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MUTUAL COMMITMENT AND EXPERIENTIAL KNOWLEDGE IN INTERNATIONAL BUSINESS RELATIONSHIPS

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Mutual Commitment and Experiential Knowledge in International Business Relationships

by

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ABSTRACT
Numerous studies have identified various patterns of behaviour by firms developing international business relationships, but little attention has been devoted to empirical studies of the dynamic processes within these international business relationships. This paper contributes towards a better understanding of how market knowledge and market commitment are developed in supplier/customer relationships in international markets. It reports the empirical testing of a dynamic model of increasing commitment and experiential knowledge development in international business relationships. The model shows that the dynamics of experiential knowledge generation seem to take place mainly in the mutual relationship development, not so much within the individual firms that develop the relationship. The dynamics of the model are that a domestic supplier replaces his business relationships with existing customers for other business relationships with customers that are more embedded in the foreign market. This process shows how the supplier’s increased knowledge of the business network that a foreign customer is embedded in makes it possible for the supplier to overstep the customer and deal with firms that are more embedded in the local market. The model thus explicates a process of increasing foreign market involvement.

CASE OF HGL HOLDINGS INTERNATIONALISATION PROCESS
HGL Holdings is a company based in Christchurch, New Zealand, and has been listed publicly since 1973. The company was established in 1938 to produce plumbing equipment. In 1947, it started producing electrical

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equipment. At present HGL manufactures electrical accessories, portable consumer fan heating and air movement products, electronic motor speed control systems, and plastic mouldings.

Before HGL Holdings started to export, it had a 95 per cent share of the domestic market. HGL’s first export efforts started in 1962 when the chairman was asked by the Minister of Trade and Industry to lead a trade mission to the Pacific Islands; this resulted in initial exports worth $500.

Since HGL was initially manufacturing electrical goods it had to export to regions that used the same voltage in their electrical products as New Zealand. It started exporting to Malaysia, then Australia; now it exports to about 40 countries with such diverse markets as Hong Kong, Singapore, Malaysia, Thailand, Indonesia, Philippines, the Pacific Islands, Spain, Portugal, the UK, France, Germany, Argentina, South Africa and Chile.

When HGL started exporting it used agents. After much research it decided to get involved in direct foreign investment in Australia and Malaysia and set up its first assembly plant outside New Zealand in Malaysia in 1977, to take advantage of incentives offered to foreign investors by the government there. This assembly plant was established as a joint venture with Australian and British partners. HGL and its joint venture partners then decided to share the required 30 per cent ownership with indigenous Malays so that they could benefit from tariff protection. Sharing ownership with these three other parties reduced HGL’s shareholding from 100 per cent to 27 per cent, which it eventually sold off. The joint venture partners were not co-operating, the products they were manufacturing were widely different and each company wanted to protect its own interests by focusing on its own products.

After the joint venture failed, HGL established a wholly owned factory in Malaysia in 1979. It also established a factory in Australia, in 1984, because the Australian government offered various incentives to foreign investors. HGL believed it knew the Australian market well and considered that country to be
part of the domestic market. In 1994 it opened a second factory in Malaysia. At present HGL has two factories in Malaysia and one in Australia.

At present Australia is HGL’s largest export market, accounting for 60-70 per cent of the company’s exports. Europe is its second largest market, with opportunities to develop.

Through its relationships with distributors in Australia and Britain, HGL is increasing its sales to these markets, thus using existing relationships to develop new ones. HGL’s future plans are to form more strategic alliances with its existing distributors and suppliers to expand its markets. Since it produces a wide range of products it has started distributing supplementary products through those other distributors which it has met through its original distributors. Top management make frequent visits to markets abroad to gain knowledge about products and markets, to build and maintain relationships, and to participate in about six trade fairs a year.

Introduction

The short case above illustrates the international expansion of one firm. Other observations of cases of internationalisation have found comparable patterns (Davidson 1980, Franko 1989, Gatignon and Anderson 1988, Goodnow and Hansz 1972, and Johanson and Wiedersheim-Paul 1975). The observations have led researchers to identify “establishment chains”, whereby firms increase their commitment to the foreign market as they gain knowledge of it (Johanson and Wiedersheim-Paul 1975). For example, the initial phase of a firm going international might involve the use of, an agent in the target country. But as the firm’s knowledge of the foreign market increases, it decreases its commitment to the agent while increasing its commitment to the market by, for instance, the setup of a sales subsidiary. A common establishment chain pattern is to move from a state of no regular export activities, via export through independent
representatives and the establishment of sales subsidiaries, to the establishment of manufacturing subsidiaries.

A fundamental explanation of the establishment chain behavior is that a firm learns incrementally about the foreign market. Such a learning process occurs because the firm gains foreign market knowledge through commitment of resources to do business in that market (Johanson and Vahlne 1977). Market knowledge and market commitment affect decisions pertaining to commitment of resources to foreign markets and how current activities are conducted. Market commitment refers to resource commitments made to realize perceived business opportunities. Market knowledge in this context is what a firm learns from experiences in the foreign market. Following Penrose (1959), we call this ‘experiential knowledge’. Such knowledge is specific to each market and consequently also specific to each set of actors involved in business exchanges that is, to the international business relationship. Because of its specificity, experiential knowledge cannot be transferred between countries, or between units in a firm. That experiential knowledge is developed in international business exchange is a very good reason to echo Toyne’s (1989) call for research on international business exchange in international business research.

Another gap in international business research is the lack of empirical studies modelling the dynamism of the interplay between commitment and experiential knowledge in the internationalisation process. Much effort has been devoted to support and elaborate the internationalisation process model (Barkema, Bell and Pennings 1996, Calof and Beamish 1995, Eriksson, Johanson, Majkgård, and Sharma 1997, Madhok 1996, Reid 1984), but, to our knowledge, no empirical studies have yet presented a dynamic model of commitment and experiential knowledge. Coviello and Munro (1997) suggest integrating the internationalisation process model with the network approach to improve our understanding of internationalisation. The purpose of this paper is to present and empirically test a dynamic model of increasing commitment and experiential knowledge development in international business relationships.
One way to achieve the purpose is to focus on a domestic supplier’s business relationship with a foreign customer. Through the supplier’s and customer’s mutual commitment to do business, the supplier gets to know about the setting where the customer is embedded (Andersson and Weitz 1992). The customer thus serves as a bridgehead for the supplier entering the foreign market. One of the implicit assumptions in Johanson and Wiedersheim-Paul’s (1975) establishment chain argument is that once a firm acquires experiential knowledge about a market, and gains customers through an agent it no longer has use for this agent. Consequently, the firm advances further in the establishment chain, increasing its commitment in the market by setting up sales and manufacturing subsidiaries. This paper develops the implicit assumption about agents outgrowing their use by providing empirical evidence to show experiential knowledge generation within a mutual relationship. It shows how a firm uses a mutual relationship to expand its network by building and maintaining other relationships. Once a firm gains experiential knowledge from a relationship, it reduces its commitment to that relationship and focuses its efforts on developing other relationships that have been formed through the first one.

In order to achieve this objective the paper focuses on three key issues. First, experiential knowledge structure in a firm. Second, experiential knowledge development within a business relationship. Third, relationship development within a business network context. The model developed for this study begins with the supplier’s use of a customer as bridgehead to facilitate expansion and increased value to the supplier. It then moves to mutual relationship commitment where there is a dyadic business relationship, and then to business network connections were there are multiple relationships. In other words, the model moves from focussing on one partner (firm) to focussing on a dyadic relationship and then on multiple relationships.

In the next section four hypotheses are developed which relate to the model formulated for this study. The hypotheses are then tested by structural
equations modelling (LISREL) on a sample of 147 suppliers who have foreign customers. This is followed by a discussion of the findings and the management implications and ends with general conclusions and suggestions for future research.

**Experiential Knowledge, Mutual Commitment, and Business Relationships in the Internationalisation Process**

The Uppsala model by Johanson and Vahlne (1977) has been a basis for international business research (Andersen 1993). Recent applications are of this model are; Eriksson et al. 1997, Gray 1997, O’Grady and Lane 1996. The model implies that market commitment and acquisition of experiential knowledge will be a small steps process but with three exceptions. First, firms with large resources do not experience major consequences because of a relatively smaller commitment. Second, when markets are stable and homogenous, market knowledge can be gained from methods other than experience. Third, when the firm has experience in similar markets it can use this experience in a specific market. As a firm increases its international involvement it also increases its market knowledge and commitment. The underlying assumption in this model is that the lack of knowledge about foreign markets and operations creates an obstacle to internationalisation and that this knowledge can only be acquired by operating in international markets.

Johanson and Vahlne’s (1977) model has come under criticism for being too deterministic and sequential (Reid, 1983; Turnbull, 1987; Rosson, 1987). But according to Penrose (1980) and Madhok (1997) the development and integration of new knowledge does happen incrementally. Cohen and Levinthal (1993) identify that learning is most effective when new knowledge relates to the firm’s prior stock of knowledge. Eriksson et al. (1997) support the incremental approach to internationalisation because it enables a firm to learn more realistically from small incremental steps to internationalisation than from
huge mistakes made from the leap-frog approach. They conclude that managers gain experiential knowledge from the mistakes they make in the gradual approach. In a development of the Johanson and Vahlne model, an emphasis is placed on business exchange relationships as the primary vehicle for resource commitment and experiential knowledge generation (Johanson and Vahlne 1990). The development that takes place within the exchange relationship becomes stored in the firms as part of the ongoing activities that result from routines (Nelson and Winter 1983). And at the firm level the formation of structures and routines for internationalisation occur gradually as a firm incorporates experiential knowledge (Eriksson et al. 1997). However, firms can learn incrementally but will have large stepwise learning experiences when substantial changes are made to their routines (Argyris and Schon 1978).

An example of experiential knowledge generation within a business exchange relationship is the domestic supplier’s use of the foreign customer as a bridgehead (Johanson and Mattson, 1988) for expansion in the foreign country. Both the organisation of the firm and the attitudes of the staff focus on gaining further knowledge of the foreign customer’s market in daily activities. Such a focus shows that the customer is an important channel for the supplier learning about the foreign market. The supplier accumulates knowledge on how the foreign customer interacts with business partners in the foreign market. Using the customer as a bridgehead implies that both partners in the relationship are already substantially involved with each other. This may be a transitory stage while both partners develop new relationships. Nevertheless, for an internationalising supplier, the use of the foreign customer as a bridgehead is an important link in foreign market expansion. One result of the use of the customer as a bridgehead is increased supplier value creation.

When firms conduct business with foreign counterparts they acquire knowledge from each other (Hamel, 1991). Numerous studies have focused on the dynamics of international cooperation in the forms of joint ventures (Beamish and Banks, Makino and Delios 1996), and cooperative alliances (Aulakh,
Kotabe, and Sahay 1996, Johnson, Cullen, Sakano, and Takenouchi 1996). Madhok (1997) also posits: “Collaborations are a useful vehicle for enhancing knowledge in critical areas of functioning where the requisite level of knowledge is lacking and cannot be developed within an acceptable timeframe or cost” (p.43). One example of a collaborative relationship is where the customer might be actively involved in the research and design of products and the supplier in turn might customise the product. Hallen, Johanson, and Seyed-Mohamed (1991) state that much knowledge is generated as business partners commit to the relationship by adapting to each other. One partner’s adaptation of product and production process is reciprocated by the other partner, so these adaptations are a mutual process. Anderson and Weitz (1992) find that partners in a business exchange relationship make mutual and incremental commitments when they develop business with each other. The process for this hinges on the use of pledges of commitment, whereby the business partners “feel each other out” as they commit more fully to do business activities with each other. Experiential knowledge is thus generated in the *mutual commitment* between a supplier and a foreign customer used as bridgehead.

However, the mutual commitment in a business exchange relationship is dependent on with the context of surrounding business exchange relationships. For instance, a supplier’s exchange with a foreign customer may depend on the customer’s exchange with his or her own customers. Several studies show that a firm acquires knowledge through its network of connected relationships, such as customers, customers’ customers, competitors, suppliers, supplementary suppliers, distributors, agents, consultants as well as government agencies (Anderson, Johanson, and Häkansson 1994, Johanson and Vahlne 1990; Johanson and Mattsson 1988; Hakansson, 1982; Ford, 1979). Social exchange theory defines the connectedness of relationships as the exchange that goes on in one business relationship being contingent upon exchange in another relationship (Cook and Emerson 1978, Emerson 1981; 1972). The context in
which a supplier commits to a foreign customer is thus the business network connections of both the supplier and the customer.

**Relationship Commitment and the Supplier’s use of the Customer as a Bridgehead**

Various studies have shown that firms in business relationships develop strong ties with each other (Ford, 1990; Heide and John 1988; Turnbull and Valla, 1986). The supplier and customer make incremental commitments in developing their business relationship (Anderson and Weitz 1992). These commitments constitute a deployment of resources that to a large extent are non-recoverable since they are relationship specific. Examples are: adaptations of products or production processes which only apply to one particular business relationship; the firm’s technology (Hallén et al. 1994); and the firm’s workflow context and resource structure (Thompson 1967, Pfeffer and Salancik 1978) which have been found important variations for the ties between partners in a business relationship. In fact, a large part of the commitments made by firms is the investment in various modes of inter-firm coordination, including work flow integration (Zajac and Olsen 1993) and coordination of activities (Alter and Hage 1993; Anderson and Narus 1990), which are associated with cognitive dimensions, such as trust (Dwyer, Schurr and Oh 1987). Such a successfully developed business relationship, where there is a high level of commitment, has transformed the relation between a supplier and a customer into a dyadic one. As the business partners commit to the relationship they learn about each other (Fiol and Lyles 1985), and further knowledge is generated, from within the relationship, as the partners adapt to each other (Hallén et al. 1994; Grabher, 1993). The adaptations may be small scale, and therefore will have smaller learning effects, or may be major such as when a new product is developed for a specific customer (von Hippel, 1978).
Several studies show that a firm can acquire knowledge from its customers which can be used for further market entry and expansion (Hertz, 1993; Lee, 1991). According to Penrose (1980) and Madhok (1997), the development and integration of new knowledge happens incrementally. Supplier-customer interaction enables the two firms to develop knowledge about each other’s needs and capabilities and to create new knowledge. These partners also accumulate knowledge about other actors in their counterpart’s domestic market, thus embedding them in each other’s business environment. When a supplier uses an existing customer relationship to develop new ones in the foreign market, the customer is known as a bridgehead (Johanson and Mattsson, 1988). The relationship a supplier has with a customer in a foreign market enables it to expand within that customer’s country. A bridgehead customer allows the supplier to acquire knowledge and to create new knowledge incrementally.

Although the above studies consider a supplier’s relationship with a bridgehead customer to be dynamic, we consider the organisation of the handling of these relationships within the firm to be considerably more rigid. Organisational change is characterized by inertia (Hannan and Freeman 1982), which is why the business relationship dynamism will not lead to instant adjustments in the interacting firms. Instead, the units that are immediately involved in the relationship development will struggle with matching the routines in their respective firms to the dynamism evolving in the relationship. Organisational routines, procedures and structures play an important role in controlling the firm’s behaviour (Cyert and March 1963; March and Simon, 1958). They influence how the firm will behave in future. However, organisational routines are unclear (Kilduff 1992, 1993; Nelson and Winter, 1982) and tend to be formed outside the firm’s formal structure (Kilduff, 1993). Since routines outlive individuals, decision-makers have incomplete knowledge of the organisational routines (Eriksson et al. 1997). But routines may not be a static phenomenon embedded in the structure of the firm. Some firms may have
learned how to smoothly integrate the knowledge generated in business relationships into the structure of the firm. They are capable of learning how to learn (Collis 1991; 1996, Bereiter and Scardamalia, 1993) and how to develop routines and structures within the organisation to transfer this experiential knowledge created in the relationship with the bridgehead customer. “Learning is the core of the process of knowledge transfer” - so how this experiential knowledge is transferred into the routines and structures of the firm is important (Spender, 1994, p. 363). However, development of such capabilities involve learning processes that are difficult to develop and maintain in firms (Argyris and Schon 1978, Collis 1991; 1996, Spender 1994).

In this study the supplier’s use of the customer as a bridgehead is regarded as a phenomenon embedded in the structure of the firm. The supplier using a customer as a bridgehead has made structural arrangements to handle this relationship, and has integrated this behaviour into the routines so that it is a part of the ongoing activities in the firm. Integration of new knowledge into routines in the firm is made more effective when parties commit to development of business relationship. When the supplier attains a higher level of commitment with the bridgehead customer, the supplier will be exposed to more new knowledge that leads to changes in routines for using the customer as a bridgehead. We posit that a higher level of mutual commitment in a business relationship will make the supplying firm learn more effectively, and thus use the customer to a larger extent as a bridgehead.

Hypothesis 1: The more the relationship commitment in a business relationship the more the supplier uses the customer as a bridgehead.

The Supplier’s use of the Customer as Bridgehead and Supplier Value Creation
A supplier who has integrated routines for using the customer as a bridgehead has also learned how to develop international business in the foreign market. The processes leading up to this learning experience have become embedded in the routines of the firm as ongoing activities. To make such a learning process is not effortless, and requires the investment of resources. Madhok (1997) asserts that by acquiring knowledge a firm obtains superior capabilities which are costly for others, such as competitors, to attain. Conversely, the lack of experiential knowledge is costly for the firm (Eriksson et al. 1997). The three kinds of experiential knowledge identified are: lack of business knowledge (referring to local customers and their surrounding business context of competitors, other suppliers, and other market conditions), lack of internationalisation knowledge (referring to institutions, norms, culture, values, and language in the foreign setting), and lack of internationalisation knowledge (an antecedent to lack of business and institutional knowledge). The second of these experiential knowledges, internationalisation knowledge, is the accumulated stock of knowledge of how to go international, the firm’s stored routines on what is important to do and what is important to avoid as the firm continues its incremental resource commitments in the foreign market. Internationalisation knowledge is the firm’s capability of doing foreign incremental resource commitments. Having gained internationalisation knowledge means that the costs for further expansion are reduced, and this will lead to higher value. That the relationship building leads to increased profitability is shown by Kalwany and Narayandes (1995) and Blankenburg Holm et al. (1996).

The supplier’s use of the customer as a bridgehead is therefore a behaviour that results from all three of the above-mentioned kinds of experiential knowledge. An increased use of the customer as a bridgehead results from insufficient business and internationalisation knowledge. Consequently, the more a supplier uses the customer as a bridgehead, the higher the supplier value creation.
Hypothesis 2: A supplier’s increased use of a customer as a bridgehead also increases the supplier’s value creation.

**Supplier Value Creation and Relationship Commitment**

There are two key points about supplier value creation that emerge from the earlier discussion. First, supplier value creation is the outcome of the experiential knowledge in the bridgehead relationship. Second, supplier value creation has implications for the way both parties (the supplier and the customer) will commit to the mutual relationship. The first point, supplier value creation is associated with the value of the relationship between the supplier and bridgehead customer. The value of this relationship includes the accumulated experiential knowledge within the bridgehead relationship. The value of this bridgehead customer could be new market opportunities in the form of expansion of relationships that develop through the bridgehead customer. These relationships are profitable (Blankenburg Holm et al. 1996) and become a strategic asset for the supplying firm (Johanson, 1989). Johanson and Vahlne (1990) state that through this relationship knowledge is created, other relationships are developed, and the firm improves certain structures and routines. The supplier invests resources in establishing and maintaining this relationship with the bridgehead customer, and through this relationship it develops other relationships in a wider network of connected relationships.

The second point, is that supplier value creation has implications for the way both parties will commit to the mutual relationship. The supplier’s value creation increases as it continues to use the customer as a bridgehead. Over a period of time considerable investments are made in this relationship and the benefits of this investment to the supplier could last several years. While the supplier benefits from this investment there is no reason to increase investment in the relationship. Once the relationship with the bridgehead customer is established and supplier value creation remains stable the relationship has
served its purpose, and thus loses its importance to the supplier. Since the supplier continues to benefit from the bridgehead relationship he or she diverts efforts into building and maintaining other connected relationships which have developed from this bridgehead relationship. That the supplier develops new relationships that represent a higher form of commitment to the market is only natural considering that the supplier has got increased experiential knowledge of the foreign market through the bridgehead customer (Johanson and Mattson 1988).

While the process of incremental resource commitment and experiential knowledge gains is positive for the foreign market entry, it is negative for single bridgehead relationships. These relationships are the primary vehicle for acquiring experiential knowledge, but once they have served their purpose, firms commit to other relationships instead, thus committing more to the foreign market itself. Such other relationships may, for instance, include setting up production abroad to do business with the bridgehead customer’s own customers, thus overstepping the bridgehead, which becomes redundant. However, it should be noted that this is the case when the supplier already uses the customer as a bridgehead, meaning that substantial commitments have already been made. Initially, there is a need to commit to make a customer a bridgehead, but this commitment will be eventually reduced as the customer is bypassed.

Hypothesis 3: Increased supplier value creation decreases relationship commitment.

**Business Network Connection**

Researchers of business networks (e.g. Ford, 1990; Gadde and Mattsson, 1987; Hakansson and Johanson, 1993) have transposed the social exchange perspective on social networks (e.g. Cook and Emerson, 1978; Emerson, 1972)
to business networks (Anderson, Hakansson and Johanson, 1994). Social exchange theory considers exchange relations as a dynamic process (Hallen, Johanson and Seyed-Mohamed), and it can be used as a framework to understand buyer-seller relationships (Dwyer, Schurr and Oh, 1987). Using social exchange theory business networks can be defined as follows; “as a set of two or more connected business relationships, in which each exchange relation is between business firms that are conceptualised as collective actors” (Emerson, 1981). Social exchange theory has also been used by Anderson and Narus (1984) to study market relations.

A dyadic relationship of the kind under consideration does not evolve in isolation from the two parties’ other relationships (Hakansson and Snehota, 1995; Grabher, 1993). The reason is that an exchange relationship between the two firms is influenced by their relationships with others, and this affects how the firms behave towards each other. If one partner is influenced by its other relationships when doing business with a counterpart, this creates opportunities and constraints for developing this new relationship. Consequently, business relationships should be considered within the context of business network connections (Anderson, Hakansson and Johanson, 1994). Studying networks would capture the complexity of interorganisational relations (Achrol, Reve and Stern, 1983). To understand basic network connections the starting point should be the basic exchange between pairs of social actors using a dyadic interaction model. Aldrich and Whetten (1981) emphasise this as follows: “The starting point for all studies of aggregates of organisations is a relation or transaction between two organisations” (p. 385). For relationships to remain successful they must be embedded in a network that determines the norms under which dyadic relationships are conducted (Achrol, 1997). It is important to study this network context for business relationships, because the dynamics in one relationship will influence the dynamics in other connected relationships. The strength of connected relationships shapes the focal relationship and influences managerial choices by determining both
opportunities and constraints (Blankenburg and Johanson, 1992). Consequently, business network connections provide the context of strategic change for both parties (Mattsson, 1986).

When a firm develops new business relationships it has to adapt to already established relationships. Madhok (1997) argues that the firm’s previous activities are crucial, because they shape how its routines are developed. The knowledge developed within a relationship with a counterpart is unique, because it is shaped by information transferred through connected relationships. The more partners interact the more information they bring from their respective connected relationships into the focal relationship. Networks provide access to various sources of information thus offering more opportunities to learn than relying on knowledge from within the firm (Grabher, 1993). Larson (1992) found that companies and individuals consider themselves as members of a network within a broad industry framework. Through this industry framework members acquire ideas, influences, or information about the surrounding network that would otherwise be unobtainable (Granovetter, 1973). Bonaccorsi (1992) argues that firms do not operate independently but maintain relationships with comparable firms. Firms can obtain knowledge, learn from the experiences and share resources with other actors in their business networks. The business network may overlap other structures such as a value-added chain or a distribution channel (Hakansson and Snehota, 1995).

The result is that the internationalisation of firms should be seen as a “set of connected learning processes” (Axelsson and Johanson, 1992 p.208). These processes involve other actors in the network: competitors, suppliers, customers, and government. According to Sharma and Johanson (1987) the firm’s relationships with these various actors are the most important assets of the firm. Being part of a business network is of strategic importance as firms are exposed to opportunities in new markets (Axelsson and Johanson, 1992; Coviello and Munro, 1997). The firm combines its existing knowledge with
knowledge from other partners to create new knowledge (Hakansson and Snehota, 1995; Grabher, 1993). Since this new knowledge has developed within the relationship it means that the knowledge of the two parties is connected. The open-ended character of networks encourages new knowledge to be created which cannot easily be traded in markets (Grabher, 1993), for example, a relationship can result in exchange of sophisticated technology which is knowledge of a tacit nature (Nelson and Winter, 1982).

A firm can use its existing relationships with customers for foreign market entry and expansion. The more these connected relationships affect the supplier/customer relationship, the more they will influence the supplier’s foreign market development. The supplier can consider this customer as a bridgehead to enter new markets and to expand within these markets. According to Madhok (1997), a firm can become successful by developing its capabilities. Capability refers to how knowledge is applied. It could, therefore, be argued that this bridgehead relationship can be used to develop these capabilities. The method the firm uses in acquiring and developing its knowledge provides it with a competitive advantage (Madhok, 1997).

How this bridgehead partner is chosen and how experiential knowledge is generated within the relationship will give the supplier a competitive advantage. In order to develop this organisational capability the supplier has to be able to learn. The supplier also has to realise the value of this bridgehead relationship to the firm in developing its knowledge and capabilities for foreign market entry and expansion. If the supplier forms this bridgehead relationship before its competitors then it has an edge over them in that market, for example, the bridgehead relationship could be used to break into tightly structured business networks in the foreign market where it is often difficult for a new firm to enter. Oviatt and McDougall (1994), McDougall et al. (1994), and Bell (1995) found that small software firms rely on network relationships for market selection and entry during their internationalisation. Gray (1994) shows that a lack of relationships in business networks was frequently
mentioned as the main obstacle to enter new markets or to expand within existing ones. This means that the firm does not have the opportunity to create new knowledge. Indeed knowledge and information are becoming the main wealth-creating assets (Bell, 1973).

Hypothesis 4: The stronger the connections to the surrounding business network the more commitment to the relationship.

**Hypothesized Structural Model**

The hypotheses are interrelated as depicted in the structural model in Figure 1. Experiential knowledge of the firm is embedded in the use of the customer as a bridgehead. If the *customer is a bridgehead* to the supplier, then *supplier profitability* increases (arrow 1). Experiential knowledge is generated in *mutual relationship commitment*, which then becomes embedded in the experiential knowledge structure of the supplying firm as an increased use of the customer as a bridgehead (arrow 2). However, mutual commitment is affected by the supplying firm in that supplier profitability changes mutual relationship commitment (arrow 3). It is suggested that decreasing supplier profitability causes the business partners to commit further, rather than to exit the relationship. Arrow 1 to 3 make up a loop of mutual relationship commitment and experiential knowledge increase. This whole loop takes place within the context of business network connection, which has a direct positive effect on mutual relationship commitment (arrow 4).
Data Collection and Method of Analysis

The data was gathered within the frame of the Second European Industrial Marketing and Purchasing (IMP) project. It was gathered by questionnaire completed in an interview situation, with a researcher present. Most of the questionnaire asks respondents to answer with respect to a customer who is important to the firm, and who the respondent has personal experience of. In this study the business relationship’s average duration is 16 years, and the three largest customers account for 55 per cent of the supplier’s sales of the product line. Thus, the relationships studied are important to the supplier firms. From the sample base, 147 suppliers with customers in foreign countries were extracted. The sample base for this paper is thus domestic suppliers who
answered questions on one specific foreign customer relationship. Customers were in France, Germany, Italy, Japan, Sweden, the UK, and the US.

The IMP questionnaire was specifically designed to be analysed by the LISREL method which traces structural relations in a data set. LISREL uses correlations and the co-variances of error terms as two independent sources of information, giving a more accurate picture of data variation than other methods (Lord and Novick 1967). The method is commonly used in psychology and pedagogical studies (Jöreskog and Sörbom 1993). Marketing researchers use the method frequently, exemplified by the fact that the last two years of issues of Journal of Marketing each contain one LISREL analysis. There have been a few applications in more general business studies journals (Gupta, Dirsmith and Fogarty 1994; Ginsberg and Venkatraman 1995; Stimpert and Duhaime 1997), but so far only two in international business (Blankenburg-Holm et al. 1996; Eriksson et al. 1997). For further information on LISREL, see Bollen 1989, Hayduk 1987, and Jöreskog and Sörbom 1993.

The validity of LISREL models is assessed in a two-step procedure that corresponds to the main components of the model. The first step is the creation of latent variables, which are variables at the construct level, an intermediate level between theory and data. These variables will hereafter be referred to as ‘constructs’, and the constituent observed variables will be labelled ‘indicators’. Construct validation is done by studying whether the constructs are separate from each other (discriminant validity), and whether they are homogenous within the construct (convergent validity). Discriminant validity is assessed by studying if constructs load only on their designated indicators, and also by forming an approximate confidence interval with the standard error of the correlation between constructs (Jöreskog and Sörbom 1993: 19; Anderson and Gerbing 1988: 416). The loading of indicators is assessed by factor loadings, t-values, and R2-values, which are measures of the linearity of the relationship and should preferably exceed 0.20 (Jöreskog and Sörbom 1993:
Convergent validity is assessed solely from the loading of constructs on indicators.

The second step in validation of LISREL models concerns the entire model. A model is usually quite a complex web of causal relationships between constructs. It takes account of both direct and indirect causal relations, which means one causal relation may be reinforced or counteracted by another. It is important to note that the validation of the model refers to one particular web of interrelated causalities. A construct may be valid in one model, but not in another. The validity of the model is assessed by chi-square and degrees of freedom, which measure the difference between data and model, and a probability estimate, which is a test of a non-significant distance between data and model (Jöreskog and Sörbom 1993: 120-128). There is an ongoing debate on what measures to choose for assessment of nomological validity (Bollen and Long 1993), but as Jöreskog and Sörbom (1993, pp. 121, 122) point out, the other measures proposed are all functions of the chi-square.

Since the validity of constructs may differ with the context of a structural model, it is recommended that the validity of constructs is tested not only in the structural model, but also in a measurement model without causal relations between constructs.

**Construct Validity**

The discriminant validity was supported in a measurement model, which the interested reader can find out from the correlation matrix in the appendix. The following discussion of convergent validity is based on estimates and measures from the structural model. In this case, the figures are not very different.

The supplier profitability construct is a single item construct. The wording of the question suggested to the respondent that she or he should consider revenues associated with this relationship, which incorporates the wider effects
of the relationship. The scale is a five-point Likert scale, with points: very bad, rather bad, break-even, rather good, and very good.

Table 1. *The Constructs and their Indicators.*

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Abbreviation in Figure 1</th>
<th>Factor Loading</th>
<th>T-value</th>
<th>R²-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supplier profitability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Considering all costs and revenues associated with this relationship, how would you assess its profitability over the last five years</td>
<td>PROFITS</td>
<td>1.00</td>
<td>--------</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Customer is bridgehead to supplier</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This customer is important to us because he is a bridgehead for expansion in customer country!</td>
<td>IMPCEXI</td>
<td>0.63</td>
<td>5.31</td>
<td>0.40</td>
</tr>
<tr>
<td>This customer is important to us because he anticipates future market trends!</td>
<td>IMPCTRE</td>
<td>0.71</td>
<td>5.58</td>
<td>0.50</td>
</tr>
<tr>
<td><strong>Mutual relationship commitment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In all, how large is the investment made by your firm in your relationship with this customer?</td>
<td>INVESTS</td>
<td>0.60</td>
<td>3.53</td>
<td>0.35</td>
</tr>
<tr>
<td>In all, how large is the investment made by the customer firm in his relationship with your firm?</td>
<td>INVESTC</td>
<td>0.54</td>
<td>3.46</td>
<td>0.29</td>
</tr>
<tr>
<td><strong>Business network connections</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To what extent is your business with this customer affected by any of his specific customer relationships?</td>
<td>OWC</td>
<td>0.48</td>
<td>4.76</td>
<td>0.24</td>
</tr>
<tr>
<td>To what extent is your business with this customer affected by any of his specific relationships with suppliers of products supplementary to yours?</td>
<td>SPL</td>
<td>0.44</td>
<td>4.27</td>
<td>0.19</td>
</tr>
<tr>
<td>To what extent is your business with this customer affected by your relationship with any specific other customer of yours?</td>
<td>OTC</td>
<td>0.31</td>
<td>3.02</td>
<td>0.10</td>
</tr>
<tr>
<td>To what extent is your business with this customer affected by your relationship with any specific supplier of yours?</td>
<td>OWS</td>
<td>0.62</td>
<td>5.91</td>
<td>0.38</td>
</tr>
</tbody>
</table>

The customer is bridgehead to supplier construct is made up of two indicators. The scale is of a five-point Likert type, with points: strongly disagree, partly disagree, neither/nor, partly agree, strongly agree. Both indicators’ key statistics are convergently valid. One indicator asks directly if the customer is a bridgehead to the supplier for expansion in customer country. The other indicator asks about the role of the customer as an anticipator of market trends. This latter indicator asks the supplier to consider the embeddedness of the customer in the foreign business network.
The mutual relationship commitment construct consists of two indicators whose key statistics show that they are convergently valid. Each of these indicators were preceded in the questionnaire by some 10 questions on the customers, and suppliers, respective adaptations to each other. The phrase “In all” at the beginning of the question asks the respondent to condense all questions on adaptation into one overall assessment of investment. This defines the question to concern adaptations as an investment, which is a wider definition than accounting investment. The scales have the points: none; small, e.g. only minor investments in the relationship are made; neither small nor large, e.g. some investments are made; large, e.g. considerable irretreivable investments are made in the relationship; very large, e.g. the relationship can only be discontinued at a large cost.

The business network connection construct captures four indicators. Two of these refer to the customer’s own customers and to supplementary suppliers. The other two concern the supplier’s own suppliers and other customers. Social exchange theory states that one exchange relation is connected to another if the exchange is contingent on each other. The questions therefore ask to what extent business with the customer is affected by the connected business relationships on a scale with the points: not at all, only a little, to some extent, rather much, very much. The business network connection construct has been studied in other contexts, partially based on the same data set as this study (Blankenburg-Holm et al 1996; Blankenburg-Holm 1996).

Interestingly, the indicators of the business network connection construct seem to take on different importance in different contexts. The key statistics for the present model show that the supplier’s other customers have got a low R2-value, and the lowest factor loading. This suggests that the strongest role of the business network connections is played by the other three indicators, in the context of the structural model.
Results

The hypotheses put forward in the earlier parts of this paper have been combined in a structural model depicted in Figure 1. The nomological validity of the model is good, which means that it is valid for interpretation. The statistical measures that signify this are the chi-square of 29.26, with 23 degrees of freedom, and a probability value of 0.17. All the separate relations in the model show good key statistics, with the exception of the relation between the customer is bridgehead to supplier construct and supplier profitability. This relation has a low R2-value, which means that the linearity of that relationship is not very strong. This result is interesting, and will be elaborated on below.
The right side of the structural model shows a dynamic process where *mutual relationship commitment* (0.85 in Figure 1) makes the domestic supplier use the foreign *customer as a bridgehead to the supplier*. Using the customer as a bridgehead increases *supplier profitability* (0.82), which in turn reduces the mutual relationship commitment(-0.71). Hypotheses 1 to 3 are supported in this loop. This circular causal relationship shows how a mutual relationship commitment makes one of the parties in that relationship, the domestic...
supplier, realise the potential of the other party, the foreign customer. Committing to development of a business relationship thus increases the experiential knowledge of the domestic supplier on how to use the customer as a bridgehead. The use of the customer as a bridgehead implies that the supplier has gained experiential knowledge of the customer and the customer’s embeddedness in its foreign business network.

The supplier’s use of customer as a bridgehead increases the supplier profitability. As mentioned earlier, this causal effect has a low R²-value (0.003), implying that the linearity of the relationship is low. This finding can be explained with an additional piece of information. Deletion of the causal effect that goes back from supplier profitability to mutual relationship commitment increases the R² value of the effect from customer is bridgehead to supplier profitability to 0.14. This result shows that there is a linearity in how mutual relationship commitment leads to supplier profitability, through the customer as bridgehead. From this piece of information it can be concluded that it is the loop that is the reason for the low linearity of the relationship.

The loop in the model is one representation of the internationalisation process model. Incremental mutual resource commitments lead to increasing experiential knowledge, which in turn effect resource commitment. The incrementality of this process need not be linear, and it is only natural that the weakest linearity has its sources within the firms that do business, and not the exchange between partners. Firms have routines for handling the relationship, and these create inertia for change within the firm. The business exchange that takes place between two parties is a much more incremental process, whereby gradual adaptations are made. In order to comply with the ongoing business activities, routines need to be incrementally adjusted at times, and more thoroughly reconsidered at other instances. Therefore, in the loop in Figure 1 it is understandable that the linearity is weakest in the effect from customer is bridgehead to supplier to supplier profitability. The effects to and from mutual
relationship commitment are more focused on the relationship development, and less on the goings-on within the firm.

The effect from supplier profitability to mutual relationship commitment is negative. This result can be explained by the fact that the relationships studied have been going on for a long time, and that the customer is important to the supplier. In such relationships, considerable investments have been made, and reaping the rewards of those relationships is not a reason to commit further to the relationship. However, if the profitability is low, then the parties do not leave the relationship, rather they commit further to development of the relationship.

The left side of Figure 1 shows that business network connections have got a strong effect on relationship commitment, which supports hypothesis 4. But, since the structural model should be considered an entity, the business network connection also has indirect effects on the other constructs. The estimates for the indirect effect of business network connections on customer is bridgehead to supplier is 0.47 (t-value of 4.18), and to supplier profitability is 0.38 (3.61). This shows that the loop takes place within the framework of the connected business relationships. The supplier integrates the customer’s connected relationship when she or he says that the customer is a bridgehead to the supplier. The customer’s embeddedness in his own business network is thus a context that the supplier sees as a reason to make the customer a bridgehead.

**Discussion**

This paper has found that the mechanisms of Johanson and Vahlne’s (1977) internationalisation process model are valid. Mutual relationship commitment leads to increasing knowledge for the supplier, which then transforms the customer into a bridgehead for the supplier. The dynamics of experiential knowledge generation seem to take place in the mutual relationship development, not so much within each of the firms that develop this
relationship. Instead, the firms that participate in relationship exchange hinder development in the mutual relationship exchange.

The internationalisation process mechanisms take place within the framework of the business network connections. Experiential knowledge generation within a relationship is contingent on the business done in the surrounding business connections. Experiential knowledge on how to enter a specific market is thus contingent on an understanding of the foreign customer’s business connections. The customer is embedded in his or hers own domestic business network, but the case may also be that the customer is embedded in an international business network. Regardless of which kind the customer’s network is, it will require considerable investment in mutual relationship development for the supplier to gain experiential knowledge of it.

**Management Implications**

Managers need to realise the importance of mutual relationship development in generating experiential knowledge. This experiential knowledge is generated within this mutual relationship rather than from within each firm. Managers should be aware that the firm can in fact stifle the growth of this mutual relationship and subsequent knowledge creation. The mutual relationship must be nurtured and allowed to develop so that experiential knowledge can be generated to increase profitability.

It is important to choose the right partner in this relationship, so managers need to screen potential partners carefully. One way of doing this is through reports, especially from personal contacts of the supplier, of how the customer behaved in previous relationships (Hakansson and Snehota, 1995).

Another implication for managers is that the customer is connected to other business networks and is embedded in a domestic as well as an international business network. The supplier has to understand what happens in these business networks and how the mutual relationship will be beneficial in
developing experiential knowledge. Consequently, before choosing a partner the supplier should conduct some research to understand the business network context in which the customer is embedded. Managers also need to identify what benefit they can gain from the customer to form a bridgehead relationship. They should develop the capabilities to identify suitable bridgehead customers and business opportunities.

Conclusions

This study has attempted to contribute to understanding the link between knowledge and commitment in supplier/customer relationships in international markets. Four hypotheses were developed and tested. All these hypotheses were confirmed, but one had a weak linearity, even though the relationship itself was strong. The relation between the customer is bridgehead to supplier construct and supplier profitability is non-linear. The findings show that mutual relationship commitment is crucial for generating experiential knowledge within this relationship. The contribution that this paper makes to the literature is that experiential knowledge is developed from within this mutual relationship and not from within the firm. The importance of mutual relationship commitment in generating experiential knowledge contributes towards the development of Johanson and Vahlne’s (1977) model. Experiential knowledge is generated within this mutual relationship and then stored in the procedures and routines of the firm.

The study supports the incremental approach to internationalisation as proposed by Johanson and Vahlne (1977). Incremental mutual resource commitments lead to increasing experiential knowlege, which have an impact on resource commitment. When firms form a relationship they develop routines on how to co-ordinate this relationship, and are reluctant to change them. From the results it can be inferred that changes in routines and procedures occur incrementally as adaptations are made.
Implications for Future Research

The findings in this study have highlighted mutual relationship commitment as a key construct to generate experiential knowledge. Further research could focus on other dimensions of mutual international business relationships. There are several ways in which firms can adapt to each other, for instance by product, production process, or by cooperating. A detailed study of the components of international business relationships that are important in various settings can be helpful in understanding how factors in relationship development generate experiential knowledge.

Since this study concentrates on the supplier, future research would benefit from a focus on the customer. As well as being a bridgehead to a foreign market, the customer may be important to the supplier in other ways. We should also find out in what ways the supplier is important to the customer.

Another question that could be addressed is; how will experiential knowledge gained from this mutual relationship influence the future behaviour of the supplier when taking up additional assignments abroad?
REFERENCES


International Business’.


Scandinavian International Business Review, 1, 1, 5-19.


## Appendix. Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>PROFITS</th>
<th>INVESTS</th>
<th>INVESTC</th>
<th>IMPCEXI</th>
<th>IMPCTRE</th>
<th>OWC</th>
<th>SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROFITS</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INVESTS</td>
<td>-0.052</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INVESTC</td>
<td>0.066</td>
<td>0.356</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMPCEXI</td>
<td>0.206</td>
<td>0.228</td>
<td>0.128</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMPCTRE</td>
<td>0.289</td>
<td>0.170</td>
<td>0.138</td>
<td>0.479</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OWC</td>
<td>0.249</td>
<td>0.056</td>
<td>0.160</td>
<td>0.046</td>
<td>0.134</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>SPL</td>
<td>0.248</td>
<td>0.015</td>
<td>0.040</td>
<td>0.196</td>
<td>0.236</td>
<td>0.213</td>
<td>1.0</td>
</tr>
<tr>
<td>OTC</td>
<td>0.089</td>
<td>0.119</td>
<td>0.006</td>
<td>0.336</td>
<td>0.225</td>
<td>0.081</td>
<td>0.5</td>
</tr>
<tr>
<td>OWS</td>
<td>0.181</td>
<td>0.218</td>
<td>0.314</td>
<td>0.155</td>
<td>0.224</td>
<td>0.327</td>
<td>0.5</td>
</tr>
</tbody>
</table>