved in the past. (R)

S4.q20 – In trying to resolve a difficult problem this customer sometimes lets us know that they can take their business elsewhere. (R)

Performance

S5.q1 – The amount of business that we have with this customer is growing.

S5.q2 – We are satisfied with the level of profits we achieve with this customer.

S5.q3 – Investments of time and money in this customer have been worthwhile.

S5.q4 – Investments we have made in this relationship have made our business operations more cost effective and efficient.

S5.q5 – The cost of servicing this customer is low given the amount of business it generates.

S5.q6 – Returns that we have made from this relationship have enabled us to

reinvest and expand our business with this customer.

S5.q7 – We see a lot of future growth potential with this customer.

S5.q8 – We have been required to make investments in this relationship that have cost us a lot of money and that offer little benefit to our own operations. (R)

S5.q9 – The future viability of this relationship does not look good. (R)