

EXPLORING BUYER-SELLER RELATIONSHIPS IN DEVELOPING COUNTRIES. EMPIRICAL EVIDENCE FROM THE PHILIPPINES.

Peter J. Batt
Curtin University of Technology

Nexhmi Rexha
Curtin University of Technology

Abstract

Empirical evidence collected from comprehensive personal interviews with potato farmers in Northern Luzon revealed a total of twenty three constructs that may influence the development of long-term buyer-seller relationships in developing countries. Satisfaction with the seed suppliers offer quality and the farmer's satisfaction with the exchange, the willingness of the seed supplier to communicate, to make adaptations and to provide education and training programs, relational norms, trust and commitment, dependence and uncertainty are established. However, how important each of these constructs are in the development of long-term buyer-seller relationships and determining which constructs are antecedents to the development of a long-term relationship and which constructs are an outcome of the relationship has yet to be ascertained.

Introduction

With increasing turbulence and greater uncertainty in the market, more firms are moving away from transaction orientated marketing strategies towards relationship marketing approaches for enhanced performance. More industrial firms are realising that customer retention is more cost effective than customer creation (Achrol 1997; Han, Wilson and Dant 1993; Kalwani and Narayandas 1995).

While an extensive amount of literature has appeared describing the variables influencing the establishment and maintenance of long-term relationships in industrial markets (Achrol 1997; Anderson and Narus 1990; Anderson and Weitz 1992; Ford 1984; Morgan and Hunt 1994; Wilson 1995), the vast majority of the research has been undertaken in Europe and North America. Very little research had been undertaken to increase our understanding of long-term buyer-seller relationships in the developing world (Frazier, Gill and Kale 1989).

According to Achrol, Reve and Stern (1983), Anderson and Weitz (1986), Hallen, Johanson and Seyed-Mohamed (1991) and Heide and John (1988), the environment may exert significant influence on the market exchange relationship. Ford (1984) demonstrates how distance influences the development of buyer-seller relationships and the strategies adopted by suppliers to penetrate various industrial markets in Europe. Hallen, Johanson and Seyed-Mohamed (1991) suggest that technology is the most important variable influencing business relationships. However, in the developing countries, poorly developed infrastructures often result in widespread production and distribution bottlenecks that impede the availability of products (and technology) to producers and consumers. Governments often restrict production capacity, corporate ownership, imports and prices, access to capital, technology and foreign exchange (Frazier, Gill and Kale 1989). In agriculture, the uncertainty of supply in the input market, the uncertainty of price in the output market and large seasonal variations in

productivity (Crissman and Hibon 1996) will introduce additional dimensions to the models of industrial buyer behaviour proposed by Hakansson (1982), Anderson and Narus (1990), Morgan and Hunt (1994) and Wilson (1995).

This paper seeks to identify those factors that may influence the development of long-term buyer-seller relationships between seed suppliers and potato farmers in the Philippines.

Methodology.

During February to March, 1999, 52 potato farmers in Northern Luzon were asked to indicate how much they agreed or disagreed with 101 prepared statements which sought to identify the nature of the farmer's relationship with their most preferred seed supplier.

Based on the extent literature of buyer-seller relationships, the statements were grouped under one of twelve categories which sought to capture; (1) the importance of the purchase decision; (2) uncertainty; (3) the duration of the relationship; (4) dependence; (5) offer quality; (6) satisfaction; (7) trust; (8) commitment; (9) communication; (10) adaptations; (11) education and training; and (12) social norms. Morris, Brunyee and Page (1998) identified some 22 key variables that characterise buyer-seller relationships. Some of these variables describe the overall relationship, whereas others reflect the dyadic nature of the relationship. Morgan and Hunt (1994) propose that commitment and trust are the key mediating variables between five important antecedents and five desired outcomes from the relationship. Wilson (1995) puts forward a set of 13 relationship variables that have both theoretical and empirical support.

Farmers were asked to respond on a scale of 1 (I disagree a lot) to 7 (I agree a lot). Scales were developed from research reported by Anderson, Chu and Weitz (1987); Anderson and Narus (1990); Anderson and Weitz (1992); Athaide, Meyers and Wilemon (1996); Ford (1984); Ganeson (1994); Gundlach, Achrol and Mentzer (1995); Heide (1994); Leuthesser (1997); McQuiston (1989); Moorman, Deshpande and Zaltman (1993); Morgan and Hunt (1994); Morris, Brunyee and Page (1998); and, Noordewier, John and Nevin (1990).

Given that the majority of farmers in the Philippines speak English, the survey instrument was written in English and the interviews were conducted in English, although farmers often responded in their native dialect. The interviews, which, on average, took 3 hours to complete, were conducted in the farmer's homes by a technical officer employed by the Highland Agriculture and Resources Research and Development Consortium from Benguet State University in La Trinidad.

The data was encoded and factor analysis undertaken using principal component analysis. Varimax rotation with Kaiser normalisation was performed to more clearly indicate which variables belonged to which construct. Further clarification of the variables contributing to each construct was achieved by applying the reliability coefficient (Cronbach's alpha).

Results and Discussion.

The importance of the purchase decision was captured by two statements that measured the farmer's estimates of seed costs and the frequency of purchase (Table 1). In the Philippines, seed is the most significant cost of production (HARRDEC 1996). However, as the majority of small farmers have few cash reserves, the purchase of seed becomes even more significant. Most farmers are able to replace only a small proportion of their seed each year.

Table 1. Relationship Building Factors in Filipino Seed Potato Industry.

	Items	Eigenvalue	Cronbach's alpha
Importance of the input	2	1.80	.802
Uncertainty; Financial security	7	4.53	.817
External instability	4	2.84	.758
Need uncertainty	3	2.22	.669
Duration of the relationship	4	2.99	.888
Dependence; Investment	4	3.33	.838
Power	4	2.50	.796
Satisfaction; Equity	9	4.76	.867
Channel conflict	1	1.20	
Offer quality	7	5.04	.923
Communication; Content	5	4.23	.890
Frequency	2	1.60	.553
Responsiveness	2	1.04	.376
Adaptations; Customer orientation	5	3.96	.902
Supplier orientation	3	2.02	.668
Education and training	4	3.50	.948
Trust; Competence	5	4.37	.912
Empathy	3	1.38	.634
Psychic distance	2	1.20	.451
Commitment; Continuity	6	6.55	.925
Relational benefits	4	1.75	.923

While potatoes are one of the most profitable crops for small farmers, they are also one of the most risky. There is much uncertainty of supply in the input market, uncertainty of price in the output market and large seasonal variations in productivity (Crissman 1989; Crissman and Hibon 1996). Here, uncertainty is captured by three constructs that consider; (i) financial security; (ii) external instability; and (iii) need uncertainty.

In situations of high uncertainty, the literature suggests that buyers can reduce uncertainty by purchasing from suppliers who have supplied them in the past (Anderson, Chu and Weitz 1987; Jackson 1985). Duration of the relationship captured four variables in a single construct that measured the temporal nature of the exchange and the stability of the relationship.

When the outcomes obtained from the relationship are important; when the outcomes from the relationship are higher or better than the outcomes available from alternative relationships; and when fewer alternative sources of supply are available to the firm, dependence is said to increase (Heide and John 1988). While seed is the most important input, the results achieved to date suggest that farmers are able to choose between many alternative seed suppliers hence the lack of alternatives is not a source of dependence. Furthermore, the majority of farmers indicate that their most preferred seed supplier does not have the best seed offer, hence there are better alternatives. What then is the source of the dependence? Given that the majority of farmers experience major financial limitations and that most farmers are unable to borrow from financial institutions (Tagarino, Cungihan and Paday-os 1998), most farmers are dependent upon their seed supplier to not only finance the cost of the seed, but also the cost of complementary inputs (chemicals and fertilisers). Furthermore, most small farmers are

dependent on their seed supplier to market their produce and to provide them with information. In such a relationship, the seed supplier has the majority of the power.

Despite the dependence and apparent inequity in the exchange, Crissman (1989) suggests that the majority of small potato farmers purchase seed from those suppliers with whom they have a long-standing personal relationship. Here, satisfaction is measured by the equity in the exchange (Frazier 1983; Anderson and Narus 1990) and the level of conflict in the exchange. Anderson and Narus (1990) indicate that firms that are able to reduce the level of conflict in their relationship experience greater satisfaction. Although farmer's indicate that there is considerable conflict in their relationship with their most preferred seed supplier, they continue to transact in the belief that those suppliers with whom they have dealt in the past will treat them more equitably than lesser known, alternative seed suppliers who may take greater advantage of their situation.

Quality, price and the ability to deliver are regarded as the most important criteria by which industrial buyers evaluate potential suppliers (Cunningham and White 1973; Dempsey 1978). However, a farmer's decision to purchase seed can also be expressed in rational economic terms as value-for-money (Kool 1994). A farmer's decision to purchase seed may depend upon the difference in productivity between the farmer's own seed and the purchased seed. Seed which is substantially free of pathogens is more productive, but it is also more expensive to purchase (Monares 1981).

Mohr and Nevin (1990) analyze communication processes in marketing channels from four perspectives; the frequency, the direction, the mode and the content. From this study, three components were extracted; the content, the frequency and responsiveness. Feder, Just and Zilberman (1985) indicate that limited access to information is one of the major constraints limiting the rapid adoption of new technologies in the developing world. Given that the majority of farms in the Philippines are smaller than 1.3 hectares (Crissman 1989), farmers will actively search for information to increase productivity per unit area. The frequency of contact was measured by the ease with which the farmer could contact the seed supplier and how often the farmer visited with the seed supplier. Responsiveness was measured by the time it took for the seed supplier to respond to quotations.

The stronger the supplier's market position, the less likely it is that the supplier will adapt to the buyers needs (Hallen, Johanson and Seyed-Mohamed 1991). An investigation of the extent to which the seed supplier adapted to a farmer's needs revealed two opposing factors; a customer orientated approach and a self-centred orientation. While farmers can choose between several alternative seed suppliers, the seed suppliers dominate the exchange transaction for they supply the majority of the inputs and control most of the information that the farmer receives.

Product education and training includes the broad set of activities that a supplier must perform to help the buyer get an innovation up and running (Athaide, Meyers and Wilemon 1996). This construct captured the desirability of the seed supplier having field demonstration plots, providing training programs and the willingness of the seed supplier to share the costs of evaluating new varieties.

Anderson and Narus (1990) view trust as the belief that an exchange partner will perform actions that will result in positive outcomes for the firm and not to take unexpected actions that may result in negative outcomes. Moorman, Deshpande and Zaltman (1993) define trust as the willingness to rely upon an exchange partner in whom one has confidence. However,

Ganeson (1994) also believes that trust is a belief or an expectation about an exchange partner that results from the partners expertise, reliability and intentionality. He proposes that trust is comprised of two components; credibility and benevolence. This study captures two similar constructs; (i) competence refers to farmer's belief that their most preferred seed supplier has the necessary expertise to provide good quality seed and that the supplier always keeps their promise; (ii) empathy is derived from the seed suppliers concern for the farmer's best interest.

Business relationships are generally derived from the social exchange processes that occur between the individuals taking part in the transaction (Wilson 1995). Such relationships provide the basis for both parties to develop confidence in the stability of the relationship. Relational norms are expectations about behaviour that are partially shared by decision makers (Gundlach, Achrol and Mentzer 1995). In the context of business relationships, the literature refers to five social norms; solidarity, mutuality, flexibility, integrity and harmonisation of conflict. From this study, we were able to extract three factors; (i) mutuality assesses the importance of the relationship and the extent to which the partners trust one another; (ii) goal compatibility (solidarity) measures the extent to which the parties share similar goals and jointly discuss business plans; and (iii) the extent to which the relationship extends beyond the transaction, for the most preferred supplier was often a close personal friend. However, this construct also encapsulates a preference to deal with local suppliers, which Hakansson and Snehota (1995) define as psychic distance.

Moorman, Deshpande and Zaltman (1993) define commitment as an enduring desire to maintain a valued relationship. Morgan and Hunt (1994) suggest that a firm will commit to an exchange partner when the relationship is considered so important as to warrant maximum efforts to maintain it. Hakansson and Snehota (1995) see commitment as the tendency to persist with courses of action, often without a causal motive, on the basis of some expectation. Gundlach, Achrol and Mentzer (1995) distinguish between an attitudinal and an instrumental construct. Commitment is most often seen as an attitudinal construct that describes affective commitment, psychological attachment, identification, affiliation and value congruence. Fortuitously, the results of this study seem to have captured both constructs; the first construct measures the likelihood that the farmer will continue to interact with their most preferred seed supplier, while the second construct measures the benefits of maintaining the relationship, both from the farmer's perspective (where the supplier provides financial assistance and seed during times of scarcity) and the suppliers perspective (where the farmer will buy the majority of their seed from their most preferred supplier).

Implications and conclusions.

While this paper outlines and confirms many of the factors which are reported to be involved in the development of long-term relationships, we have yet to determine how important these factors are and to determine which factors are antecedents to the development of long-term relationships and which factors are an outcome of the relationship. Furthermore, to what extent the relationship building process and the relationship building variables are influenced by the moderating variables (the importance of the input, uncertainty, dependence, the duration of the relationship and the availability of alternatives) has yet to be determined.

References.

- Achrol, Ravi S, Torger Reve and Louis W. Stern (1983), "The Environment of Marketing Channel Dyads: A Framework for Comparative Analysis", *Journal of Marketing*, 47 (Fall), 55-67.
- Achrol, Ravi S (1997), "Changes in the Theory of Interorganisational Relations in Marketing: Toward a Network Paradigm", *Journal of the Academy of Marketing Science*, 25(1), 56-71.
- Anderson, Erin and Barton A. Weitz (1986), "Make-or-Buy Decisions: Vertical Integration and Marketing Productivity", *Sloan Management Review*, Spring, 3-19.
- Anderson, Erin, Wujin Chu and Barton A. Weitz (1987), "Industrial Purchasing: An Empirical Exploration of the Buyclass Framework", *Journal of Marketing*, 51 (July), 71-86.
- Anderson, Erin, and Barton A. Weitz (1992), "The Use of Pledges to Build and Sustain Commitment in Distribution Channels", *Journal of Marketing Research*, 29 (February), 18-34.
- Anderson, James C and James A. Narus (1990), "A Model of Distributor Firm and Manufacturing Firm Working Partnerships", *Journal of Marketing*, 54 (1), 42-58.
- Athaide, Gerard A, Patricia W. Meyers and David L. Wilemon (1996), "Seller-Buyer Interactions During the Commercialisation of Technological Process Innovations", *Journal of Product Innovation Management*, 13, 406-421.
- Crissman, Charles C (1989), *Seed Potato Systems in The Philippines: A Case Study*. PCCARD.
- Crissman, Charles C and Alberic Hibon (1996), *Establishing Seed Potato Prices: Concepts, Procedures and Implications for Research and Training*. Social Science Department. Working Paper 1996-1. CIP. Lima. Peru.
- Cunningham, M.T. and J.G. White (1973), "The Determinants of Choice of Supplier". *European Journal of Marketing*, 7 (Winter), 189-202.
- Cunningham, Malcolm T (1982), "Barriers to Organisational Interaction" in *International Marketing and Purchasing of Industrial Goods. An Interaction Approach*. Hakan Hakansson ed. Wiley. New York. 358-368.
- Dempsey, William A (1978), "Vendor Selection and the Buying Process", *Industrial Marketing Management*, 7, 257-267.
- Feder, Gershon, Richard E. Just and David Zilberman (1985), "Adoption of Agricultural Innovations in Developing Countries: A Survey", *Economic Development and Cultural Change*, 33, 255-298.
- Ford, David (1984), "Buyer/Seller Relationships in International Industrial Markets", *Industrial Marketing Management*, 13, 101-112.
- Frazier, Gary L (1983), "Interorganisational Exchange Behaviour in Marketing Channels: A Broadened Perspective", *Journal of Marketing*, 47 (Fall), 68-78.

Frazier, Gary L, James D. Gill and Sudhir H. Kale (1989), "Dealer Dependence Levels and Reciprocal Actions in a Channel of Distribution in a Developing Country", *Journal of Marketing*, 53(1), 50-69.

Ganeson, Shankar (1994), "Determinants of Long-Term Orientation in Buyer-Seller Relationships", *Journal of Marketing*, 58 (April), 1-19.

Gundlach, Gregory T, Ravi S. Achrol and John T. Mentzer (1995), "The Structure of Commitment in Exchange", *Journal of Marketing*, 59 (January), 78-92.

Hakansson, Hakan. ed (1982), *International Marketing and Purchasing of Industrial Goods. An Interaction Approach*. Wiley. New York.

Hakansson, Hakan and Ivan Snehota (1995), *Developing Relationships in Business Networks*. International Thomson Business Press. London.

Hallen, Lars, Jan Johanson and Nazeem Seyed-Mohamed (1991), "Interfirm Adaptation in Business Relationships", *Journal of Marketing*, 55 (April), 29-37.

Han, Sing-Lin, David T. Wilson and Shirish P. Dant (1993), "Buyer-Seller Relationships Today", *Industrial Marketing Management*, 22, 331-338.

Heide, Jan B and George John (1988), "The Role of Dependence Balancing in Safeguarding Transaction-Specific Assets in Conventional Channels", *Journal of Marketing*, 52 (January), 20-35.

Heide, Jan B (1994), "Interorganisational Governance in Marketing Channels", *Journal of Marketing*, 58 (January), 71-85.

Highland Agriculture and Resources Research and Development Consortium (1996), *Highland Potato Technoguide*. Benguet State University. La Trinidad.

Jackson, Barbara B (1985), "Build Customer Relations that Last", *Harvard Business Review*, November-December, 120-128.

Kalwani, Manohar, U and Narakesari Narayandas (1995), "Long-Term Manufacturer-Supplier Relationships: Do They Pay Off for Supplier Firms?", *Journal of Marketing*, 59 (January), 1-16.

Kool, Maarten (1994), *Buying Behaviour of Farmers*. Wageningen Press.

Leuthesser, Lance (1997), "Supplier Relational Behaviour: An Empirical Assessment", *Journal of Marketing Management*, 26, 245-254.

McQuiston, Daniel H (1989), "Novelty, Complexity and Importance as Causal Determinants of Industrial Buyer Behaviour", *Journal of Marketing*, 53 (April), 66-79.

Mohr, Jakki and John R Nevin (1990), "Communication Strategies in Marketing Channels. A Theoretical Perspective", *Journal of Marketing*, 54 (October), 36-51.

Monares, A (1981), *The Potato Seed System in the Andean Region: The Case of Peru*. Unpublished PhD thesis. Cornell University.

Moorman, Christine, Rohit Deshpande and Gerald Zaltman (1993), "Factors Affecting Trust in Market Research Relationships", *Journal of Marketing*, 57 (January), 81-101.

Morgan, Robert M and Shelby D. Hunt (1994), "The Commitment-Trust Theory of Relationship Marketing", *Journal of Marketing*, 58 (July), 20-38.

Morris, Michael H, Janinne Brunyee and Michael Page (1998), "Relationship Marketing in Practice. Myths and Reality", *Industrial Marketing Management*, 27, 359-371.

Noordewier, Thomas G, George John and John R. Nevin (1990), "Performance Outcomes of Purchasing Arrangements in Industrial Buyer-Vendor Relationships", *Journal of Marketing*, 54 (October), 80-93.

Tagarino, D.D., E.B. Cungihan and J.B Paday-os (1998), *Analysis of the Credit Market for Potato Production and Marketing in the Cordillera Administrative Region*. HARRDEC. Benguet State University. La Trinidad.

Wilson, David T (1995), "An Integrated Model of Buyer-Seller Relationships", *Journal of Academy of Marketing Science*, 23(4), 335-345.