

A Business Relationship Model using Cognitive and Behavioural Constructs

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Abstract

A conceptual model based on multiple theoretical frameworks is proposed for investigating business relationships with customers. Empirical data on relationships is used in a preliminary analysis to show that correlations between constructs generally follow patterns indicated by theory. The proposed model extends existing models by capturing the many facets of a complex business relationship in a way that can be applied in different contexts.

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Introduction

Empirical studies into business relationships have usually been grounded in one of the well-established theoretical frameworks such as social exchange or transaction cost analysis. However, studies based on a single framework tend to provide only a limited perspective. This has led researchers to suggest that research into business relationships needs to draw on multiple frameworks, the approach that is taken in the study outlined in this paper. Only a few studies have attempted to draw on multiple theories to investigate business relationships. Further, these studies have limited coverage of communication, environment and customer specific factors.

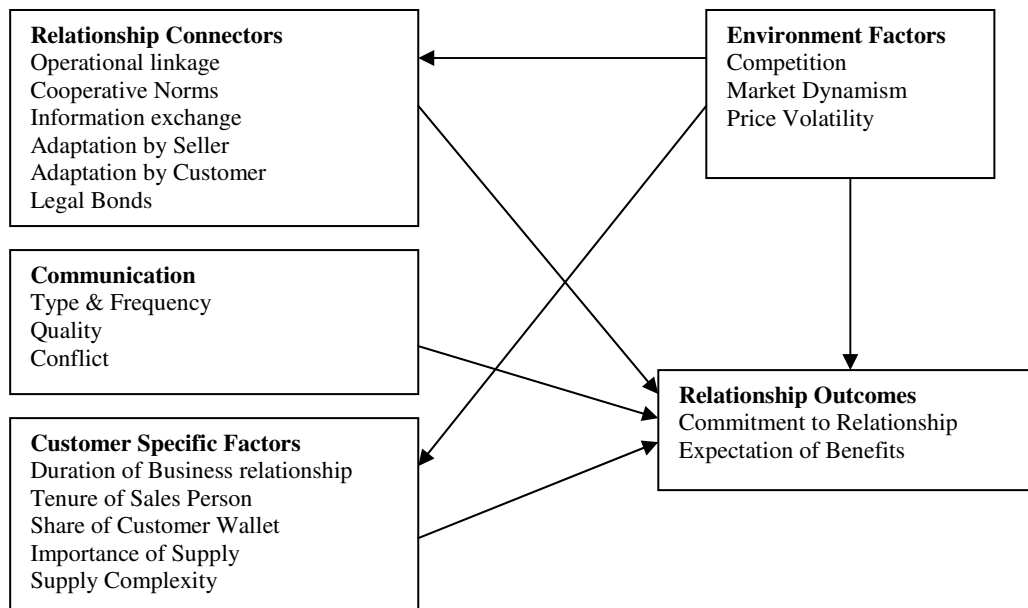
The present study forms part of a larger investigation into the possible links between nature of business relationships and the widely reported variation in customer profitability (Mulhern, 1999; van Raaij, Vernooij, & van Triest, 2003). This investigation involves first developing a theoretical model to investigate the nature of the business relationship between a seller and its customers.

Model Development

Theoretical frameworks used to investigate various facets of a business relationship include transaction cost analysis (Berthon, Pitt, Ewing, & Bakkeland, 2003; Rindfleisch & Heide, 1997), relational contract theory (Lusch & Brown, 1996), social exchange theory (Anderson & Narus, 1984), power dependence theory (Frazier, 1983) and the IMP approach (Ford & Hakansson, 2006). However, no single theoretical framework adequately captures the multiple facets of a complex relationship, making it necessary to use constructs drawn from different theoretical frameworks (Bowman & Narayandas, 2004; Palmatier, Dant, & Grewal, 2007). The need to capture multiple facets of a relationship is relevant because outcomes may be influenced by many factors.

Among the first to use constructs drawn from several theories were Cannon & Perreault (1999), who proposed a set of relationship connectors in a taxonomy of business relationships. The relationship connectors proposed were: information exchange, operational linkages, legal bonds, cooperative norms, adaptations by seller and adaptations by buyers. Cannon and Perreault argued that these were in turn influenced by market and situational factors. The underlying principle in developing the constructs was to focus on the behavioural facets in a relationship rather than on the cognitive aspects to enable investigation of a wide variety of relationships. This approach of Cannon and Perreault's (1999) was the starting point in developing a theoretical model of a business relationship that is shown in Figure 1.

Figure 1. Conceptual Model of Factors in a Business Relationship



An important facet of any ongoing business relationship is the quality and modes of communication used (J. Mohr & Spekman, 1994; J. J. Mohr, Fisher, & Nevin, 1996). Communication quality influences relationship building and is a characteristic of business interactions when there is congruence of business goals between parties (Large, 2005). By contrast, differences in goals that result in unresolved or escalating conflict adversely affect communication quality and may result in a breakdown of business relationships (Mohr & Spekman, 1994). These factors are represented in the model as three communication variables: type and frequency of communication, quality of communication and conflict.

Researchers studying the profit impact of business relationships have reported that customer characteristics, such as length of relationship and tenure of the sales representative, influence the nature of interactions with the supplier and impact the outcomes of relationship development efforts (Bowman & Narayandas, 2004; Venkatesan & Kumar, 2004)). Another characteristic that seems to influence business relationships is the supplier's share of a customer's purchase, referred to 'share of customer wallet'. A seller's investment in forming a closer relationship takes place in the expectations of increasing or maintaining this share of wallet (Fink, Edelman, & Hatten, 2007). A customer's motivation to develop closer relationships with a seller is also linked to the importance of supply to their operations and the complexity of their needs (Cannon & Perreault, 1999). These factors are combined into a set of variables labelled Customer Specific Factors.

At a firm level, business relationship as a strategy could be viewed as one of the responses to a move away from a pure market situation where price and other economic factors play a dominant role. Business relationships serve to de-link the effects of market factors and their associated risks and uncertainties. However, the influence exists to varying degrees depending on the maturity and evolution of the business relationship. Hence it is important to consider the key environment factors that influence the structure and dynamics of a business relationship. Based on Cannon and Perreault's (1999) approach, variables such as competition, market dynamism and price volatility model impact of the environment, and these are expected to influence not only the outcome of business relationships but also the

relationship connectors, communication and specific business factors that create that relationship. .

Finally, allocation of an organisation's resources to build business relationship is made with a view to achieve relationship outcomes such as an increase in a customer's commitment to a relationship. Commitment implies that benefits are expected to accrue over time and hence includes expectations of an ongoing relationship (Dwyer, Schurr, & Oh, 1987; Gundlach, Achrol, & Mentzer, 1995; Sollner, 1999). However, these perceptions may be adversely influenced by the presence and level of conflict that arises in the course of a business relationship. This conflict may occur when one or both parties attempt to use power asymmetry arising out of resource or other sources of imbalance to gain advantage. Environment factors such as competition may also influence commitment and expectation of benefits accruing in future, and the relationship may also be affected by the quality and amount of communication between the parties.

The proposed model of a business relationship links relational outcomes such as commitment to four groups of factors; namely, relationship connectors, communication, customer specific factors and environment factors. Relationship connectors that reflect behaviour are expected to be closely linked to outcomes such as commitment when there is a close relationship. Similarly, customer specific factors will be closely linked to commitment and benefit expectations in a relationship, especially when there is a long history of doing business, or supply is important to the customer's business, or the customer's requirements are complex in nature. Communication as seen from the supplier's perspective will be closely linked to commitment and benefit expectation, but is likely to be adversely affected when there is conflict. In a close relationship, the environment can be expected to have a weak impact as it represents a situation where other factors have greater importance.

Nature of Effects

In a strong business relationship with a customer, it is expected that the underlying factors that represent the relationship, such as relationship connectors, communication and customer specific factors, will be strongly correlated and thus can be regarded as the main effects in the proposed model. This implies that environment factors will have a weaker effect on the relationship and will manifest as lower levels of correlation. Specifically, the following main effects are expected among the main constructs if they are a valid representation of a close business relationship:

1. A positive correlation between commitment and relationship connectors.
2. A positive correlation between communication quality and commitment to a relationship
3. A positive correlation between relationship connectors and benefit expectations
4. A negative correlation between conflict in a business relationship and relationship connectors and communication quality

The presence of correlations as indicated by theory will enable further analysis into the nature and directions of effects using appropriate confirmatory methods.

Methodology

Testing of the conceptual model in Figure 1 was conducted in a large organisation operating in a business-to-business market. The use of a single organisation was influenced by the larger research question of relating relational outcomes to financial measures and is the method used in a number of studies (Mulhern, 1999; Niraj, 2001; van Raaij et al., 2003; Van Triest, 2005). Approximately 300 large customers were initially selected as the sample for investigation. The account managers responsible for these customers were surveyed to provide information about the business relationships.

A survey instrument was developed with the questions framed as reported in the original literature from which the constructs were selected. All the questions relating to various perception constructs were anchored on a seven-point Likert scale using strongly agree and strongly disagree as end points. The draft questionnaire was extensively tested over several iterations with different personnel in the organisation as well as with colleagues to check for content and wording of questions. The survey was administered using Surveygizmo, an online survey portal, and after two reminders to non-respondents achieved a response rate of 58%.

Data cleaning undertaken prior to analysis indicated that most of the responses were complete. For a few questions in the relationship constructs with up to four missing items per question, missing values were replaced with the response mean. A very low response was received on share of customer purchase that the seller had on various product categories purchased by a customer. Hence, one of the constructs to evaluate share of customer wallet was excluded from further analysis. Similarly, legal bonds as a construct was also excluded because fewer than 30% of respondents had some form of legal agreement covering transactions or building of relationships.

Research Findings

Reliability of Constructs

The remaining constructs were analysed for scale reliability using Cronbach's alpha. High values of Cronbach's alpha (all constructs had values $\geq .83$, $p=.01$ except one which was 0.73, $p=.01$) confirm the reliability of the scales adapted for this study. All the items in each construct also had high item to total correlation. The only construct which could be improved was relationship expectation where deletion of an item measuring benefits in getting other business resulted in a higher alpha value. Thus all the constructs with items using seven-point scales demonstrated acceptable reliability.

Relationship among constructs

The correlations of the main constructs using scales were computed using aggregate values for each construct to test the four main effects postulated. The aggregate values were computed using the sum of mean values of each item as adopted by Cannon and Perreault (1999). These values are shown in Table 1.

The correlations exhibit a clear pattern, consistent with the expectations previously outlined. Higher levels of correlation are seen among constructs used for business relationships, whereas the environment constructs demonstrated lower correlations with the other constructs. For example, the environment factors show significant correlations with only two

or three relational factors and the values were all less than .31 ($p \leq .01$). The main factor on which all environment constructs showed a correlation was on relationship commitment.

Table 1: Correlation Matrix of Main Relationship Constructs

Constructs											
Operational Linkages	1.000										
Information Exchange	-.774**	1.000									
Cooperative Norms	-.586**	.659**	1.000								
Adaptation by Seller	-.548**	.594**	.462**	1.000							
Adaptation by Buyer	-.491**	.588**	.435**	.728**	1.000						
Communication quality	-.054	.046	.177*	-.038	-.082	1.000					
Conflict	-.150	.221*	.021	.238**	.154	-.362**	1.000				
Importance of Supply	-.494**	.554**	.671**	.438**	.350**	.263**	.025	1.000			
Supply Complexity	-.429**	.447**	.391**	.515**	.464**	.081	.177*	.459**	1.000		
Commitment to Relationship	-.468**	.491**	.571**	.447**	.275**	.221*	.013	.625**	.361**	1.000	
Expectation of Benefits	-.290**	.243**	.566**	.299**	.237**	.440**	-.177*	.544**	.297**	.564**	1.000

** . Correlation is significant at the 0.01 level (2-tailed). * . Correlation is significant at the 0.05 level (2-tailed)

An important finding is that operational linkages has negative correlations with other constructs, which is contrary to expectations based on theory. However, taking the organisation context into consideration, this finding is understandable because the nature of business and location of customers makes development of operational linkages difficult. This implies that further analysis into the relational effects should not incorporate this construct in order to avoid spurious effects. This finding also highlights the need to interpret relational constructs taking their context into consideration, especially when the averaging effects of a cross sectional study are not present.

Other expected main effects are also supported. Thus it can be concluded that the theoretical constructs presented in Figure 1 provide a plausible insight into the nature of a business relationship and can be subjected to a more rigorous confirmatory approach to theory testing using SEM.

Contribution to Research

Theoretical frameworks of a business relationship that draw on multiple theoretical strands are very few and do not capture all the main facets from a supplier's perspective. A recent study which attempted to do this (Fink et al, 2007) has limited focus on several important aspects such as communication. Similarly, models proposed in other studies are restricted in their view of a business relationship (Werner Reinartz, Krafft, & Hoyer, 2004; Werner Reinartz, Thomas, & Kumar, 2005). The proposed model attempts to capture the many facets of a complex business relationship in a way that can be applied in different contexts. This model should be of interest to practitioners because its parameters can be interpreted in terms of measures commonly used for assessing business relationships.

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