

# **Brokers, Business Initiation and Structural Holes**

**Nazeem Seyed-Mohamad and Amjad Hadjikhani**

## **Introduction**

This paper concerns the problem of how network structure has impact on initiation of new business and entrepreneurship. Business network and business relationship have been extensively discussed (Johanson, J & Mattson, L-G, 1988; Håkansson, H., and Walusewski, 2002; Dwyer, F.R., Shurr, H.P. & Sejo, O., 1987). In this research field and similar to some studies in social science on cohesive networks, cooperation is been the major determinant of the business network. However, researchers in this field mainly concern stability in the relationships connections and research topic like initiation of relationship for new market opportunity have seldom attracted these researchers (Ghauri, Hadjikhani and Johanson, 2005). In another research filed parallel to this there has been a wide attention towards entrepreneurship and relationship initiations based on social network (Gargiulo and Benassi, 2000). With emphasis on social network new business is explained by flexibility and the search for new opportunity has recently attracted a group of researchers elaborating thoughts like structural holes in the market (Ahuia, 2000; Walker, Kogut and Shan, 1997). While business network theory has been silent about connecting network structure to structural holes and new businesses, researchers in social science and organization theory have made extensive contributions. This study attempts to focus on this gap and study the role of brokers for initiation and development of new business. The perspective is that new businesses are outcomes of connectedness and structural holes in the business network. Two fundamental elements of relationship, exchanges and adaptations, explains the construct, network structure. The study will develop a theoretical framework and operationalised to study a case.

The prevailing business network studies stresses on relationship change which contains the two dimensions of present and past. Simply stated, interdependence in the network relationships is present because of changes in the past and those changes are assumed to be stable and smooth. Firms' activity for building new relationships and 'extra' resource input for the sake of change of relationships is omitted (Hadjikhani, Ghauri and Johanson, 2005). In other words, concepts for analysis of new relationships are missing. Business to Business research studies points to the importance of studying the antecedent-consequence process of how business relationships are maintained and developed. Yet studies dealing with a more uncertain future is lacking. Nevertheless, uncertainty is a major problem facing managers since they must make decisions that will have implications for the future business of the firm. Such decision can in many instances involve initiating new business relations. Studying of this phenomenon is important as it cause change in the configuration and content structure of the network.

Against views studying past and present structure (Soda, G., Zaheer, A. 2004) there has been some attempts to conceptualize the aspect of future and its connection to the present and past (Ghauri, Hadjikhani and Johanson, 2005). In these attempts opportunity development and new business entrepreneurship is related to structural holes and strength of ties (Andersson et al, 2005). In these efforts the view of Burt (2000) on structural holes and Homans 1958, Granovetter 1973 and Burt 2000, on social exchange and social networks can be related to industrial activities of the firms (Walker, Kogut and Shan, 1997). This paper follows this path and infuses the aspect of structural holes and social network into the business network to deal

with the shortcomings of new relationships initiations and role of brokers in business network. It concerns the aspect of the present and future dimension and analyse initiation and development of the business. A discussion of exchanges, adaptations, relationships and network structure lead to formulation of a specific model of business initiation and development. A methodological section will give the background information of the case presented in this paper. Subsequently an analysis will be made with a concluding discussion of the results and the implication for research and management.

## **Business Initiation in Network Structures**

### *Exchanges and Adaptations*

The concept of exchange is much rooted in Sociology, Psychology, Antropologists and similar sciences. Homans (1958), a sociologist and a pioneer in exchange theory describes the elementary forms of exchanges between two individuals and how they develop social exchange relationship structures. Several others have developed similar models there individuals embedded respond to each other in enduring ways and develop relationships or ties that could be more or less strong (Granovetter 1985; Thibaut & Kelley,1962 ). This forms of exchange processes, in which two or more individuals affect and are affected by each other in relatively enduring ways, is also an adaptation process (Newcomb, Turner and Converse 1952).

Exchange is also one of the core concept of marketing (Bagozzi 1975). Without exchange between at least two actors there is hardly any relevance in talking of business in a strict marketing sence. Simplistically, in a market setting, an exchange occurs when somebody offers something and someone else agrees to take up the offer subject to agreement on price, quality and other factors negotiated and agreed upon. This exchange situation assumes that information is more or less freely available and the subsequent exchange will all depend upon a new set of negotiations and agreement. However in a more complex surrounding especially in industrial business this is not always the case and firms are always faced with uncertainty due mainly to information difficulties.

In business to business markets information is vital albeit not freely avialable. And the information that maybe available are usually ambiguous and with uncertain information judgement about other actors, their goods, technical capabilities, financial standing, logistic capacity and capabilities and so on is difficult to make. White (1981), for instance view information as ambiguous for producers that competition is more accurately modeled as imitations. Others such as Williamson(1972) invented the concept of information impactedness, a situation there the cost of information is difficult to ascertain because of uncertainty. Uncertainty in business to business markets is high since the capabilities and capacity of one actor much match the needs and wants of the other actor. And such needs and wants are more or less in a complex changing mode due to many factors not least techological developments, changing national market setups, globalisation etc.

It can be argued interlockings between the firms are so crucial that the very survival of the firms maybe will depend on the closeness to couterparts. Many authors have demonstrated how firms have replaced market behaviour with relationships (Johanson,Hallén & Seyed-Mohamed 1989 , Ford, 1980).These studies, both qualitative and qvantitative, have demonstrated that relationships are useful for exchange of information. Information exchange in a relationship context is also a knowledge formation process. Information can be explicit, implicit and tacit (Polanyi 1996;). Explicit information is recorded information whereas implicit information could be recorded if one wanted to. Tacit information is knowledge that

is retained in the individual, not recorded and cannot be recorded. Tacit knowledge is similar either to on-the-job training where individuals learn how to work effectively and efficiently after repeated performing many times, for e.g. operating machinery in a work plant (Piore 1968) or else Kirzner's (1979) perspective of learning individuals working in relationship-type firms have better chances of learning idiosyncratic information from each other by working in close co-operation. Studies have revealed that relationship information generates counterpart specific investments in logistics, production processes, products, finance etc. Such investments are also adaptations to specific counterparts (Johanson, Hallén & Seyed-Mohamed 1991). Adaptations and information are two parts of the same coin since they modify each other in an antecedent-consequent manner and are two of the main agents that form relationship structures.

### *Relationships and Network*

Network theory is much rooted in Sociology, Psychology, Social Anthropology and similar sciences. The social network theory consider networks as nodes and ties. Nodes are actors and ties are the relationships. This perspective have been widely used to studies involving social capital and focused to study networks about families to organisations to nations(e.g. Cook & Whitmeyer 1992). The work by Homans who was more interested in simplistic behavioural exchanges between individuals is complimented by studies that go beyond dyadic exchanges to incorporate larger structures(Blau 1964; Emerson 1962; Willer 1982; Granovetter 1983; Burt 1992). Although there are some differences in the focus of the studies (such as some who argue that the individual actor is unimportant. Rather the network which is important to those who argue that actors are more important) there is a growing commonality that actors and relationships are important units of analysis.

Business studies using network theory is extensive. Researchers in the so-called IMP-Group have done several studies of business networks ranging from connected relationships to technological development to internationalisation. All these studies have one thing in common – their conviction that network perspective is more suited to study business to business markets than those concepts available in market theories. Market concepts are replaced more or less totally by concepts those are somehow familiar to sociologists. Concepts such as network positions, centrality, inbetweenness, co-operation, conflict, power/dependence etc replace those aspects such as competition, market share, market oriented positions etc.

Business networks, although closely share the perspective of Sociologists and others have some idiosyncracies. The main point of departure is business exchange and the structures are to facilitate exchanges. When two firms are involved in business these two firms might be from two different technologies and the information exchanges and the adaptations will be specific to this relationship and network. For instance a firm involved in mass production industry maybe doing business for instance with a firm in the chemical industry (process industry) and/or in unit technology firm (such as manufactuers of autoline for automobile indutry). This will demand information exchanges at various technology levels and also at various departments in the network-related firms. The information, most usually can also be tacit or specific in nature and will relate to what type of investments – adaptations- maybe necessary to synchronise the need with the offer. Maybe one firm will have to adapt their production process to suit the deliveries and production of counterparts. Or one actor may have to install machinery adapted to suit the product needs of the counterarts. Or else the firms may have to make various adaptations in financial instruments, delivery routines, stock keepings etc. Practically several firms get more less connected in a business exchange

network and the actions and activities of one firm may affect the actions and activities of several other firms within one network. They are all connected in a complex structure of exchanges, information exchanges and information sharing and making various specific counterpart adaptations. Thus the interconnectedness of the firms form business network structures.

Relationship and network structures are useful for many purposes. It can reduce the issue of information impactedness in the market place, it can combine resources so that one actor's resource become also the resource of the counterparts and so on. Thus some network relationships will be multifaceted with various interactions while others will be less strong. Some actors maybe more powerful while others are more dependent (Pffer & Salansick 1978). Some structures are strong and closely connected with many linkages, contacts and daily exchanges while others maybe weak with very few and sparodic exchanges. But both strong and weak relationship together form network structures and they are useful for network analysis.

### **Network Structure and Structural Holes**

The Social Network Structure perspective of social capital have many mechanisms (Burt 2000). Two such important mechanisms in network structure from a connectivity perspective are the strength of weak ties as developed by Granovetter (1972), and brokerage across structural holes as developed by Burt (2000). Granovetter's (1973) model of the strength of weak ties propose that most novel and unique information flows to individuals through weak ties rather than through strong ties. In his view close friends tend to move in the same circles and the information they have tends to overlap each other considerably. In contrast, people who do not know each other so well may have information novell to others. In that way weak ties are more important than strong ties because the information that cut across the two networks will have important consequences. Granovetter's view is that the connection to the weak ties will generate new information that otherwise will not be available in strong networks. In his words this has much macro level implications.

The explanation is simple, i.e., each person has close friends known to each other and they form a closely knit clique. And individuals are connected to other cliques through weak rather than strong ties. So from a helicopter perspective if cliques are connected to each other, then it must be mainly through weak ties. The outcome is that unique and non-redundant information and new ideas and know-hows are diffused through weak ties (Granovetter 1983).

The strength of weak ties is connected to the Burt's (2000) view of network structure. Burt's perspective of network structure is in terms of network closure and structural holes. The whole argument grounded basically on strong and weak ties and the density of the relationships. The more dense all actors in a network are connected to each other then all have access to same information overlapping each other. In comparison structural holes constitute different cliques of networks, each on its own more or less dense but the connection between the cliques are maybe through one actor or individual. When there are such structural holes the information available between the networks do not overlap but additive. This is in line with the thinking of Granovetter (1973) on the strength of weak ties and Freeman (1977) on the betweenness centrality.

Network closure is important to the extend that all individuals with a densely tied network have access to same information and in such networks there is hardly much possibility for guileful behaviour. This makes it less risky in the network to trust each other. Granovetter(1992) argue that the embarassment of cheating a friend of long standing is

substantial when not discovered. But unbearable when other friends become aware that he has cheated.

The weaker connection between cliques are structural holes in the social structure of the market (Burt 2001). Holes in network structure is a position of control and information play a vital role for the incumbent who cuts across and have ties in different network cliques. The hole creates for the individual a competitive advantage since people in the separate networks circulate with different types of information. The individual who is tied to two or more networks can act as a broker in the flow of information between people from the different networks and thereby control the projects that will bring together people from opposite sides of the hole. He is a broker and he holds the role of an entrepreneur.

Business networks are actor linkages that connect resources and activities (Johanson & Vahlne 1992). The ties maybe more or less strong depending the resource dependencies as well as frequency and complexity of the exchange activities. In tightly knit relationships and networks the information flow will expectedly be more freely distributed among the network actors closely and strongly linked to each other. Resource adaptations will be to maintain and develop the activities and the relationships. Guileful behaviour will be less and so are risk and uncertainty. In this network there is little room for brokers. Naturally, structural holes in business network with strong and weak ties is a part and parcel of the structure and can manifest in various forms ranging from industry to industry, country to country and so on. These structural holes can be the trigger that maybe initiates new businesses. Structural holes can be assumed to have much implication in business and very much for the understanding of how new business gets initiated and also how when initiated it could structurally develop. Additionally it could also help understand market entry processes and other aspects of business initiation

For obvious reason it can be assumed that within countries networks are more or less dense and information in such networks are more or less available to the incumbants. However the connections between the national cliques are usually only sparsely connected. This applies more or less to all industries ranging from automobile industries to industries that may produce nuclear plants, ships etc. And it can be assumed also more realistic in emerging markets there information flow between networks are limited. Therefore, not unrealistically it could be assumed that automobile network in Sweden would not have the same amount of contacts and information about automobile networks in, for instance, Russia or China or even Japan or Malaysia as they will have within Sweden. By this it is not meant that they do not have ties in other countries but the density of the ties will be marginal and the information flow restricted. Of course actors will have general information about the industries as well as maybe who the important actors are but they will not have specific information. However, each country network will be more or less dense and access within them can be expected to be much higher in comparison with inter-country networks or in general between network cliques.

### **Structural Holes and Business Initiation**

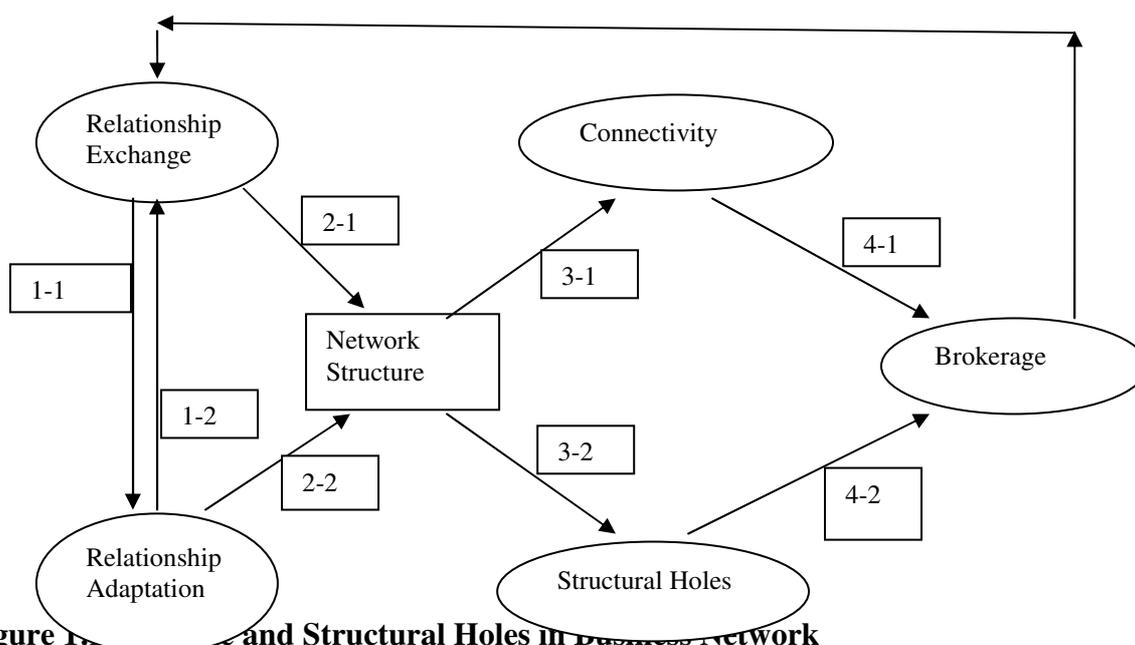
Business initiation starts when different network structures and structural holes are found. Consider two cliques A and X. It could be in the same country or it could be different countries. For simplicity and analytical purpose clique A is a three actor network. A1, A2 and X1. A1 and A2 have strong relationship. A1 and X1 have a weak relationship. A2 and X1 have no relationship and they have never met before. Similarly X1 has a network with strong and weak relationship with other X's. It also has a weak relationship with A1 but no relationship at all with A2. In this structure A1 has an important role. A1 has information

about clique A which is well structured with many strong relationship. Consequently A1 has almost all necessary information about A2. Similarly A1 also has considerable information about X1 as well as much information through this linkage about the X clique. A1 has a resource that he uniquely possess and could use for entrepreneurial activity (compare Krzner 1973).

In this set-up A1 can do brokerage. If A2 is in need of getting access to an actor in clique X then A1 can provide novel information about X1 to A2 as well as to X1. Since A1 is in a dense network there is no room for A2 to give false information since his reputation will be in line. For X1 this connection will be useful since the information and linkage come from an actor known to them and have a good relationship. A1 function as a broker, an entrepreneur and also the initiator of the business between A2 and X1. Also, if the cliques are in two different countries he is the initiator for foreign market entry for both A2 and X1.

Once the initiation of business start between A2 and X1, A1 is no more an entrepreneur or the broker. A2 and X1 must work hard to learn about each other, exchanging and sharing information and making counterpart specific adaptations in order to develop the relationship. If they succeed then X1 will become a part of the A clique and a new network closure will take place with the inclusion of X1. This is a process-network connectivities and thereby the structure is always changing and new holes can be identified by the new inclusion and that will generate new brokerage roles and new entrepreneurs and new relationships.

On the basis of our description a general model is formulated (fig.1). This model illustrate the the initiation process in the background of the brokerage resulting as a consequence of holes in the network structure and the connectivities. The network structure, in turn is a result of the Relationship exchange and relationship adaptation. And the relationship exchange and relationship adaptation are a consequence of business initiation and development. Subsequently the network structure will change and manifest in new connectivities and holes which provide the basis for entrepreneur activities for business initiation. This will generate a new cycle of exchanges and adaptation and the process continue.



**Figure 1. Relationship Exchange and Structural Holes in Business Network**

## Method

The theoretical base for this study is Exchange Theory and Social Network Theory. The Social exchange concepts are integrated with research done in business to business environment and a study specific model is developed. This model is a process model and specifically designed to capture business initiation and development. The antecedent-consequence nature of business initiation and development is the main focus. But it can also be applied for Foreign Market Entry studies as well.

Figure 1 is a specific model of business initiation and business development. Brokerage situation exist as a result of the connectivities and gaps in the connectivities. These two factors will determine what possibility maybe available to the potential broker and with which actors in the network. In the figure these two are indicated in 41 and 42. Connectivity and structural holes are a consequence of the present network structure at a point of time and are manifestation of construct, network structure. These are indicated in the figure as 31 and 32.. The network structure in turn is a result of the exchange relationships within the network and also the adaptatins those are made with various relationships. They are indicated by arrows 21 and 22. Together they determine the strength of the relationships within the structure, the density of the structure and existence of cliques. Relationship exchange and relationship adaptation are determinants of the strength of relationships. When the information needs of the actors are complex, crucial and tacit and when interparty adaptations are high then relationships are strong and close. Arrows 11 and 12 illustrate this on-going processes. These two variables, namely relationship exchange and relationship adaptation in turn are influenced by initiation of new relationships through brokerage. This is indicated by arrow 5 in the figure.

Adaptation and exchanges are the two main factors in dyadic relationship (Håkansson et. Al. 1982; Johanson, Hallén, & Seyed-Mohamed 1991). Exchanges are usually multifaceted and would renege from product exchanges, financial exchanges, information exchanges etc. Information exchanges could be explicit, implicit and tacit. If the relationship is close then there will be considerable tacit information which will be shared between the actors of the relationship firms. These two factors influence each other. Through various on-going exchanges they identify the need for various adaptation-adaptations can be in products, production processes, financial instruments, stockholding, transport etc. Both these relationship factors determine the strucural condition of the network. If the relationships are close and dense then the network form dense cliques with strong relationships there most actors are strongly connected to each other . If the relationships are weak then we will find weak cliques. The network structure is continuesly changing due the relationship activities and also due to entry of new actors in the network through new business initiations.

Two of the mechanisms in the structure are the connectivities and structural holes. These two mechanisms determine the possibility for individual actors to act as brokers. The brokerage will often lead to initiation of new business that will set in motion new exchanges and adaptations and consequently also changes in the network structure.

The empirical material is a case study in the automobile sector. The case interviews are done in two different periods. The first set of interviews was done in 1995. And the second set of interviews in 2007. Several interviews were conducted with managers at Autoliv, the manufacturer of safety belts and airbags, SAAB, manufacturer of cars and NORMA, also manufacturer of safety belts. The first two firms have their origin in sweden and the NORMA is an Estonian firm. Also one interview was done with the Russian automobile manufacturer GAZ. At NORMA the interviews were with Mr priit Taud, Project manger, Mr Ivar Aas, Quality Labrotory Manager, Enn Maasepp, Production manager, Mr Peeter Tonisto, Manager, Compnent Manufacture and Mr Raivo harand, Accounting Manager. At SAAB the interviews

were with Mr Bo Andersson, President Purchasing, Sven-Olof Holmström, Special Projects Division, Lars-Göran Winther, Head of Purchasing in 2007. At Autoliv with Mr Gustaf Celsing. At RusAutoProm with Mr Dennis Tjernov, on recommendation from Mr Erik Eberhatsson, Managing Director. This interview was conducted in 2007.

## **Enterprise NORMA -Background**

Enterprise NORMA was started by a German national in 1889. NORMA was the name of his girl-friend and it was originally located in Paldiski about 40 kms from the capital city Tallinn. Estonia had gone through several different occupations and at that time the country was a part of the Russian Empire. Successively the Estonians took over ownership and moved the factory to Tallinn in the 1920s.

NORMA has a shifting history. Originally the firm was focused to produce tin products such as cans and boxes. This production process continued until 1944 when the Soviet troops occupied Estonia and made it a part of the Soviet Union. As a result NORMA was nationalised, re-organised and made the center for 20 Estonian metal factories. The production was also supplemented with the manufacture of toys, home-appliances. Photoflashes, batteries etc. All these products were then distributed in the COMECON market.

In the early 1970s there was a new turn of events. The Soviet Ministry of Automobile Industry turned to the Estonian lock producer firm, Vasar, to inquire if they maybe interested in producing safety belt for the Russian car Moscovitch. Vasar management was not keen on this project but Mr Leonid Teder, the chief designer of Vasar, was. He therefore quit Vasar and took up a position at NORMA. It was on his initiative NORMA in 1972 supplemented its product assortment with the introduction of producing safety car seat belts for the automobile industry.

Initially Norma produced safety belts only to Moscovitch but subsequently Auto-Vaz (Lada) also started to procure belts from Norma. In the beginning Norma produced only static belts. But in 1974 they designed and started producing the retractor belts. Retractor belts are self-adjusting and pulls back into the retractor unit while it is not in use. This is the result of technical development in the safety-belt area and also as a result of regulations in the United States as well as Europe.

Avto-vaz that produced Lada cars was exporting their units to the West since the early 1970s. However, the regulatory environment in automobile safety was changing in the western countries and a new regulation was imposed in Europe in 1979. This regulation demanded that seat belts should follow the so-called European Standard E4. Consequently Avto-Vaz was forced to adapt to this regulations if they are to continue their export to the west.

Initially, Autoliv imported certified retractor safety belts from the west. This was considered an expensive alternative and also created dependency on foreign suppliers. However, the intention was to manufacture the safety belts in Soviet Union. Therefore, Mr Teder with the rest of Norma management started to investigate the possibilities of producing in-house such belts. At this moment of time Norma had much free production capacity and they took the initiative to negotiate with the authorities at the Soviet Ministry for the Automobile Industry. Mr Teder and colleagues finally were able to convince the ministry to give them permission to manufacture retracted belts. NORMA however, did not want to go through the whole process of developing a new safety belt.

Consequently Norma with the co-operation of the Soviet Ministry for Automobile Industry and together with license handling organisation 'Licensintorg' arranged an international exhibition focused on car safety equipment. The exhibition was held at the

Olympic center in Tallinn. Several western producers of safety belts were also invited to participate in the exhibition. Many engineers from Norma were active during this exhibition, examining the safety belt systems presented by various western firms. Finally their choice was the 'B-100' retractor safety belt produced by the Swedish firm Stil-Industry. This was the first meeting that consequently initiated the relationship process between Norma and the Swedish firm Stil-Industry. Stil-industri subsequently became Autoliv.

## **Autoliv**

A Swedish family, to be exact two brothers, started two separate firms in 1953. One of them called his company Stil-Industry. The other brother called his firm Autoliv and he started out manufacturing safety belts for cars. Although safety-belts were invented and manufactured in the United States in the eighteenth century especially for aeroplanes Autoliv (Stil-Industri) was the first firm in Sweden to manufacture belts for cars and Volvo was the first car in the world to use safety belts as standard. This was in 1959. At the same time Stil\_Industri also started to manufacture safety-belts in co-operation with Autoliv.

In 1965, Autoliv started delivering belts to SAAB. They first manufactured and delivered diagonal belts, and subsequently developed the so-called three-point belts. And in 1971 they produced the retractor belt for the automobile market. These belts were initially installed in SAAB cars exported only to the United States. The SAAB and Autoliv co-operation grew, and in 1984 Autoliv did not only sell just safety belts, but a complete safety system to the SAAB cars. At this point of time the co-operation intensified between the two firms.

Stil-Industri and Autoliv have also gone through turbulent processes. In 1975 Autoliv was acquired by the Swedish steel company, Granges. In 1980 Granges in turn was acquired by the Swedish home-appliance firm, Electrolux. In 1985 Stil-Industri too was acquired by Electrolux. By this acquisition and integration Electrolux was able to make considerable savings. Also during this period Electrolux introduced Autoliv in the Stockholm Stock Exchange and it was considered a successful introduction.

During this journey Stil-Industri and Autoliv, in addition to their many national and international projects also entered the Soviet Union market. The triggering cue was their participation in the Tallinn exhibition for Safety equipment arranged by NORMA together with Soviet Ministry for Automobile Industry and the Soviet license handling organisation 'Licensintorg'. This is the initiation of their market entry to the Soviet Union.

## **SAAB**

SAAB (Svenska Aeroplane Aktiebolag) company was started in the late 1930s to manufacture aeroplanes. However after the war they found that they need to diversify production from war planes into other areas. Although several alternatives were discussed, ranging from motor cycles to fitted kitchens, it was finally decided to manufacture cars. And they wanted to niche into a small, affordable car that included size, type, construction and price. In 1945. the so-called project 92 was agreed upon and initiated. It resulted in a model that was not fully appreciated by the management but Engineer Mr Gunnar Ljungström argued '*...if it can save 100 litres of fuel a year, it does not matter if it looks like a frog!*'.

And SAAB started first in 1956 to have factory fitted seat belts in the model GT 750. And in 1962 all cars in Sweden are fitted with seat belts in the front seats. And in 1988 SAAB fitted the first airbag in the driver's side.

SAAB is one of two car manufacturers left in Sweden and as mentioned above has a long history. However, SAAB Automobile AB is a relatively new company. It was established in 1990 when SAAB-Scania AB transformed the whole SAAB car division into an independent unit mainly as a result of financial difficulties. In 1990 General Motors acquired 50 percent SAAB: However, due to international over production of cars and consequent cut throat competition SAAB ran heavy losses. The overall competition brought down SAAB sales from 125,000 units in 1987 to just around 80,000 in 1992.

Thus, in order to reduce the deficits and increase productivity the new firm, SAAB Automobile made far reaching changes in its business operations. Personnel was reduced from 17,000 employees to just around 12,000 employees. Another change, which reflects this case too, was to start a joint-purchasing project with General Motors Europe. This was in line with the strategy directly under the leadership of the General Motors Purchasing President Mr Juan Lopez who saw a vast potential and great saving within purchasing. And it also made it possible for SAAB to compare its price with other suppliers of GM Europe. The strategic conduct illuminated that the price level of SAAB Automobile suppliers was far too high.

David Herman, the first president of SAAB, did not consider the process of reducing purchasing costs and supplant expensive suppliers fast enough. In 1990 he replaced Bertil Björkman with Bo Andersson as President of Purchasing. Bo Andersson, a former Army Major commented:

*‘I need suppliers who want to be internationally competitive and who realise that they are competing with other suppliers in the whole world. That kind of companies does not come here crying, pretending I am rude, because I want to buy at the best price.’*

Subsequently Bo Andersson negotiated with 300-odd suppliers forcing them to reduce prices and also lower prices at least 2 percent annually. He saved 300 million dollars in 3 years. The new supplier contracts for the forthcoming models, the project 104 and SAAB 900, were in line with this savings plan. This is also the beginning of finding alternative suppliers in the Baltics and also initiation of contacts with NORMA.

In 1991 Bo Andersson decided to find suppliers in the Baltics and western Russia. He wanted the best available suppliers who could fit General Motors demand for the SK project 104. Mr Sven-Olof Holmström, who carried out special projects to Mr Andersson was given the project. He then went out through normal channels involving embassies and trade councils and also NOKIA and Autoliv. From these sources he got a number of potential suppliers. In short none of the firms other than NORMA could perform even the initial requests.

## **Relationships and Connections**

### **AUTOLIV-SAAB**

SAAB and Autoliv have a lasting relationship and it was, as pointed out elsewhere, began in 1965 when Stil-Industri/Autoliv (both firms respectively were owned by two brothers) first introduced the static diagonal seat belt. This belt was further developed and in 1971 the first retractor belt was produced and introduced to the automobile industry. The co-operation throughout was rather close and intensive information exchanges and inter-personnel co-operation among R & D people between the two firms can be described as intensive. As a result in 1984 Autoliv not only started to supply safety belts but also completely passive safety systems to SAAB cars. This co-operation between managers from the companies was

not badly affected by the turbulent changes in the structure and ownership of Autoliv and Stil-Industri. On the contrary the take-over by Granges and later by Electrolux was supportive to promote co-operation. These two firms were financially strong, supplied other products to SAAB as well.

### **Autoliv-NORMA – Until SAAB business with NORMA**

Now back to NORMA and AUTOLIV. As described elsewhere NORMA was originally a firm that produced goods that were not related to safety belt systems. The triggering cue that set the whole process of NORMA and its consequent development within the safety-belt segment is strongly a result of Soviet Union system of structure and distribution. The western safety regulations demanded that cars, whether locally made or imported into western countries must fulfil safety regulations. Since the Soviet cars did not fulfil this conditions the Soviet manufacturers had to import safety belts from Europe, a expensive alternative. Therefore, the authorities in Moscow, i.e., the Soviet Ministry for Automotive Industry and the licence handling organisation 'Licencetorg' agreed with NORMA to organise an international exhibition focused on safety equipments. Many international firms were invited and participated in the Exhibition in Tallinn and finally, the Swedish firm, Stil-Industri won a licence contract. The co-operation between NORMA and Autoliv is a consequence of Electrolux merging Stil-Industri and Autoliv together. This merger renamed the firms and is then effective as AUTOLIV.

The licence contract was the first business agreement between the two firms. The contractual agreement was not between NORMA and AUTOLIV but it was between AUTOLIV and Licencetorg. And the licence agreement was limited to manufacture the B-100 retractor belt. Furthermore licence agreement was not to manufacture the whole system but limited to some of the main and patented parts. In order to fulfil and support this agreement the Soviets also had to purchase a whole set of production equipment as well.

NORMA had to purchase all the production equipment from the west for hard currency since they were not produced in the Soviet Union. Consequently AUTOLIV bought much machinery from Germany and Switzerland and had them shipped to NORMA. Some of the equipment that were bought were electronic measuring machines, AutoCad computers, fine-stamping machinery, presses, fine cutters and grinders, complete galvanising line for surface treatment of metal parts etc. These equipments were necessary to produce parts that could satisfy the needs of the Soviet auto manufacturers in order to fulfil the regulatory stipulations in the western countries allowing import of the Russian cars. The whole investment decision was made by the Soviet Ministry for Automobile Industry but the real payment was made by Auto-Vaz. This firm had access to hard currency earned through car exports.

The safety belt division at NORMA grew quickly and soon constituted 90 percent of total sales. NORMA serviced and maintained the new production equipment. Leif Gustafsson, a Manager at AUTOLIV made the following comment

*‘If the Estonians had taken care of the equipment in the same way as the Russians, they would have destroyed it-they do not maintain the equipment well and it goes on until it falls apart’.*

The exchange dimension broadened over time between NORMA and Stil-Industri(AUTOLIV). The transaction between the firms is now more than limited to the license agreement. In fact in the year 1982 AUTOLIV was buying from NORMA 100 different steel and plastic parts for its B-100 retractor belts. The business exchange was getting more and more balanced-NORMA paying back the licence fees by delivering components demanded by AUTOLIV for belt manufacture. A sort of barter exchange

although it was officially not allowed under the Soviet law. However, AUTOLIV never revealed the origin of these components due to the common industry norm at that time that Soviet Products are inferior in quality.

In 1986 NORMA was the largest workshop company with 3200 employees. However, in 1988 AUTOLIV changed the retractor safety belt for a new model and as a result bought fewer components from NORMA. The business exchanges diminished considerably except for the licence and a few components. However, the information exchange between the firms continued with AUTOLIV providing NORMA with invaluable information about the situation and the demands in the western automotive industry. During this period NORMA also started to seriously work with ISO 9000 program, the international quality standard. In co-operation with Autoliv NORMA was making preparations to qualify for ISO 9000 quality standard. In this audit, 244 different requirements such as design, development, manufacturing, installation service etc are controlled.

In the early 1990s a new development fundamentally changed the structure, conduct and more or less the whole business environment for NORMA. Soviet Union disintegrates. And after the disintegration of the Soviet Union in 1991 the production figures went down heavily for NORMA. Earlier all sales were paid in roubles, but after the independence of Estonia in 1991 and the introduction of the Estonian Kroon in 1992, NORMA no longer accepted roubles from the Russian car manufacturers. For a few months NORMA was forced to stop all production. Subsequently, Auto-Vaz and NORMA made a barter trade agreement, and Lada paid the safety belt deliveries from NORMA with 4500 Lada cars annually. A very lucrative business for NORMA at that time. Profits were not counted in percent but how many times they got the money back!

The cars were then re-sold to a car company that then re-exported them back to Russia!. However, this agreement lasted only one and half years whereupon Auto-Vaz started to pay in dollars. They were able to do so through their own export revenues. It was just during this period, in 1992 to be precise that SAAB decided to source components in the Baltics.....

## **SAAB-NORMA**

In 1992 Mr Sven-Olof Holmström from SAAB and Mr Gustaf Celsing, Managing Director of AUTOLIV together visited NORMA. In this evaluation stage they met Mr Priit Raud, the Project manager, Mr Raivo Harand, the Accounting Manager, Mr Ivar Aas, the Quality laboratory manager and Mr Enn Maasepp, the Production manager. After this meeting Mr Holmström decided to send an APR (Advanced Purchasing Request) to NORMA.

NORMA had great difficulty in answering this request. They had no experience in answering such requests. They also had trouble answering the technical and financial questions. The technical difficulty was connected to how to read the SAAB three-dimensional CAD-CAM electronic drawing. NORMA had only two-dimensional Auto\_Cad computer. When they stopped all other operations in this computer it took one and half days and nights to read the electronic 3-D drawings! Mr Raud, the project manager was very proud and satisfied they could accomplish this undertaking since this is a door opener to SAAB.

During the Soviet period the buyer simply ordered the supplier to manufacture the article according to certain technical specifications. Communication was minimal. According to Mr Knut Turk, a SAAB manager

*'NORMA was totally concentrated on the technical difficulties and put several engineers on the job for several weeks. So they were surprised when we told them about 'product criticism' - they had never heard that before. '*

Product criticism has to do with the supplier proposing design changes by giving product criticism. They can propose, for instance, different tolerance levels, radius, and other measurements etc. Such proposals can benefit the manufacturer and the user since it will be easier to manufacture and also could be better and/or cheaper to buyer. This was an important component to combine the manufacturing knowledge of the supplier and the product knowledge of the user.

Finally, when NORMA technicians agreed to SAAB request, NORMA accountants started to count. The financial difficulty can be deferred to the fact that NORMA had no experience in calculating the price of a product according to the cost deferred from manufacturing it. All the prices used due to experience in the Soviet time was artificial and centrally decided. Additionally 1992 is a period of enormous turbulence in Estonia with changing regulations, new laws, high inflation, changing currency etc. NORMA calculated the price based upon cheap Russian raw material(plastic granule).

The product that was to be produced in the beginning was mud flaps. NORMA was of the opinion the Russian product was equal in quality to western granule. SAAB production division did not accept this because this product had the tendency to crack when cold and the Russian supplier was unable to tell exactly what this plastic granule consisted of. On recommendation from SAAB NORMA decided to buy the raw material from Norway. Statoil, the Norwegian firm had a price that was much higher than what NORMA had based its calculations. NORMA never tried to re-negotiate the agreement. They considered the relationship with SAAB far too important.

The technical documentation and the quality control needs was a huge problem as well for NORMA. Here SAAB policy usually is not to help suppliers of this type of products. However, here they made an exception and send a production technician, Mr Kenöögling. He spent much time with various departments and people at NORMA.

Several NORMA managers also visited SAAB in Sweden. Mr Raud, Mr Indrek Vanaselja, the technical Manager and a few other technicians made up this team. Also from SAAB several technicians, quality managers and purchasing managers accompanied Holmström to visit NORMA in Tallinn to develop the supplier base.

The technical development process continues. In April 1993, one year after the first meeting NORMA produced off-tool samples, which was from the adjusted tool, but still not measured and approved. When the mud flaps later became measured and approved they became approved off tool samples (OTS). The OTS is technically as good as serial production. At the same time the production run is gradually raised to full run test. Finally, in June 1993 the serial material mud flaps from NORMA was delivered before and coincide with the serial production of the new SAAB 900, which started in June 1993.

The adaptation process for NORMA was painful. During the Soviet period, although there was Soviet quality standards the goal was to meet the planned production targets. In co-operation with Autoliv NORMA was making preparations to qualify for ISO 9000 quality standard. In this audit, 244 different requirements such as design, development, manufacturing, installation service etc are controlled. The co-operation with SAAB demanded similar adaptations to GM Quality Standard. For this purpose the quality department had to be enlarged from three to seven employees. They also had to start a new department for controlling the incoming material to tally with the GMQS requirements. The quality manual itself took a whole year to write and print. The focus now was from product to quality production. During this period there was frequent meetings and contacts between the two firms.

At the same time SAAB and NORMA signed the contract. And in 1992 SAAB employed a local Purchasing Manager, Mr Peeter Tibbo. And in December 1992 SAAB

opened a representative office in Tallinn and it was ceremoniously opened with representatives from Sweden, Estonia as well as 15 journalists. With the appointment of the local Purchasing Manager and the local office SAAB started to negotiate with NORMA to produce other components. One of them was to produce a small sheet metal console for the accelerator cable mount on the engine of the project 104. The process to start up this project went much faster and with less uncertainty. However some aspects of documentation etc still existed.

SAAB manager, Mr Anders Johansson was positively surprised to note how NORMA adapted to the new situation. In his view it was not different from, e.g. , a supplier from England. The problem was not with the manufacture but with the documents.

While the exchange episodes were taking place between the two firms SAAB got new information and also new discoveries. One important aspect was the question of moulds. Moulds are very important to make serial production of components, which is the core of the business between these firms. NORMA had in fact a well equipped moulding unit and these moulds were made at a fraction of the cost for such in Sweden or elsewhere in the west. This helped both firms to co-ordinate the activities in a more win-win fashion. The investments that NORMA already made became a resource for SAAB to buy components at relatively low price and NORMA simultaneously slipped the responsibility to invest on new machinery and training costs for this important equipment.

### **NORMA – AUTOLIV- Since SAAB-NORMA**

Consequent the turbulent early 1990s the firm was privatised in 1994 and management took over the firm. Two years later, in 1995 NORMA was introduced into the Tallin Stock exchange and subsequently also a new management emerged.

Since 1996, after the firm was introduced in the Stock exchange many foreign firms started to show interest in NORMA. One of the most keen firm that already had much experience and knowledge in working with NORMA and also had informal information exchange was AUTOLIV. AUTOLIV for a long time since the disintegration of the Soviet Union had ambition and also tried to establish a foothold in Russia. But during this period of time it was a very difficult task doing business with Russian market actors. AUTOLIV lacked the experience and knowledge to handle the instable market situation, the corrupt bureaucracy and generally the weak institutions that support business.

AUTOLIV was not fully inactive in the Russian market. They still continued to produce safety seat belts to the Russian Automobile Industry and also they had inhouse experience in dealing with the Russian firms. AUTOLIV was also positively developing its business with SAAB, a close ally of SAAB. SAAB had during this period successively increased the number of components, at most 32 components, that they sub-contracted from NORMA. The combination of past experience with NORMA, the development of a strong mutual relationship between NORMA and SAAB and NORMA position in Russia together generated the interest that paved the way for AUTOLIV to make a strategic decision to get close to NORMA. The partnership strategy was meant also to set barrier for competitors positioning in Russia and simultaneously also getting access to cheaper production alternative. In addition they could also get access to NORMA's knowledge and experience of the Russian automobile industry.

In 1999 AUTOLIV acquired 49,5 percent of NORMA shares and subsequently in 2000 increased the shareholding to 51 percent of ownership. The relationship with SAAB also encouraged and also helped NORMA in developing specific competencies relevant to the automobile industry. NORMA by this time also had several ISO certificates and

simultaneously also increased considerably its production know-how. Therefore shortly after AUTOLIV took over controlling shares NORMA started mass production of safety seat belts to AUTOLIV. Within the next two years NORMA acquired the knowledge, made considerable technical adaptations and invested in modern machinery and started to produce the whole system in the safety seat belt segment. AUTOLIV also introduced much qualified personnel into the Executive Board to monitor and guarantee quality, production, logistics etc to qualify to the demands set forward in the highly competitive global automobile industry.

## **Analysis**

### **The exchanges, adaptation, Relationships and connectivity**

AUTOLIV enters the Soviet automobile market. AUTOLIV did not plan their entry into the Soviet Union – it was a result of the need that automobile exporters in the Soviet faced due the regulatory conditions exposed on motor vehicles in the west. Although NORMA was the manufacturer of safety belts to the Soviet car industry the decision making is done in Moscow by the Ministry and Licenstorg. Through this network Mr Leonid Teder at NORMA also had know-how of who were the belt producers in the west. It can be argued that Mr Leonid Teder was the driving force in this business. His contacts with the Ministry and the automobile manufacturers in the Soviet Union paved the way for an exhibition in Tallinn.

Once initiated, the relationship grew between AUTOLIV and NORMA. Exchanges were maintained and developed over many years. To start the business NORMA had to install several new machines and equipments and that was entrusted to AUTOLIV for procurements in the west. Even transactions were more unofficial when they even established bartering goods not allowed by Soviet law. Starting with license contract the business continued with AUTOLIV importing several components from NORMA—a balanced exchange relationship. These components in turn were installed in AUTOLIV safety belts and were used by car manufacturers in the west. However, AUTOLIV never mentioned that these components originated from NORMA. Seen from this perspective AUTOLIV, SAAB and NORMA had connected relationships through AUTOLIV although NORMA and SAAB never met. NORMA's only relationship with the western automobile industry was only with AUTOLIV.

The foreign market entry by AUTOLIV when they established business with NORMA is also the only linkage between the automobile clique in Sweden and the automobile clique in the Soviet. Naturally cars were imported from the Soviet to Sweden but that was done via the Foreign Trade Organisation in Moscow. It never gave permit to visit factories or the right to negotiate or deal directly with the factories.

SAAB's need to enter the Baltic Market and NORMA's need to find partners in the west were the background to the business scenario. SAAB was running at a loss and General Motors that purchased SAAB was hunting for cost cutting. SAAB was an actor in a dense network of suppliers. Everybody knew each other and some form of stagnation was evident within supplier relationships. At least when it came to price cutting for SAAB to be competitive. The incumbent Purchasing Director was embedded in the network and was not forceful enough to bring about change in the supplier chain. It could be argued that this is characteristic in a closely knit network in which everybody is a friend of everybody (Burt 2000).

NORMA too faced difficulties but of a different nature. The collapse of the Soviet Union more or less destroyed the prevailing distribution system. Most firms had to close down or cut

down operations drastically. Their linkage with Moscow was more or less cut after independence. Business was limited to one Russian manufacturer who paid for the seat belts not cash but cars. Even that came to an end when the Russian car manufacturer re-started exporting to the west earning foreign currency. So NORMA was anxiously looking for alternative in the west. And who else could entrust other than AUTOLIV with whom they had a on-going relationship albeit diminished to only information exchanges.

The issue at SAAB was rectified when the Purchasing Director was replaced by a more active Mr Bo Holmström with military background. He pushed for change and he also looked for alternatives and the alternatives he knew was available in the Baltic countries. This was directly following the collapse of the Soviet Union. But he had no concrete information about the actors or their background. Out of a large number of contacts SAAB received from the Swedish authorities and with whom they met only one was approved. And that was NORMA who was introduced by their relationship partner AUTOLIV. In fact the MD of AUTOLIV himself travelled with the SAAB manager to meet with NORMA. This is an indication the trust AUTOLIV had about the people at NORMA.

And NORMA did not disappoint them. They virtually spend the scarce resource they had in employing new people, putting machinery to work day and night, working through hundreds of documents given to them as a part of General Motors procurement standard, completely new to NORMA. They also bought new machinery and changed suppliers to facilitate the demands by SAAB. In return SAAB committed resources in sending people across and also helping them to get new suppliers. Information exchanges at various levels, much human and machinery work and adaptations at various levels successively and somewhat painfully for NORMA helped to develop the relationship. This relationship also reshaped the network structure in the sense NORMA is now a trusted and useful actor in the Swedish network in particular and generally also in GMs supplier network. A new network closure.

### **Structural Hole and Brokerage**

There was a great need for SAAB and NORMA to initiate new business. SAAB had no experience doing business in the Soviet Union and NORMA had only little experience limited to working with AUTOLIV. Both the actors had marginal information about the network that the other belonged. Although NORMA had more knowledge they were unable to reach them. In a network perspective what can be observed clearly is a connected network with one strong tie and a weak tie and a non-existent tie. A structural hole exists since there is no direct connection whatsoever between SAAB and NORMA. This is when the relationship with AUTOLIV became important.

SAAB requested several actors in their network but only the contact with AUTOLIV proved useful. AUTOLIV knew of the need uncertainty of the two actors. They also evaluated correctly that the needs of the two firms could be best satisfied if they joined force. That decision must have influenced Mr Celsing to travel together with Mr Holmström to Tallinn for the first meeting. In this perspective AUTOLIV had a unique position that they shared in a more brotherly manner. Although AUTOLIV was a supplier to SAAB they did not hesitate to introduce a potential competitor to SAAB. They played the role of a good entrepreneur in a relationship context. However, it could be expected that AUTOLIV had also motives and its own agenda clear in doing so.

By introducing both the parties and getting them to interact with each other AUTOLIV position as broker and entrepreneur is over. A new relationship has started bridging the hole-a consequence of brokerage. When SAAB and NORMA started exchanges the hole between these two firms are closed, a network closure. And this closure also changed the composition

and the structure of the existent network. In this new network structure NORMA broadens its network to the west-not limited to SAAB. It also gets access to a wider General Motors network, a strong position for NORMA. For SAAB it gets access to a reliable, cost effective supplier and also indirect connection to a broader Russian automobile network.

There was very fast and positive development at NORMA. After perestrojka the management took over the factory. They reorganised it, got linkage to SAAB and also introduced it to the bourse in Tallinn. At this stage many foreign firms were targeting NORMA to take over. However, AUTOLIV was also closely watching the development, helping NORMA with the ISO certificate procedure, and also watching the positive development with SAAB. AUTOLIV was much interested in the Russian automobile network but found it very difficult to position due to various business and non-business reasons. This they could overcome by co-operation with NORMA. They buy a large percentage of NORMA shares and also take over the majority ownership position. NORMA get fully integrated with AUTOLIV. This opened up changes in the structure. AUTOLIV could get direct access to the Russian automobile network through their ownership of NORMA. Furthermore NORMA gets to be a global player in the automobile network. The dependency to SAAB is now marginal. AUTOLIV takes the lead!

## Conclusion

The case clearly demonstrates the role of a brokerage and his brokerage capability can initiate new business with two firms that never had met with each other before. This new relationship also modifies the structure of the relationship giving rise to a series of businesses within the network. It also clearly demonstrate the difficulty involved in starting up a relationship when the broker had introduced the partner. A sense of commitment must be inherent between the two parties to make it a success. In our case it was evidently successful. The brokers role from the outset was vital-his information was novell and those information he had about the two parties and their competencies and abilities are a pre-condition for a business relations to develop.

A broker's role is not simple in a business setting. One Purchsing Manager who is also responsibel to start-up new business discussed the process that he had to go through in initiating, maintaining and developing business. In his view he was doing the work of a dog, a donkey and also an owl. Like a dog he must be watchful so that the suppliers he already has do not get dissatisfied but also he must bark so that they get the job done and also does the necessary adaptions. As a donkey he must work very hard and not least also socialise with them even after work-an important part of his job. It can be in Stockholm or it can be in Berlin or it could very well be in some other city. And he must be an owl, intelligent to make the correct decisions since many depend upon your knowledge and insight. In our opinion the case demonstate somewhat the role of the broker as well as the role of managers involved in maintaining and developing the relationship. A very difficult and time consuming process in which all involved must contribute in various ways. This study is among the few that connects the structural holes to the business network.

The brokerage role and the bridging of holes is three folded more or less connectet. One, a process of business initiation where two actors unknown to each other initiate a relationship. Two, it cloes a subset of network and changes the structure of the network. Three, it also makes market entry. In our case a treble foreign market entry. One there SAAB makes an entry into Estonia. Two NORMA enter the Swedish and othe rinternational markets. Three AUTOLIV enters the Russian market.

## Research Implications

Further research is needed to understand deeper how these two areas can be combined. The case study manifests some elements of the structural holes and brokers. One crucial element manifested in the case is knowledge. The brokers' knowledge on a) network structure b) existing connections c) competency of the actors and finally, d) relationship strength and weakness grounds the brokers behaviour in the structural holes. The aspect of knowledge, as the case elevated, is relied on brokers business and social competency. This aspect is related to the large amount of studies in social and business science on entrepreneurship. Wherein, the emphasis is been on the entrepreneurs and their ability to manage their social network. This study goes further and emphasises on other actors' resources and the strength in their connections. More research on the elements of structural holes in connection with the strength of connection can increase our understanding how a new business initiates and develops.

The case presented here is an example of how the business in a specific setting, i.e. an European setting could initiate. It is also a setting in a time when a market undergoing turbulence not experienced before and the actors overnight lost most assets. Therefore it would be useful to conduct studies in other settings. Some areas are firms in the same geographic market but in different industries, technologies etc. Furthermore, the concept of relationships in countries such as Japan is close and dense. Studies in that region maybe useful for comparison how bridges are established in Japan as well as how the Japanese actors bridge gaps in, for example, China. Another area maybe in the service industries. How do actors bridge?

Experimental studies could also shed valuable insight. One could have small networks with resources distributed and there actors have control over those resources. Each actor will have a position and they can be allowed to interact. This type of experiments could well be conducted with new methods such as Fuzzy Logic. Fuzzy Logic is not limited by logics in mathematics. The system allows actors to make subjective decisions which is very much so in social settings as in our case.

The brokerage and business initiation discussed indicate that much information uncertainty can be overcome if brokers with good knowledge and network connectivity can bridge actors to start new businesses. This is indeed very valuable because reducing uncertainty in market terms means heavier commitment in managerial and financial resources. In an uncertain environment as Estland was at that time SAAB might have had to invest resources to develop their own production and or distribution system. In a network environment this is clearly not the case. Investments can be kept at a low level, resources at NORMA could be utilized becoming a part of resources controlled by SAAB, and at the same time uncertainty can be drastically reduced through information exchange.

Adaptations are costs for both parties. However, the unbalanced dependence in this case made NORMA to make relatively more investments to satisfy the needs of SAAB. But these adaptations nevertheless became important resources for NORMA since they were able to learn methods of satisfying demanding western clients. They successively became interesting for other customers as well as for other investors. Thus NORMA could get financial resources and management resources at various levels not only within the SAAB relationship but also through AUTOLIV that invested heavily in NORMA.

This is a win-win-win condition for all three actors. And naturally it maybe a good mechanism for managers to have a more network perspective than pure economic perspective to business initiation.

## References

- Ahuja, G., 2000, Collaboration Networks, Structural Holes and Innovational Study, Administrative Science Quarterly, 45, 425-455.
- Alter, C. & Hage, J. (1993), Organizations Working Together, Sage Publications, California.
- Andersson, A., Blankenburg Holm, D., Johanson, M., 2005, Opportunities, Relational Embeddedness and Network, In: Opportunities Managing Opportunity Development in Buisness Network, pp. 27-48; Palgrave, London
- Bagozzi, Richard.P. 1975 "Marketing as Exchange", Journal of Marketing, 39 (October), 32-39.
- Blau, R.M. (1964), Exchange and Power in Social Life, John Wiley & Sons, New York.
- Burt, R.S., 1992, Structural Holes, Cambridge, MA, Havard University press
- Burt, R.S., 2000, The Network Structure of Social Capital, Reserch in Organizational Behaviour, Vol.,22, 345-423, Geen wich, JAI press.
- Cook, K.S. & Emerson, R.M. (1978), "Power, Equity and Commitment in Exchange Networks", American Sociological Review, 43 (October), pp. 721-739.
- Cook, K.S. and J.M. Whitmeyer. 1992. `Two Approaches to Social Structure: Exchange Theory and Network Analysis.'Annual Review of Sociology18: 109-127
- Dwyer, F.R., Schurr, H.P., & Sejo, O. (1987), "Developing Buyer-Seller Relationships", Journal of Marketing, vol. 51, pp.11-27.
- Ford, D. (1980), "The Development of Buyer-Seller Relationships in Industrial Markets". European Journal of Marketing, 14, No. 5/6, pp.339-354.
- Freeman, Linton.C., 1977, A set of measures of centrality based on betweenness, Sociometry 40: 35-40
- Ghauri P., Hadjikhani, A., and Johansson, J., 2005; Managing Opportunity Development in Buisness Network, Palgrave, London.
- Granovetter, Mark.S. 1973, "The Strength of Weak Ties", American Journal Of Sociology 78: pp. 1360-80.
- Granovetter , Mark.S., 1983 The Strength of Weak Ties, a network theory revisited, pp.29-56 in Sociological Theory,1983,edited by Randall Collins.San Fransisco,CA.
- Hadjikhani, A, Ghauri P., and Johansson, J., 2005, Managing Opportunity Development in Buisness Network, pp.1-26; Palgrave, London.

Hedberg, B. (1981), "How Organizations Learn and Unlearn", in Nyström, P.C., & Starbuck; W.H.(eds.). *Handbook of Organizational Design*, Oxford Univ. Press, London, pp 3-27.

Hallberg, Kjell. & Nazeem Seyed-Mohamed 1999 "The Saab Case in the Baltics". In Jan-Åke Törnroos and Jarmo Nieminen (eds.) *Business entry in Eastern Europe : a network and learning approach with case studies*. Kikumora publications. Series B, 4. Helsinki : Kikumora Publications, 1999,ISBN 951-45-8860-6, xi, 315 s

Hallén, L., Johanson, J. & Seyed-Mohamed, N. (1987), "Relationship Strength and Stability in International and Domestic Industrial Marketing". *Industrial Marketing & Purchasing*, vol 2, no 3.

Hallén, L., Johanson, J. & Seyed-Mohamed, N. (1989), "Relationships and Exchange in International Business", in Hallen, L. & Johanson, J. (eds.) *Networks of Relationships in International Marketing*, *Advances in International Marketing*, JAI Press, Connecticut, Vol. 3, pp. 7-23.

Hallén, L., Johanson, J. & Seyed-Mohamed, N. (1991), "Interfirm Adaptation in business relationships". *Journal of Marketing*, vol 55,pp. 29-37.

Hallén, L., Johanson, J. & Seyed-Mohamed, N., 1993, "Business Relationships and Customer Production Technology". Accepted for publication in the *Business-to-Business Marketing Journal*.

Homans, G. (1958),"Social Behaviour as Exchange", *American Journal of Sociology*, 63 (May), pp.597-603.

Håkansson, H., (ed.) (1982), *International Marketing and Purchasing. An Interaction Approach*. Wiley, Chichester.

Håkansson, H., and Walusewski, A., 2002, *Managing Technological Development*, London, Routledge

Johanson, J. & Mattsson, L.G. (1988), "Internationalization in Industrial Systems - A Network Approach". In Hood & Vahlne (eds.) 1988, *Strategies for Global Competition*. Croom Helm, London.

Johanson, J. & Vahlne, J. (1977), 'The Internationalization Process of The Firm', *Journal of International Business Studies*, 8, pp. 23-32.

Kirzner, I.M., (1973), *Competition and Entrepreneurship*, The University of Chicago Press.

Newcombe, Theodore, M., Turner, Ralph.H., & Converse, Philip.E. 1952, *Social Psychology: The Study of Human Interaction*, London:Routledge Keegan Paul Ltd.

Seyed-Mohamed, N., & Wilson, D., 1989, "Exploring the Adaptation Process". Working Paper, PennState University, U.S.A.

Piore, Michael J. & Doeringer, Peter., 1971, *Internal Labor Markets and Manpower Adjustment*, New York: D.C. Heath & Company.

Polanyi, Michael (1967) *The Tacit Dimension*, New York: Anchor Books.

Seyed-Mohamed, N. (1990), *Structural Modelling of Business Relationships*. Acta Universitatis Upsaliensis, 21, Almqvist & Wiksell International, Sweden.

Soda, G., Zaheer, A. 2004, Network Memory, The Influence of Past and Current Networks on Performance, In Academy of Management Journal, Vol. 47, No. 6, 893-906.

Walker, G. , Kogut, B., Shan, W., 1997, Social Capital, Structural Holes and the Formation of an Industry Network, Organizational Science, Walker, Kogut and Shan, 1997ol. 8, No. 2, March-September, 109-123

White, Harrison.C. 1981, Where do markets come from? American Journal of Sociology 87:517-547.

Willer , D. & Anderson, B. (1982), "Network Exchange and Coersion: The Elementary Theory and its Applications," Elsevier.

Williamson, O.E. (1979), "Transaction-Cost Economics: The Governance of Contractual Relations," Journal of Law and Economics, 22 (October), 3-61.