The Born Global – Redefined

On the Determinants of SMEs Pace of Internationalization

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Abstract

The objective of this study was to describe the process of internationalization of small- and medium-sized enterprises (SMEs) and to explore the reason for the differences in the pace of internationalization of firms. This is due to the fact that increasing evidence shows that in spite of small size and inexperience in international transactions, high value-adding manufacturing firms are capable of outrunning their larger, more resourceful counterparts in foreign markets. The problem studied were more specifically: Which factors influence the pace for SMEs to increase their resource commitment to a foreign market and which factors influence the pace for entering new country markets?

The international strategy an SME chooses is assumed to depend upon the firms' key employees' experience and network, the characteristics of the industry, how global it is and the characteristics of the product(s).

The problem was investigated using a case study design, more specifically by carrying out in-depth interviews of founders or other key employees in twelve case firms. The case companies were selected from a pool of respondents to a survey that was carried out in the Autumn 2001. The population of that survey was defined to be SMEs in Norway, founded after 1990 (registered in the Kompass database), an SME being defined as firms with less than one hundred employees. Based on preliminary findings of the firms' export share and market selection the twelve case firms were categorized into four different groups: gradual international (GI), born global on the export dimension (BGE), born global on the market dimension (BGM) and true born global (TBG). This study thus gives a more nuanced view on the socalled born global. It is found that it might be useful see the born global as a more heterogenous group than has been done previously. In addition, the study departs from other studies in focusing on the market selection dimension in studying the increased international commitment as opposed to the entry mode dimension which most previous studies have focused on.

It was concluded that the SMEs which may be recommended to venture abroad at an early stage are the ones with;

- a unique product/or production process

- founders or other key employees with extensive experience and network from previous employment in similar industries, in particular will the ones with strong relations to key persons in large, successful organizations have a large advantage, or the ones with good and well-established relations to certain actors in the industry supporting them with knowledge and insight to areas they themselves are lacking

(f.i. research institutions) will be at an advantage compared to those not having such relationships (e.g. they have to start at start-up with establishing such relationships).

- products adapted for a global market – may *need* to venture abroad and an earlier stage in the firm's development, compared to firms with products for which there exists a sufficient home market.

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Oslo, October 2006 *Siv Marina Flø Karlsen*

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Chapter 1 Introduction

1.1 Background

The purpose of this study is to describe the process of internationalization of small and medium-sized enterprises (SMEs) and to explore the reasons for the differences in the pace of internationalization of firms, why are some firms born global? Furthermore, the study of several cases are intended to allow for better understanding or improved ability to theorize about the concept of internationalization of SMEs. Empirical evidence, from many countries, supports the notion that firms often internationalize by benefiting from what they learn by experience, i.e. their market knowledge increases gradually and uncertainty and risk is reduced over time for each new country. However, in 1988 Johanson & Mattson pointed out that some firms follow other internationalization patterns. They argued that the degree of internationalization of markets (e.g. the frequency, intensity and integration of relationships across borders in the particular industry market) has an impact on the internationalization process of the individual firm. In highly internationalized markets, firms may *leapfrog* some of the stages in the learning process. More recently, many authors (e.g. Oviatt & McDougall, 1994; Knight & Cavusgil, 1996; Madsen, Rasmussen & Servais, 2000), have found empirical evidence of yet another type. Some exporters are *born* global. These are firms that aim at international markets or even the global market from their inception. They do not seem to follow any kind of staged learning process leading to internationalization, i.e. their behaviour is beyond *leapfrogging*.

Knight & Cavusgil (1996) argue that the slowness of the process described in traditional internationalization literature may be an indication of management's aversion to risk-taking and their inability to acquire relevant knowledge and information. The fact that the process seems to be speeded-up now, may partly be explained by the notion that management in rapidly globalizing firms are less risk-averse and/or have better access to relevant information. The environment has changed a lot since the "traditional internationalization theories" were developed, e.g. the increased level of globalization in many industries may constitute an explanation for the observed increase in the pace of internationalization of firms. This increased globalization, which is believed to lead people to perceive the world as being smaller, may also induce managers to perceive the risk of entering foreign markets as being lower. One driver of globalization is believed to be the development of advanced communication technology, i.e. an industry described as having a high degree of globalization will by definition be characterized by having information transferred more easily and faster than in less global industries. This increased access to information may decrease the psychic distance between countries, which has previously been seen as a major obstacle for the international expansion of firms (e.g. Johanson & Vahlne, 1977).

Despite the importance of SMEs to international marketing, little is known about how they prosper under globalization or about globalization's moderating role on entrepreneurship and marketing strategy. According to Knight (2000), most SMEs are disadvantaged in an increasingly global environment because they lack the resources of large multinationals. Waters (1995) states that one manifestation of a globalizing world is just the emergence we now see of entrepreneurial start-ups that have an international outlook from inception.

The faster pace may also at least partly be explained by the fact that professionals with cross-national experience and inter-cultural competence are available in much larger numbers than just ten years ago and also founders of new companies have much more elaborate international experience, skills and networks than previously (Madsen, Rasmussen & Servais, 2000). Oviatt & McDougall (1994) also state that recent technological innovation and the presence of increasing numbers of employees with international business experience have established new foundations for multinational enterprises (MNEs). Traditionally, these were developed from large, "mature" domestic firms, but the increased use of low-cost communication technology and transportation means that the ability to discover and take advantage of business opportunities in multiple countries is not the prerogative of large, mature corporations anymore. Crick & Jones (2000), for instance, found that several firms were set up by managers who have experience operating in international markets from previous employment. They have experience in dealing with the complexities of international operations and have acquired an appreciation of the risks and resource implications. Finally, but not less important, they have developed a network of customers and contacts that they can use and rely upon when setting up their own firms. Whatever the reasons are, there is increasing evidence that shows that in spite of small size and inexperience in international transactions, high value-adding manufacturing firms are capable of outrunning their larger, more resourceful counterparts in foreign markets.

The focus on SMEs and the influence on their development stemming from increased globalization is an area in need of further study (Knight, 2000). In addition, this study will have an explicit focus not only on the increased commitment to markets as is the more common indicator of a firm's degree of internationalization (see f.i. Pedersen & Petersen, 1998), but also on market selection or more specifically on the degree of market spreading. The theoretical contributions in the area of foreign entry mode, have been more advanced than other topics of the firm's internationalization (Andersen, 1997). The level of analysis studied here are the individual, the reasoning behind this will be further elaborated in chapter four. The traditional level of analysis when studying the process of internationalization, is the firm (e.g. Johanson & Vahlne, 1977; 1990; Cavusgil, 1980; Johanson & Mattson, 1988; Madhok, 1997; Andersen, 1997, among others).

1.2 Internationalization

1.2.1 The Born Global Phenomenon

According to Bradley (1995), there are basically two dimensions which represent the key strategic decisions in connection with a firm's internationalization, (1) international market selection, and (2) choice of entry mode. With regard to the market selection dimension, the so called born globals (BGs) often start activities in many markets simultaneously and do not always prefer starting in those markets that are closest. The product is developed for a global-/international market (Madsen, Rasmussen & Servais, 2000). Bell (1995) explains this in the following way, "psychic distance has become much less relevant as global communication and transportation infrastructures improve and as markets become increasingly homogeneous" (p.62). According to Pedersen & Petersen (1998) the pace by which firms commit resources may differ substantially, but the tendency is for firms to increase their resource commitment to a foreign market over a period of time, starting to serve foreign markets with agents and later internalizing the activity by changing to wholly owned subsidiaries. It is assumed that the internationalization process of firms is currently proceeding faster on both dimensions (Hedlund & Kverneland, 1985) than traditional theory predicts. Thus, the research questions addressed in this thesis are: which factors influence the pace for SMEs to increase their resource commitment to a foreign market and which factors influence the pace for entering new country markets?

The term *international* usually refers to either an attitude of the firm towards foreign activities or the actual carrying out of activities abroad (Kindleberger, 1962 in Johanson, 1994). The attitudes are the basis for decisions to undertake international ventures, and the experiences from international activities influence these attitudes. Tayeb (1992) argues that companies engage in international business when the possibility of achieving the company's objectives is either diminishing at home and/or there are great opportunities abroad.

The first born global study was conducted by Rennie (1993) who identified a "new breed" of Australian firms which were "born global". According to this study born globals tended to be small (e.g. average sales $16 million) and relatively young (e.g. average age of 14 years), they had begun exporting on average, two years after their establishment and generated three quarters of their total sales from exports. The companies were found in all industries, but they all applied new technologies to developing unique products or a new way of doing business and, according to Junkkari (2000), as a result were strikingly competitive against established large players.

1.3 Methodological approach

Taking the explorative nature of the study, the complexity of the outcome variable and the need for processural data into consideration, a comparative case study approach was chosen to study the pace of internationalization of twelve case firms.

The analysis is based on a combination of primary and secondary data sources. The collection of primary data consists primarily of semi-structured interviews. The secondary data sources consists of external information sources such as newspaper articles and the Brønnøysund register, as well as internal documents such as newsletters, annual reports, customer lists and a number of other important documents.

The approach in this thesis is both to compare the different cases to see if any patterns replicate themselves across the cases, and to look at each case's history to get a picture of the dynamics in the internationalization processes. A quite detailed roadmap is proposed by Eisenhardt (1989) who defines eight stages in the process of theorybuilding from case study research;

Roadmap of a case study

Getting started
↓
Selecting cases
↓
Crafting instruments
↓
Entering the field
↓
Analyzing the data
↓
Shaping hypotheses
↓
Enfolding literature
↓
Reaching closure

Source: Eisenhardt (1989:532)

Figure 1: Roadmap of the study

First it is about getting started, i.e. the research question(s) have to be defined. Second, the cases to be studied have to be selected. The cases are chosen based on theoretical selection not random. Third it is about crafting the instruments or choosing methods of data collection and fourth it is suggested that the researcher enters the field, that is, the collection of data is starting either through interviewing and/or participant observation. The next step is analyzing the data using within-case analysis and cross-case pattern search and based on this the shaping of hypotheses or propositions is done as the sixth step before enfolding literature. That is, compare the data with conflicting and/or similar literaure, and finally the eight and last stage is to reach closure, in other words, to sum up the main findings and the different implications of these and the limitations of the study. With regard to the analysis in this study, it was divided into four main stages: (1) establishing the case firms' milestones (chronology), (2) coding and writing up the data according to phases and themes, (3) comparing the cases, and (4) applying theory.

1.4 Outline of thesis

The thesis is organized as follows: first an overview of the chosen perspectives on firms' internationalization processes is given in chapter two, before the conceptual framework is presented in chapter three. In chapter four the research design is described and operationalizations of the main concepts are made. The way the cases have been chosen are also elaborated on in chapter four and how the actual data collection has been carried out before the chapter is concluded with a discussion of validity and reliability issues. The twelve cases are described in some detail in chapter five, with focus on the different dimensions believed to have an impact on the pace of internationalization. In chapter six the cases are further analyzed and results compared with relevant theory in the field and propositions following from these findings are then presented. Finally the main results of the case study are summarized and implications are made in chapter seven. The final chapter also ends with some suggestions for future studies.

Chapter 2 Theoretical Background

2.1 Introduction

Internationalization can be described as the process of adapting exchange transaction modality to international markets (Calof & Beamish, 1995). Root (1987) defined entry mode as an institutional arrangement for organizing and conducting international business transactions, such as contractual transfer, joint ventures and wholly-owned operations. The existing literature does not seem to have reached to an agreement on which conceptual framework and constructs should be used to explain a firm's foreign market entry. Some of the most frequently used frameworks on internationalization will be reviewed next and it will be elaborated on why one theory has been chosen over the other.

Traditionally international business researchers focused on large multinational enterprises (MNEs) (Gabrielson et al, 2006) and following from this, much of the focus has been on how and when to carry out foreign direct investments (FDIs). Entrepreneurship researchers focused primarily on venture creation and the management of SMEs within a domestic context. In recent years however, the demarcation segregating international business and entrepreneurship has begun to erode (Gabrielson et al, 2006). The literature has reached the point of specifying that "international entrepreneurship is a combination of innovative, proactive, and risk-seeking behaviour that crosses national boundaries and is intended to create value in organizations", (McDougall & Oviatt, 2000:903).

This chapter gives an overview of the most used theories on internationalization. Many of the theories on internationalization or choice of entry modes overlap. The theories have been divided into two main categories: economic theories, which include transaction cost theory (Williamson, 1971;1981) or internalization theory (Buckley & Casson, 1976), eclectic paradigm or OLI-framework (Dunning 1980/88) and different global management and strategic behavior theories (Hamel & Prahalad, 1985; Knickerbocker, 1973; Porter, 1986). Then there are behavioral theories with their roots in the resource-based theory (Penrose, 1959), including the stages theory of internationalization (Johanson & Vahlne, 1977), network theory (Johanson & Mattson, 1988), social network theory (Granovetter, 1973), entrepreneurship theories (Aldrich & Zimmer, 1986; Stevenson, 1984) and the organizational capability perspective (Madhok, 1997).

2.2 Economic Theories

2.2.1 The Transaction Cost Theory (TCT)

The TCT belongs to the new institutional economics paradigm, in which the firm is viewed as a governance structure (Williamson, 1985). The TCT seems to be especially effective in explaining vertical integration decisions, and has been used to predict entry mode for manufacturing firms a well as for service firms. Transaction costs are the costs of running the system and include *ex ante* costs, such as searching, drafting, negotiating and safeguarding an agreement, and *ex post* costs, such as monitoring and enforcing agreements. The transaction cost theory focuses on inter-organizational governance of a seller-buyer relationship. Specific assets, the frequency of economic exchange and uncertainty surrounding the exchange of resources between buyer and seller, represent the core dimensions of the transaction. The composition of these dimensions is decisive for the way cost efficient governance modes are assigned to the transaction (Williamson, 1971; 1981). The decisionmaker is supposed to be boundedly rational and sometimes display opportunistic behavior. In the last decades, TCT has been commonly applied in research on foreign market entry modes (e.g. Erramili & Rao, 1993). In choosing entry modes, firms are supposedly making trade-offs between control (e.g. benefit of integration) and cost of resource commitments (e.g. cost of integration).

The "theory of internalization", which the TCT is sometimes called, assumes that a multinational enterprise has somehow developed a firm-specific advantage in its home market (Johanson & Mattson, 1988). Usually this is in the form internally developed, intangible assets that give the firm some superior production, product, marketing and/or management knowledge. If this asset cannot be exploited and safeguarded effectively through market or contractual transactions, an "internal market" has to be created. Expansions outside the firm's domestic market then, take place through horizontal and/or vertical integration. The firm establishes or buys manufacturing plants outside its home market. "Internalizing" has costs in the form of internal administrative systems and risk-taking. These costs of internalization will be lower the less different the foreign market is from the home market. Thus, the internalization model predicts that international expansion starts in "nearby" markets. The internalization model is not intended to explain processes, but attempts to explain a specific economic institution, the multinational enterprise. Lorenzo and Lipparini (1999:317) argue that "..transaction costs, focusing as it does on a single transaction, is not appropriate for understanding learning and innovative processes when knowledge is broadly distributed and the locus of innovation is found in a network of interorganizational relationships".

Most of the studies on foreign market entry modes, have made some modification of the TCT. The modified TCT predicts a positive relationship between asset specificity and propensity for high-control entry modes. Although the extensions of the TCT could enrich our knowledge of a firm's entry mode, such modifications imply that the assumption of transaction cost minimization is abandoned. Use of other decision criteria than transaction cost minimization could lead to other conclusions concerning choice of entry mode, than would be suggested by the original TCT. TCT has limitations in that firms evaluate the merits of control not only on the reduction of transaction costs, but also on other non-TCT-related considerations, such as global integration and market power (Andersen, 1997;

Dunning, 2000). Madhok (1997) demonstrates that when using benefits or values instead of the transaction cost minimization as a decision criteria, other conclusions are reached concerning which entry mode a firm should select. Andersen (1997) raises other issues of concern with regard to the modified TCT, he points out that while most TCT-studies on entry mode have used firm level as unit of analysis, the unit of analysis should according to the theory be the transaction. Bloodgood, Sapienza and Almeida (1996) are also critical and argue that while some firms may internationalize to reduce costs by internalizing the transfer of goods and services across national borders, it does not explain activities that are directed towards accomplishing strategic goals having little to do with reduction of costs. In addition, according to Tallman (1991), TCT is an economic theory of organizational structure, not strategy, since international strategy is the main dependent variable here, this theory does not seem very appropriate for this study. Furthermore, the issues of control and integration subsume TCT, which is static in nature, and may not be completely relevant in the context of global technological advances and dynamic innovation wherein firms are able to both disinternalize through alliance capitalism and exercise control at the same time (Dunning, 1995; 2000). Additionally, there might be problems of operationalization since transaction costs are seen as difficult to measure a priori.

The TC theory does not focus on firms' potential production constraints, as there is no attention to what extent the integration of an activity will fit a firm's existing competence or resource base. TCT has also been criticized for ignoring the importance of trust (Ring & Van de Ven, 1992). Although trust appears to be an essential element in explaining the nature of economic organization (cf. Braddach & Eccles, 1989; Arrow, 1974; Hennart, 1982), it is not incorporated in the mainstream model of TCT. Relations and trust within the relationships to different actors, from customers and suppliers to research institutions, may be of even greater importance for these new types of internationalizing firms, born globals, than to the larger and more resourceful MNEs. The large MNEs and their FDI decisions have been the main focus of the economic theories of internationalization.

2.2.2 The Eclectic Framework

Dunning's eclectic paradigm (1979, 1980, 1987, 1988) endeavours to predict foreign direct investments (FDIs) by firms. Despite the significance of theories such as the International Product Life Cycle theory (Vernon, 1966; Onkvisit & Shaw, 1983; Toyne & Walters, 1993), the Markets Imperfection Theory (Hymer, 1976), Strategic Behavior Theory (Knickerbocker, 1973; Graham, 1978; Casson, 1987), the Resource Based Theory (Penrose, 1959; Cantwell, 1995; Prahalad & Hamel, 1990; Madhok, 1997; and Andersen, 1997) and the TC theory (Williamson, 1981; 1985), Dunning (1995) states that they were singly incomplete and could not adequately explain either the choice of FDI over exporting and licensing or the choice of where to locate the FDI. As and alternative Dunning (1980;1988) proposed an eclectic theory of international production. The eclectic paradigm is, according to Benito (1995), by far the most popular general theory on internationalization. Benito (1995) believes Dunning's paradigm is more of a multi-level framework than a theory. He states that the eclectic paradigm is a synthesis of the perspectives of market power (e.g. industrial organization), internalization (e.g. transaction cost) and location (e.g. international trade theory). Dunning (1980;1988) suggests that the following factors will influence a firm's choice of entry mode; ownership advantages (e.g. firm specific assets and skills), locational advantages (e.g. reflect attractiveness of specific country; market potential & investment risk), and internalization advantages (e.g. costs of choosing a hierarchical mode of operation over an external mode; transaction costs).

The strengths of the theory can be characterized by its richness (e.g. several explanans) and its creativity (e.g. generation of new determinants and combinations of these with existing ones). The strengths may however, also be the potential weaknesses of the theory. When increasing the number of explanans, the problems of establishing demarcation lines between the different concepts may arise. Itaki (1991) for instance, believes that the concept «ownership advantage» is redundant. For predictive purposes, many economists would prefer to use relatively few explanans in order to ensure simpleness. Secondly, the use of several explanans is likely to create problems with regards to analyzing and interpreting the effects of interrelationships among the determinant factors. Solberg & Askeland (2005) stated that the broadness and multiplicity of the eclectic framework makes it vulnerable to complexity and tautology, leading to difficulties in predicting causality. Thirdly, the concept «locational advantage» is likely to have a direct influence on the international market selection (IMS). The assumption that the choice of entry mode and IMS can be regarded as independent decision processes may not be true; f.i. do firms select a country where the locational advantages are perceived as being great (e.g. high market potential, low production costs), but where the government restrictions narrow the feasible set of entry modes? Most entry mode literature assumes that the entering firm has the option to choose any entry mode in a given country. This may not be the case in a real setting. The focus of this paradigm is, as stated at the top, on FDI's, this is a high-risk and high-commitment entry mode, not much used by the socalled born globals (Madsen, Rasmussen & Servais, 2000). Finally, unlike the behavioral approaches discussed in section 2.4, the eclectic paradigm is static, which might also make it inappropriate considering that internationalization is a dynamic concept, a process.

2.3 Global Strategic Management

2.3.1 Strategic Behavior Theory

"The internationalization process of the firm cannot be seen in isolation; it can only be analyzed by understanding the environmental conditions as well as the actual relationships of the firm in question", (Madsen & Servais, 1997:572).

Bell (1995), in his study of small computer software firms, found that existing internationalization models did not adequately reflect the underlying factors of the internationalization processes in these firms. He found that the process was strongly influenced by domestic and foreign client followership, the targeting of niche markets and industry-specific consideration rather than the psychic distance to export markets.

The definition of “environment” in Madsen & Servais’ (1997) article is perceived to relate to what Johanson & Mattson (1988) term “degree of internationalization of the market”. “Level or degree of globalization” can be seen as a continuation or extension of that concept due to further change in environment since the 80ies when the network theory was developed. A large body of literature has evolved on strategic responses to the increasing degree of globalization in markets, but mainly on large multinational enterprises (Hamel & Prahalad, 1985; Porter, 1986; Bartlett & Ghoshal, 1989; Yip, 1992). The strategic responses of SMEs to the development have received relatively limited attention (Knight, 2000; Solberg, 1997).

Levitt (1983:102) define globalization as “the process of homogenization of demand and increasing economies of scale, forcing companies to standardize their production and marketing at high levels of output in order to cut costs and thus gain competitive edge”. Porter (1986) also sees the globalization trends, but calls for a global strategic approach coupled with local adaptation, “glocalization”. “Industries globalize when the benefits of configuring and/or coordinating globally exceed the costs of doing so” (p. 33). A more simple definition is given by Sölvell (1988), “global competition implies competition covering the world” (p. 182). In other words, globalization is seen as an extreme case of international competition. The definition used in this thesis is Sölvell’s (1986) relatively broad one and it is applicable both at firm- and industry level.

The interplay of globalization forces such as governmental drivers (e.g. reduction of tariff and non-tariff barriers to trade and creation of trading blocs), market drivers (e.g. convergence of consumer behavior, global customers, homogenous products), cost drivers (e.g. economies of scale/increasing minimum efficient scale) and competitive drivers (e.g. convergence of practices, global networks) eventually pushes the industry to becoming global (Yip, 1989). In many cases, a global industry is characterized by oligopolistic competition, with a high degree of transparence among the firms’ capabilities and strategic actions. Hence, the strategic choices of a firm can be expected to have an impact on other companies in the industry, also in other markets (Porter, 1986).

In contrast is a so called multi-local industry characterized by heterogeneous markets and competition that occurs domestically and independently. In other words, actions in one market do not affect the activity in other markets (Porter, 1986). There might still be a significant importance of international trade, but no dominant international players (Solberg, 1997), and the MNC organizes its subsidiaries as a portfolio of national businesses (Bartlett & Ghoshal, 1989). A global industry is, according to Solberg (1997), characterized by a limited number of global players, in addition to a segment of smaller, specialized companies. Moen & Servais (2002) state that the globalization on industry level, may be one of the reasons for the change found in the export behavior at the firm level over the last decade.

Hamel & Prahalad (1985) offered a new framework for assessing the nature of the worldwide challenge. The argument above (by Levitt, 1983) emphasized the scale and learning effects that transcend national boundaries and provide cost advantages (Porter & Rudden, 1982). Levitt (1983) held the view that world products offer customers the twin benefits of the low-cost and high-quality incentives for foreign customers to lay aside culture-bound product preferences. Hamel & Prahalad (1985) believed that this perspective was incomplete and misleading; "Companies must distinguish between the cost effectiveness based on offshore sourcing and world-scale plants, and the competitive effectiveness based on the ability to retaliate in competitors' key markets" (p. 142). They believed what drives global competition is aggressive competitors using cash flows generated in their home market to subsidize attacks on markets of domestically oriented foreign competitors. Then there is retaliation, not in the aggressors' home markets where the attacks were staged, but in foreign markets where the aggressor companies are most vulnerable. This is analogue to what is labeled the strategic behavior theory by Malhotra, Agarwal & Ulgado (2003). According to this theory, there is a propensity of firms in an oligopolistic industry to move in tandem to maintain industry stability (Knickerbocker, 1973) that is, they match the strategic behavior and activities of their rivals to minimize risk and uncertainty. The main motive of this theory is explaining the pattern of FDI and the main explanator identified, is the dynamics of international competition. Motivated by the desire to minimize risks under great uncertainty, most firms under oligopolistic industries resort to imitating each move their rivals make, including the establishment of production facilities abroad. Casson (1987) also showed that firms in global industries use FDI as a preemptive strategy, that is, as a way to protect their domestic markets from foreign competition by waging competition through FDI in the latter's own market. With its focus on FDI's and retaliation through the use of such high-commitment modes in the different competitors' markets, the strategic behavior theory and other theories of global management might not explain very well the processes of SMEs lacking the resources to make such moves. However, whether or not the industry is global, is still important to establish in order to explain the reason for the firms' speed of international expansion. How SME's might overcome their disadvantage of being just a midge among the large olipolistic players in a global industry will be elaborated on in the next section.

2.3.2 Niches

Madsen & Servais (1997) state that the rise of BGs are due to at least three factors, the two first are closely connected; new market conditions, technological developments and more elaborate capabilities of people. New market conditions have arisen because of increased specialization and hence a number of niche markets are seen. The domestic demand is too small (even in large countries) for these very specialized products. These new market characteristics are to a high degree caused by some basic changes in technology. New production process technology implies that small-scale operations may also be economically sound. Transportation of people and goods are more frequent, reliable and even cheaper than before, i.e. cost barriers for an international approach has been removed. World markets become more accessible because of developments in communication e.g. low cost due to fax, e-mail and so on.

Fast paced internationalization is believed to be commonplace among firms that target small, highly specialized, global “niches” and is believed to be particularly prevalent among SMEs located in small, open economies that face the double jeopardy of targeting narrow “niches” in small domestic markets (Bell, McNaughton & Young, 2001). Moen (2000) also found that small firms tend to follow a niche focus strategy and that this strategy is further linked to product quality and high attention to personal selling. Both product quality and personal selling render a positive impact on export performance. Accordingly, the small firms in Moen’s (2000) study seem to have developed an export strategy (e.g. niche focus) that reduces their size disadvantages. This is in keeping with Pavitt (1990) who describes the key strength of the small, innovative firms as their ability to match technology with specific customer requirements. The link between niche strategy and personal selling revealed, in part, a way to try to reduce the perceived risk associated with the export venture. High attention to personal selling may be a means by which small firms gain the necessary understanding of customers’ needs in foreign markets.

The finding that small firms often follow a niche focus strategy (Moen, 2000) is consistent with Solberg’s (1997) framework, aimed at analyzing the strategic options for small and medium sized firms competing in international markets. Implicitly in this strategic option, is the view that when small firms are operating in markets exposed to international competition (e.g. home markets), they do not have any other choice than to focus their resources on an international niche strategy targeting small customer groups. Christensen (1991) makes a similar description, linked to what he calls “the small and medium sized exporter’s squeeze” (p.49), where mainly external factors make it necessary for small and medium sized firms to start exporting when lacking internal resources and export competence (Moen, 2000).

Caves & Porter (1977) explain the advantages of following a niche strategy with the concept of “mobility barriers”. Mobility barriers are defined as barriers specific to a limited group of firms within an industry (Caves & Porter, 1977). One underlying factor determining mobility barriers is the strategic behavior of firms through their investments. Competitors can either match such investments or adopt a different strategy to counter the initial actions of their rivals (Caves & Porter, 1977). Then gradually develop different strategic groups, with different sets of entry barriers, making their products non-substitutable within their immediate customer base. This is seen as one reason why smaller firms using suboptimal technologies and scales may profitable co-exist with larger, state of the art, low cost facilities. *Focus* allows the small player to avoid head-to-head competition with larger, broadly-based firms that tend to target mass markets. Nearly all respondents in Knight, Madsen & Servais' (2002) study also applied what can be termed *differentiation strategy,* which is the offering of products perceived by customers as unique. "Younger firms typically lack the resources to compete with large MNEs on the basis of low costs or superior market power and thus, such businesses may distinguish themselves by offering superior quality products in niche markets" (p. 6). In other words, the choice of a niche strategy is closely related to the type of product a firm is offering and this will be discussed in more detail next.

2.3.3 Product Characteristics

Why may it be necessary to "jump stages" on the way to international markets? According to Solberg (2001) some market settings are characterized by extremely high growth or short product life cycles, and in such settings it might be necessary to get a broad (and therefore in most cases international) market coverage in the early phases of the life of the product in order to 1) capitalize on R&D investments and 2) preempt competition from gaining market share (Kogut, 1990).

According to Porter (1980), the evolution of an industry is closely associated with the traditional product life cycle (PLC). During the process, industry structure is likely to change, in terms of competitive situation and customer sophistication. The difference in comparative advantage of small and large firms at different stages of the innovative process is discussed by Williamson (1975) "an efficient procedure to introduce new products is for the initial development and market testing to be performed by independent inventors and small firms (perhaps new entrants) in an industry, the successful development then to be acquired, possibly through licensing or mergers, for sequential marketing by a large, multidivisional enterprise". There might thus be an expectation of the firms (e.g. the born globals) changing forms over time. Again, the focus is on large players and it seems to be an implicit assumption that only large MNCs are able to compete in the long-run in the global market place. Shanklin and Ryans (1984) divided the development of high technology industries into three separate phases, requiring different talents of the firms; the patent driven stage, the supply-driven stage and the demand-driven stage. Overall, this indicates that small firms may have an advantage over larger during initial stages of product development, due to flexibility and a possibility to engage in the close customer contacts required for successful product adaptation and application development. Therefore, a rapid speed of foreign entry would be preferred among these firms, in order to cover R&D expenditures before price competition increases or the technology becomes obsolete.

Type of product may thus also influence the choice of strategies for going international and/or global. If there is a product with a short product life cycle (as in most high technology products) this creates a need for large R&D costs. Short PLCs also call for higher innovativeness in order to launch new versions or products to compensate for the decline of original ones. This is even more problematic for small firms compared to larger, more mature firms, they are not likely to have the resources and capacity to enter the mass markets. In other words the small firms have to find a way to compete with the large MNCs, one way may be aiming for small, speciality segments not large enough to interest their large counterparts.

2.4 Behavioral Theories

2.4.1 Internationalization Process Theories

A behavioristic approach to internationalization indicates the need for a sequential process of learning about foreign activities (Lindqvist, 1991). Researchers began to systematically examine the internationalization process of firms at the end of the 1960s. These studies focused on *attitudes* and *behavior* of firms in the process of going international (Li & Cavusgil, 1995). Empirical studies in this area concentrated on testing whether internationalization was an incremental and gradual process. The results are non-conclusive. Karafakioglu (1986) found that the majority of the firms he studied experienced a sequential and gradual process starting as uncommitted exporters and increasing their commitment as firms' size and export volume grew. On the other hand, Diamantopolous' (1988) and Millington & Bayliss' (1990) failed to support the incremental view of the process of internationalization. However, all researchers agreed that there were different stages in the internationalization process. These conflicting findings may suggest two different processes at work, sequential and random. In the former, firms go through different stages in sequential order. In the latter, firms leapfrog certain stages.

Stage theory of internationalization contends that a firm's international operations will gradually increase as it gains knowledge and experience in the international arena. The main point is thus, the more international experience a firm has the more able it will be to expand internationally. The next paragraph will briefly describe the main arguments within this string of literature, the so called U- and I-models.

An underlying assumption of all these models is that firms are well established in the domestic market before venturing abroad (Bell, McNaughton & Young, 2001). Johanson & Vahlne's internationalization model, *The Uppsala Internationalization Model* (U-model), rests on the resource-based theory (Andersen, 1997). The basic assumption of Johanson & Vahlne's model (1977/90) is that performing activities creates internal assets such as skills and (experiential) knowledge. Johanson & Vahlne's classification of market knowledge is based on Penrose's definition (1959:53): "One type, objective knowledge, can be taught, the other, experience or experiential knowledge, can only be learnt through personal experience….". The establishment chain, as Andersen (1997) calls Johanson & Vahlne's approach, has some points of resemblance with the eclectic framework, concerning the emphasis on firms' knowledge. The main difference between the perspectives, is that the establishment chain describes the entry mode decision as a time-dependent process, i.e. the explanation of a particular state (e.g. entry mode) is based on some prior state or a sequence of some prior states. In contrast, the eclectic framework attempts to predict a firm's entry mode based on current values of a set of independent and moderating factors.

In *The Innovation-Related Model* (I-model), the internationalization decision is considered an innovation for the firm. They focus on the learning sequence in connection with adopting an innovation. The models (Bilkey & Tesar, 1977; Cavusgil, 1980; Czinkota, 1982 & Reid, 1981) are derived from Roger's stages of the adoption process (Rogers, 1962, pp. 81-86). All four models are very similar except the two first presume that the firm is not interested in exporting at stage 1 and partially interested in Stage 2. This, according to Andersen (1993), implies that they believe there must exist some sort of "push" mechanism or external change agent that initiates the export decision. In the two latter models, the firm is described as a unit more interested and active during the early stages. In these models Andersen (1993) believes a "pull" mechanism or internal change agent is more relevant explanation to why the firm moves to the next stage.

The process theories assume that the firm will gradually increase its commitment from sporadic export to direct investment. On the question on which market to select, the process theories suggest firms would enter new markets according to their psychic distance. Psychic distance being defined as factors preventing or disturbing the flow of information between the firm and the market, including factors such as differences in language, culture, political systems, level of education, or level of industrial development (Johanson & Vahlne, 1977). A learning experience in one culturally distant country produces a knowledge base for further expansion within the same cultural sphere. Thus, firms start internationalization by entering those markets they can most easily understand. There they will see opportunities, and there the perceived market uncertainty is low. The arguments for the gradual pattern are discussed in length in the article of Johanson & Vahlne (1977). Andersen (1993) states that the other authors explicitly or implicitly build on Johanson & Vahlne's contribution.

The focus here will be on the U-model, since that is the more general one that the others are based on. It should be noted that Johanson & Vahlne (1977; 1990) have not included co-operative modes of entry (e.g. franchising, licensing, management contract and so on) in their establishment chain. In view of the frequent use of such entry modes, this is obviously a weakness. When judging the early contributions of the U-model (and I-model), we have to take into account that the world may be considered far more complex than when these (traditional) theories were first advanced. Cooperative modes of entry were not as widespread in the seventies as they are today. The authors (of traditional theories) pay little attention to market-and firm specific characteristics that can account for the behaviors they observe, they focus more on the relationship between information acquisition and market and market commitment, rather than on the (critical) issue of strategy formulation.

Reid's (1984) view is consistent with the writings of Penrose (1959), who argued that firms strategically and deliberately adapt to evolving circumstances in their market environment. The stages model has thus been criticized as being *deterministic* (e.g. the firm will start at stage A, then it will go to stage B and so on). The firm's ability to make strategic choices regarding appropriate modes of entry in overseas markets, are then denied (Reid, 1983; Root, 1987). That may be missing the point. The main argument in the stages model is that internationalization is a process based on experiential learning in foreign markets (Madsen & Servais, 1997). This process may take different forms one of which has been suggested by Johanson & Vahlne (1977), e.g like "rings in the water". Hedlund & Kverneland (1985) suggested that due to the internationalization of markets, market knowledge had increased and uncertainty then decreased, making the basic mechanisms of the U- and I-model less important than they had been in the past. Another important aspect with regard to the increased globality is the fact that, in a global industry, the firm would probably not have the option of comfortable choosing to initially enter markets depending on psychic distance or on internal resources of the firm (Solberg & Askeland, 2005). They will most probable be "forced" out by the strength of competition in their home market. However, Madsen & Servais (1997) state that a falsification of the surface manifestations is not necessarily the same thing as a falsification of the *reasoning* behind the traditional model. The basic assumptions may still be valid, even for fast internationalizing firms. Such firms' perception of uncertainty with regard to international markets is typically lower because the founder and other employees have gained international experience prior to start-up. Since some of this international experience is confined within individuals, new ventures formed by these individuals may be able to capitalize on their experience and expand internationally (Bloodgood, Sapienza & Almeida, 1996). The same argue that the firm's possession of specific advantages, knowledge, and experience are keys to whether new ventures will internationalize early and whether such efforts will be successful.

The critique of the TCT and the IPT is quite similar in that they both focus on the firms' internal development and do not take into consideration the importance of external assets, e.g. important relationships. They are both seen as losing their explanatory power as the firm and the environment gets more internationalized. In sum, both the transaction cost approach and the internationalization process model leave out characteristics of the firm and the market, which seem especially important in the case of "global competition" and co-operation in industrial systems. Another weakness of the IP perspective, is that it is not considering mode changes involving decreasing foreign commitment. The IP perspective's focus on knowledge and learning as a presupposition for internationalization is however, very important.

When it comes to the internationalization process theory which describes internationalization in terms of cognitive learning and competency development which increases, through experience, over time, this seems very valid indeed with regard to the BG phenomena, only the process is moving a lot faster than assumed in the IP-perspective. But again, the internationalization is traditionally measured at firm level. The process of learning is still believed to take time, but the focus in this study is on the individual level. This means that the process of learning and building experience may have been going on (and most probable have) for quite some time at an individual level, before the BG firm has been established. There are evidence that founder(s) of BGs in many (most) cases have extensive experience from previous employment maybe from large multinationals, i.e. we still assume a gradual development at the *individual* level. However, the process of learning and building experience may still be a bit faster than traditionally assumed, due to today's advanced information and communication technology which give better access to information than earlier.

While the U- and the I-models are useful for classifying firms according to their degree of internationalization, neither model can be used to explain and predict the movement of the firm from one stage of development to the next (Andersen, 1993). In addition, the models make no attempt to explain how the internationalization process actually starts. While knowledge of market opportunities is presumed to be the key driver of both the dynamic U-model and alternative I-model, little is known about the ways and means by which firms come to identify specific exchange partners (Ellis, 2000). It is likely that the availability heuristic plays some role in the identification of exchange partners (Liang & Stump, 1996). This will be elaborated on in the next sections where networks' importance on a firm's development both a firm level and individual level, will be discussed at length.

2.4.2 Network Theory

Industrial Network theory

"The sequential model….stresses only the early stages of internationalization….this model should be supplemented with research on new patterns of internationalization of the 1980s and 1990s…" (Melin, 1992:111). Pedersen & Petersen (1998) also suggest that the inclusion of other internal and external factors provide a more complete explanation of the pace by which a firm commits resources to foreign markets. In the special case of born globals, network theory may thus have some explanatory power. Johanson & Mattson (1988) pointed out that internationalization processes of firms will be much faster in internationalized conditions. Both in the case of a *late starter* and an *international among others* (Johanson & Mattson, 1988:298) even a purely domestic firm has a number of indirect relations with foreign networks. Hence, market investments in the domestic market are assets, which can be utilized when going abroad. In that case it is not necessary to go from a nearby market to more distant markets, and the step abroad can be rather large in the beginning.

Classically, there has been an assumption of a clear boundary between the firm and its environment and the environment has been defined as; "anything not part of the organization itself" (Miles, 1980:195). Firms have been viewed as "solitary units confronted by faceless environments" (Astley, 1984:526 in Andersson, Håkanson & Johanson, 1994). In the 1990s the perspective was changing to one of a firm interacting with its perceived environment. In contrast with the classical specification, a network perspective better captures the notion that the boundary between the firm and its environment is much more diffuse (Andersson, Håkanson & Johanson, 1994). The environment is not completely given by external forces but can be influenced and manipulated by the firm, and there will also exist external, known actors that are influencing some of the firm's internal functions. Ellis' (2000) findings support the hypothesis that knowledge of foreign market opportunities is commonly acquired via existing interpersonal links rather than collected systematically via market research. The notion of relationships does, according to Anderson, Håkansson & Johanson (1994:2) "indicate that firms do not treat the environment in a generalized or standardized way, but that they interact with specific "faces" ". The network perspective has moved away from a "faceless" environment towards a more specified environment made up of identified counterparts. According to this theory thus, internationalization occurs as a result of multilateral externalization through business and social networks rather than through internalization (e.g. FDI). These network relationships influence initial market entry and mode of entry (Coviello & Martin, 1999). The same found that small software firms rely on network relationships for rapid growth in the internationalization process.

Companies make use of resources; a combination of technical, personal, financial and other resources is always needed in a business enterprise. Some of the resources can be provided internally but a substantial part must be secured from external providers through relationships (Håkanson & Snehota, 1995). If a firm possesses some but not all needed resources, a common response is to combine resources with an external organization using co-operative arrangement. This is supported by Jolly (1989) who sees the growth in alliances as a direct result of globalization. The global logic of strategic alliances is based on the observation that the fixed costs of manufacturing, R&D, building and maintaining a brand, and operating a sales and distribution network on a global scale are too high for most companies to bear alone. For the resource constrained firm, the primary advantage of this tactic is that markets can be entered more quickly than if full ownership is used. As resource ties develop between two companies they become mutually and increasingly interdependent. As a consequence the borderline between the internal and external resources becomes blurred. The potency of the resource collection of a company thus depends on how it is tied into those of others.

When considering the limited resources of for instance born globals, it can be assumed that all types of co-operative modes, ranging from partnership agreements through strategic alliances to networks, will play an especially important role in the implementation of their globalization strategies. It has been argued that interorganizational learning is critical to competitive success. Von Hippel (1988) found that more than two-thirds of the innovations he studied could be traced back to a customer's initial suggestions or ideas. Several studies suggest that a firm's alliance partners are, in many cases, the most important source of new ideas and information that result in performance-enhancing technology and innovations. "Relationships may well be, and we argue that they are, the most significant resource in what makes a company capable of unique performance", (Håkanson & Snehota, 1995:137). They are the kind of asset that is difficult to reproduce and imitate for others and therefore critical for a company's performance (e.g. Itami, 1987). Relationships cannot be controlled by any single party in isolation but are controlled jointly by the parties involved. A relationship is jointly owned by the parties who have "invested" in it. Relationships are resources of a peculiar type as their value does not diminish with use, they cannot be used up, extensive use can often enhance its value. A company's ability to handle the ties might be more important for its results than the amount and type of more physical resources it possesses. A company's total capability is thus determined by the total resources it can mobilize through relationships. Bonds between companies arise because of bonds among individuals. This brings us on to the concept of social capital. Social capital can be defined as the goodwill which is engendered by the fabric of social relations and that can be mobilized to facilitate action (Adler & Kwon, 2002).

What has been regarded as one of the fundamental principles of organizational design is that organizations react to uncertainty in their environment by removing transactions from the market and placing them in more hierarchical contexts (Williamson, 1975; Ouchi, 1980). More recent research has started to question the generality of this principle by showing that when market uncertainty increases, individual companies tend to interact more, rather than less, with other organizations. For instance, Ellis (2000) found that decision-makers in practice respond to the inherent risks associated with foreign market entry (FME) by placing more not less, reliance on their social ties as a means of economizing on these higher search costs. The main effect of market uncertainty is thus, not the absorption of the source of uncertainty within corporate boundaries, but increased reliance on external partners who are known and trusted as reliable (Baker, 1992). Contrary to assumptions of the normative literature, international markets are not anonymous and the process of internationalization can be legitimately described in terms of establishing relationships in foreign markets (Johanson & Vahlne, 1990).

The Organizational Capability Perspective

"The firm seeks the maximization of profits based on long-term global strategy. The maximization of long-term global profits is not merely a matter of maximum rent extraction from a particular market, but building the capabilities and knowledge of the company as a whole", Contractor & Kundu (1998:329).

This perspective has recently been introduced to explain entry mode choices. Madhok (1997) present it as an alternative to TCP, while Aulakh & Kotabe (1997) have perceived it more to be complementary. The economic perspective has dominated the literature on global strategy in the last two decades (Collis, 1991; Buckley & Casson, 1985; Hennart, 1991; Yip, 1992). The internalization theory is considered to be the TC theory of the multinational corporation and research on the topic of entry mode has predominantly been from this perspective (Madhok, 1997). This perspective analyzes the characteristics of a transaction in order to decide on the most efficient, i.e. TC-minimizing, governance mode. But lately, there has been increasing attention to the notion of firms competing primarily on the basis of capabilities. This argument is rooted in the resource-based perspective (Penrose, 1959). In this perspective the historical dimension of a firm’s activities is critical, since its past experiences engender the underlying routines on the basis of which it undertakes subsequent actions. When applied in a global market the resource based theory builds on the international trade theory of comparative advantage (Malhotra, Agarwal & Ulgado, 2003) and is seen as analogous to the organizational capability approach. A firm enters global markets when it can exploit and develop its comparative advantage, capabilities and societal resources for a sustainable competitive advantage (Andersen, 1997). The entry mode chosen for foreign markets however, depends on the type of resource advantage. If the firm-specific advantage for instance, is superior knowledge based on tacit information, the firm should pursue a hierarchical governance structure (e.g. internalization) rather than a market structure. In contrast, if the firm faces capability constraint in an unfamiliar area of activity, collaborations are a useful vehicle for enhancing knowledge (Madhok, 1997). Similarly, a strategic alliance between two firms becomes a resource when the relationship promotes efficiency and effectiveness in a market offering. While the key consideration of the TC approach in selecting entry mode is cost minimization, the OC perspective focuses on the value of the firm’s capabilities. The focal concern shifts from the extent TC saved by not conducting the transaction through the market mechanism to the extent of value sacrificed, in terms of overall rent-generating capacity, by not conducting the transaction within the firm. Madhok (1997) believes the assumption of opportunism is not required, he claims that the very fact that collaboration is increasingly prevalent especially in globally dynamic and knowledge-intensive industries, suggests that firms are willing to trade off some potential losses from opportunism for the opportunity to develop their capability base. According to Madhok (1997), there is a distinct shift in orientation; the implicit default mode in TC theory is the market whereas the implicit default mode for OC is hierarchy.

The OC perspective shares the notions of bounded rationality with the TCT and the eclectic perspective, but rejects the assumption of opportunism, which is central in the TCT. The OC perspective is rooted in the resource-based theory and shares the emphasis on experiential knowledge with the Process Theory on Internationalization. The focus on a firm’s resources or capabilities are important in that it might help managers differentiate between resources and/or capabilities that might support a competitive advantage from other less valuable resources/capabilities (Peteraf, 1993). Madhok (1997) stresses the importance of finding a balance between exploitation and development of a firm’s capabilities. Aulakh & Kotabe (1997) state that the organizational capability perspective is useful in understanding firms' skills and resources relevant to integration decisions in foreign markets. It has earlier been an implicit assumption in resource-based theory that competitive advantage comes as a result of resources and capabilities owned and controlled by a singel firm, but this view is changing, inter-firm cooperation permits firms to share resources and thereby overcome resource-based constraints to growth.

The OC perspective, with its focus on both firm's capabilities (of which knowledge is one component) and relationships, covers both the internal and the external aspects of the international development of firms. This theory may be seen to follow naturally from first the IP theory, where building knowledge through own experience is central, then the network theory where the importance of relationships for knowledge-transfer is central.

A problem is that the broader network perspective offers little guidance to those firms whose network horizon is limited to the local market (presumably most SMEs). For such firms international expansion is problematic and is seen to follow the default hypothesis of psychic distance (Andersen, 1997). But this assumption is based on a level of analysis at firm level. By moving down to individual level we will find that even newly established SMEs may have a network of importance for international expansion. We should look towards social network theory, which considers the transmission of information through inter*personal* networks; "information disseminates through society via social interaction" (Ellis, 2000:447). Seen from this perspective, knowledge of foreign market opportunities are contingent upon the idiosyncratic benefits of each *individual's* social network. In other words, information search activities would appear to be selectively influenced by those existing social ties, linking the initiating decision-maker with others that are in some way connected to a particular foreign market. In addition to providing connections into other markets, social ties are useful for screening and evaluating potential exchange partners. Larson (1992 in Ellis, 2000) observed that foreknowledge of a potential partner's reputation combined with a history of personal relations reduced exchange risk by providing a foundation for mutual trust.

Social Network Theory

Irrespective of "whether a relationship is strong or weak, it generates information benefits when it is a bridge over a structural hole" (Burt, 1992:28). The logical and intuitive appeal of the structural hole hypothesis is supported by anecdotal evidence reported in the literature highlighting the role played by personal contacts with individuals and organizations in going abroad (Bonaccorsi, 1992; Liang & Stump, 1996, Reid 1984). "Structural holes", are defined as the lack of a relationship or tie between individuals or groups. Such holes prevent the flow of information and knowledge between groups and thereby inhibit the development of new combinational capability. Granovetter (1973) showed the importance of casual acquaintances in filling structural holes and as sources of unique information. Casual acquaintances or "weak ties" have information that the individual and others in the network do not have. The more weak ties, the more information the individual has (Galaskiewicz & Wasserman, 1993). These "bridging" relationships, connecting otherwise unconnected groups, may be important for explaining how organizations extend their existing capabilities. Apparently, information garnered through weak ties can be an important source of new ideas, and by nurturing weak tie relationships, individual entrepreneurs can advance emergent social networks and the development of new organizational capabilities. Social network theory suggests that organizations absorb unique information through weak social ties and distribute it through social actors and hierarchical networks (Floyd & Wooldridge, 1999). The structural hole hypothesis is not biased towards larger firms with international network horizons. That is, social capital, rather than financial or human capital, is deemed to be the final arbiter of competitive success for all types of firms in all types of settings (Burt, 1992). From this perspective the unit of analysis is the structural hole itself, or the relationship that spans it, rather than the more indistinct network in which the focal firm happens to be situated.

Uzzi (1997) found that special relationships, which were fewer in number (e.g. than arms'-length), characterized critical exchanges. This suggested that arms-length may be greater in frequency but of lesser significance and that stringent assumptions about individuals being either innately self-interested or cooperative are too simplistic, because the same individuals simultaneously acted "selfishly" and cooperatively with different actors in their network. His findings suggest that in networks of close ties, motivation is neither purely selfish nor cooperative but an emergent property of the social structure within which actors are embedded and that rationality is neither purely rational nor boundedly rational, but expert. He found that the critical transactions on which firms depend most are embedded in networks of social relationships that produce positive and unique outcomes that are difficult to imitate via other means.

It follows that individuals with few weak ties will be deprived of information from distant parts of the social system and will be confined to the provincial news and views of their close friends (Aldrich & Zimmer, 1986:277). Entrepreneurs are more likely to be found in positions whose centrality is high and which are connected to lots of diverse information sources. Since the early 1990s there has been an increased academic interest in the fusion of the two areas of international business and entrepreneurship (McDougall & Oviatt, 2000). Wright & Ricks (1994) highlighted international entrepreneurship as one of three important emerging research thrusts in the field of international business. It is claimed that "international business researchers cannot afford to ignore the growing power of entrepreneurial firms in international competition, nor can entrepreneurship researchers ignore the internationalization of the marketplace" (McDougall & Oviatt, 2000:906).

Different Perspectives on Entrepreneurship

Entrepreneurship is seen as a rich and complex phenomenon; “we should not expect, or even desire, that it be pinned down by a single, universal definition” (Wickham, 2006:5). Kilby (1971) noted that the entrepreneur had a lot in common with the “Heffalump”, a character in A.A. Milne’s Winnie-the-Pooh, described as: “a rather large and important animal. He has been hunted by many individuals using various trapping devices. But no one so far has succeeded in capturing him. All who claim to have caught sight of him report that he is enormous, but disagree on his particulars”. The main focus in this study with regard to the meaning of the word entrepreneurship is the founding of a new business (Gartner, 1985). Still, many well-known entrepreneurs have revitalized an existing organisation rather than building a new one from scratch. However, entrepreneurial behaviour in large, established companies, often referred to as “corporate entrepreneurship” is not included here. Entrepreneurial behaviour may occur at the individual, group, or organizational levels (McDougall & Oviatt, 2000), the focus here being on the individual level. The idea that the entrepreneur is someone who has established a new business organisation is also one which would fit in with most people’s notion of an entrepreneur (Wickham, 2006). Innovations have also been suggested as a critical characteristic. However, innovation is seen as an important factor in the success of all business ventures, not just the entrepreneurial (Wickham, 2006). If looking at Meyer et al’s (2002) classification scheme, the main focus here is on the entrepreneurial creation.

	Small and medium firms	Large corporations
Entrepreneurship	Entrepreneurial creation	Intrapreneurial creation
Strategic mgmt	SME performance	Corporate performance

Figure 2: Meyer et al’s (2002) classification of the domain of entrepreneurship

Entrepreneurial creation is concerned with all aspects of the entrepreneur and entrepreneurship that address the issue of how entrepreneurs devise and implement innovative products, ideas and ways of doing things.

A wider definition is Timmons' (1994:7) "entrepreneurship is the process of creating or seizing an opportunity and pursuing it regardless of the resources currently controlled". Due to the demarcation segregating international business and entrepreneurship has begun to erode in recent years, a definition of "international entrepreneurship" will now be presented: "international entrepreneurship is a combination of innovative, proactive, and risk-seeking behaviour that crosses national borders and is intended to create value in organizations" (McDougall & Oviatt, 2000:903).

"Only truly internationally entrepreneurial firms are those that are "born global"" (Fletcher, 2004:289). Kuemmerle (2002) also stated that; "a growing number of entrepreneurs start ventures by simultaneously establishing operations in several countries in order to increase the likelyhood of venture success" (p.99). According to McDougall & Ovitatt (2000) international business researchers are broadening their traditional focus on large multinational companies to also include entrepreneurial firms in their research agendas. This is due to the accelerated internationalization that is being observed in even the smallest and newest organizations; "The use of efficient worldwide communications technology and transportation, the decrease in governments' protectionist policies, and the resulting decrease in the number of geographically protected market niches has made it possible, if not necessary, for many of today's entrepreneurial firms to view their operating domains as international" (McDougall & Oviatt, 2000:902).

Traditionally, approaches to research on entrepreneurship neglect the relational nature of the process. Instead they treat entrepreneurs either as atomized decisionmakers, operating as autonomous entities, or as prisoners of their cultural environment, predisposed to entrepreneurship. The embedded nature of social behaviour refers to the way in which action is constrained or facilitated because of its social context. Entrepreneurship can be described as "…embedded in a social context, channelled and facilitated or constrained and inhibited by people's positions in social networks," (Aldrich & Zimmer, 1986:262). The same state that entrepreneurs must establish connections to resources and niches in an opportunity structure, and it is also believed they at some point are affected by relations with socializing agents who motivated them. Stevenson (1984) noted that entrepreneurs are driven by opportunity-seeking behaviour, not by a simple desire to "invest" resources. By contrast, managers are believed to be driven by a concern to invest the resources they manage, treating resources as an end in themselves, rather than as a means to an end the way entrepreneurs do.
here are two undersocialized approaches to entrepreneurship: Personality theories

(e.g. which posit that people's personal traits make them prone to behaving and succeeding as entrepreneurs) and economic, rational actors' theories (e.g. neoclassical economic theories view entrepreneurs as rational, isolated decisionmakers) (Aldrich & Zimmer, 1986). With regard to personality theories there is a common impression that entrepreneurs tend to be flamboyant extroverts who are spontaneous in their approach and rely on instinct rather than calculation. Detailed studies, however, have shown that all types of personality perform equally well as entrepreneurs (Wickham, 2006). The same claims that personality type, does not correlate strongly with entrepreneurial performance and success.

One oversocialized approach is also mentioned (Aldrich & Zimmer, 1986). Certain groups are believed to possess beliefs, values, and traditions that predispose them to succeed in business. Various groups have been labelled this way; Jews, Chinese, Japanese and Lebanese. The unusually high value Chinese for instance, place on future-oriented activities (Hofstede, 1993) facilitates increased thrift and persistence, which is very favourable for entrepreneurship (Busenitz & Lau, 1996). Chan & Chung (1985) concluded that cultural factors were a better explanation of entrepreneurship, than structural disadvantage or financial explanations. However, Aldrich and Zimmer (1986) believe that "national character" arguments must give way to models based on an underlying similarity in the economics of all Western advanced industrial societies. Rather than posit overdeterministic models, one should turn the attention to the situational conditions under which entrepreneurs enter business (p. 8).

The social development view regards personality traits as a more complex issue. In this view, entrepreneurship is an output which results from the interaction of internal psychological and external factors (Wickham, 2006). The view is that personality develops continuously as a result of social interaction and is expressed in social setting rather than being innate to the individual. The way that people behave is not predetermined, but is contingent on their experiences and the possibilities open to them. In this view, entrepreneurs are not born, they are made. This is in accordance with Aldrich & Zimmer's (1986) perspective that views entrepreneurship as embedded in networks of continuing social relations. "Within complex networks of relationships, entrepreneurship is facilitated or constrained by linkages between aspiring entrepreneurs, resources and opportunities" (p. 8). This is in contrast with previous beliefs: "Much of the utilitarian tradition, including classical and neoclassical economics, assumes rational, self-interested behavior affected minimally by social relations…." (Granovetter, 1985:481). Classical and neoclassical economists operate with an atomized, undersocialized conception of human action. Granovetter (1985) maintains that actors will not behave or decide as atoms outside a social context, nor do they adhere slavishly to a script written for them by the particular intersection of social categories that they happen to occupy. Their attempts at purposive action are instead embedded in concrete, ongoing systems of social relations. Granovetter (1985) further argues that the anonymous market of neoclassical models is virtually non-existent in economic life and that transactions of all kinds are rife with the social connections described. This view is supported by Coviello's study of a New Zealand software firm (1996) where she found that the case firm's extensive network of licencees, distributors, and other alliances around the world have been essential to its start-up and survival.

In the ideal-type atomistic market, exchange partners are linked by arms'length ties. Self-interest motivates action and the exchange itself is limited to price data, which supposedly distil all the information needed to make efficient decisions. At the other end of the continuum are embedded relationships, which are characterized by trust and personal ties, rather than explicit contracts and these features make expectations more predictable and reduce monitoring costs. Embeddedness creates economic opportunities that are difficult to replicate via markets, contracts, or vertical integration. It is thus a good basis for sustainable competitive advantage for the firms involved.

An important difference between theories of multinational enterprise and a theory of international ventures seems to be the unit of analysis. Theories of international entrepreneurship argue that some firms start out internationally because of certain entrepreneur-specific capabilities (vs. firm specific) (Bloodgood & Sapienza, 1995; Knight & Cavusgil, 1996; McDougall & Oviatt, 1996). When the entrepreneur creates the enterprise, there are no routines in place, but the entrepreneur has a vision and a network of contacts that he or she is going to build up further. Thus, the study of international ventures has to be concerned with individual learning by the entrepreneur as well as with organizational learning of the emerging entrepreneurial firm.

From Fletcher's (2004) study of two case firms' international development, it is possible to argue that the language of strategy and structure, which is often prescribed by many models of international business to enable firms to survive in competitive global markets (Levitt, 1983; Bartlett & Ghoshal, 1989; Ohmae, 1989), is somewhat limited for explaining small business internationalization. Close consideration of small business practice highlights the importance of multifaceted frameworks of analysis which go beyond the structural, strategic and behavioural and which take account of the often chaotic, opportunistic and incremental process through which entrepreneurs build international relationships and transactions (Buckley, 1991; Andersen, 1993; Calof & Beamish, 1995; Bell & Young, 1996; Jones, 1999). "..means that when evaluating the international activity of small firms, there is a closer relationship to entrepreneurship than there is to international strategy and structure that has tended to dominate small business research" (Fletcher, 2004:294). For born global firms the realization of entrepreneurial activities cannot be separated from the international business context and market in which they are being created. International entrepreneurship is a tightly integrated process whereby entrepreneurs envision and realize the emergence of their business as an international entity. For these firms, internationalization is not an extension of what has already occurred or “has been” in the home market. For small firms that internationalize some years after start-up, on the other hand, the international arena is seen as another “site” in which entrepreneurial activities are tried out or practiced. Internationalization is seen as an extension of what has already occurred in the domestic market and in this sense is also local or regional. As a result of Fletcher’s (2004) analysis, it is argued that in staged or gradual internationalization, international entrepreneurship is characterized by the extension and broadening of entrepreneurial capabilities that have already been developed at home.

2.5 Discussion

Broadly speaking, the resource-based view suggests that firms seek to capitalize on and increase their capabilities and endowments, whereas organizational economics asserts that firms focus on minimizing costs of organizing. The aim of this thesis is not to explain choice of entry mode, but rather a firm’s pace of internationalization. Thus, the use of process theories on firms’ internationalization, are considered more relevant than the more static economic theories.

Traditional theories and models of internationalization have been based on research examining the international activities of large, mature firms, often in the context of the U.S (McDougall, Shane & Oviatt, 1994). Although these theories explain a substantial amount of international business activity of large, mature firms, these theories and models do not fully explain the formation and operation of international new ventures, especially in today’s new environment. Solberg & Askeland (2006) also state that the economic theories appear to be too narrow to cope with the complexity of the global competition.

The born globals probably fit in the third cell of Solberg & Askeland’s (2006) framework (see below), where theories of networks and alliances are seen as most useful to explain firms’ internationalization.

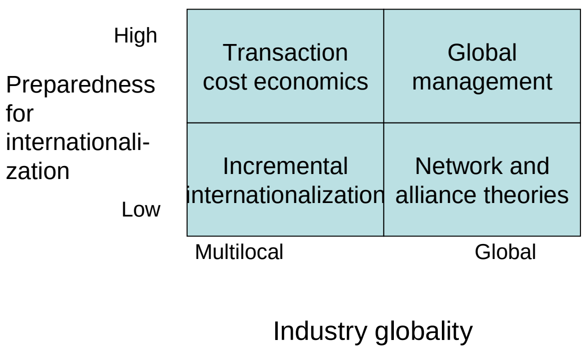

Figure 3: Framework for classification of internationalization theories

Source: Solberg & Askeland (2006:3)

This position is also analogous to what Johanson & Mattson (1988) term *late starter*. That is, the born globals can be described as firms with low preparedness for internationalization and doing business in a global industry. Even though the born globals are considered prepared on some dimensions, e.g. committed and experienced managers/employees and therefore in possession of foreign market knowledge, they are most likely lacking on other important dimensions such as market position and solid financial base. If we then look at Solberg's (1997) nine windows (see below) there are two strategies that are suggested for firms in such a position, e.g. seek international niches and prepare buy-outs, it can be interesting to see whether these are the preferred strategies of the cases studied here.

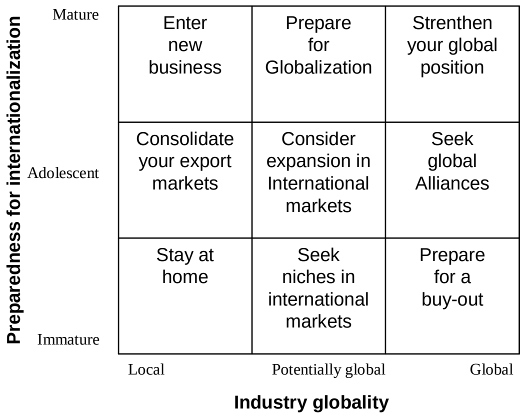

Figure 4: The nine strategic windows

Source: Solberg, 1997:11

Firms in this cell (p. 14) e.g. born globals, do not have the option to carry out a stepwise internationalization towards a global market due to the threat of large, established MNCs rapidly imitating their products. Born globals do not have the financial strength to compete head-on with their larger counterparts, and they also most likely lack key capabilities such as distribution channels and established customer networks (Solberg & Askeland, 2006). The reason why network theories seem most fit for explaining the internationalization of firms in this position, are that such firms are likely to have an urgent need to combine internal capabilities with resources outside the firm. By nature, such embryonic firms (as born globals) lack the internal resources for competing head-on with large MNCs, and thus suffer from the "liability of newness" (Hannan & Freeman, 1984). However, these firms are able to build core competencies through knowledge sharing and development through personal networks, mainly through weak ties among key individuals (Sharma & Blomstermo, 2003). Born globals are further suggested to internationalize through the development of such networks, enabling a stronger adaptation to foreign markets (Sharma & Blomstermo, 2003) and actually facilitated by the absence of a leading company history or administrative heritage. As suggested by Johanson & Mattson (1988), the success of a foreign entry relies on its relationships within a particular market rather than the cultural and market specific characteristics. The OC perspective makes even more emphasis on the advantages of combining resources in a business relationship, it claims that the advantages of a firm are very often linked to the advantages of the network of relationships in which the firm is embedded. With its focus on values, as opposed to TCTs more “negative” focus on costs, and on the development of resources and capabilities, as opposed to the more short-termed focus on exploitation of resources, the OC perspective seems more in tune with today’s dynamic and increasingly global environment. However, it is not fully developed yet and cannot be seen as an established theory. With regard to the study’s focus on SMEs and their international development, the resource-based or behavioral theories with the special focus on experience and network factors at an individual level have been considered most suitable for this study. It is important to be aware that both the behavioral and the economic theories assume firms are well established in the home market before venturing abroad. This may be seen as a concequence of these theories being developed in the 1970s and 1980s where large MNCs made out the basis for analysis and the focus of these was that of coordination and controlling their foreign acitivities mainly through the use of FDIs. New theory has to be further developed with the focus on combining entrepreneurship literature and international business as this is more in line with the increasing prevalence of socalled born globals or international new ventures. However, the conceptual framework will also include elements from the global strategic management area.

2.6 Summary

Following these theories it can be argued that a firm’s possession of specific advantages, knowledge, and experience are keys to whether new ventures will internationalize and whether such efforts will be successful. The theories are summarized in the table on next page.

	Economic	Theories		Behavioral	Theories
Criteria	**TCA**		**Strategic Behavior**	**Internationalization**	**Network**
Unit of analysis	Transaction	Firm	Firm	Firm	Firm
Explanatory variable	Characteristics of the transaction (asset specificity and uncertainty)	O, L and I advantages	Strategic behavior of competitors	Firm's experiential knowledge (know-how)	Firm's business (formal) and social (informal) networks
Assump-tions	Bounded rationality and opportunism	Bounded rationality and opportunism	Bounded rationality and opportunism	Bounded rationality	Relationship oriented
Decision criteria	Minimization of transaction cost	Trade-off between risk and return	Minimization of risk and uncertainty	Trade-off between resource (growth) and risk	Network opportuni-ties and firm resource constraint
Source of competitive-ness	Efficient management of transactions	OLI:FDI:OI:contrac-tual agreement:O: exporting	Firm's imitation and preemptive capa-bility	Path dependence and firm's experiential knowledge of market: O advantage	Development and exploitation of networks

Modes of entry	Contractual agree- ment, collaborative and integrative	Independent, colla- borative and inte- grative	FDI	Indirect and direct exporting and foreign production	Externalization and collaboration
Strengths	Effectively explains vertical integration decisions in both manufacturing and service firms	Multi-theoretical approach: RA,TCA and international trade theories	Global competitive dynamics: explains industry stability	Empirical support (albeit mixed):rooted in the RA and O- advantage theories of the eclectic paradigm	Support specifically for SMEs: focuses on dynamics rather than description of internationalization
Weakness- ess	Static orientation:does not consider non-TCA cost benefits: most past studies have used firms as units of analysis: transaction costs can not be accurately measured	Three theories provide overlapping explanation of entry mode choice: L advantage likely to influence entry mode and international market selection	Considers oligopol- istic industry structure: new forms of co- operative arrange- ments not considered	Time-dependent and deterministic evolutio- nary path does not include cooperative entry modes;strate- gic factors ignored: less valid in techn- ology and services industry	It is not a predictive model and seems ad hoc in nature; qualitative methodo- logy used may be difficult for theory- testing: does not explain internatio- nalization of firms that do not have networks

Table 1. A summary of theories explaining the internationalization process and entry mode choice

Source: Malhotra, Agarwal & Ulgado, 2003:8

To sum up, the choice of internalization, e.g. carrying out an FDI as the TC, the Eclectic and the Strategic Behavior theories are most focused on, is not a very viable strategy for the very young firms with both little resources and firm experience on internationalization. According to Solberg & Askeland (2006) the choice of internalization depends on high preparedness of the firm in question, in that it presupposes extensive human- and financial capital, both in the pre-entry, entry and post-entry phase, due to the need for information, and the high resource commitment implied by a higher controlled mode. Even though we assume the founders and other key employees of so called born globals have extensive experience from working, living and/or studying abroad, and in that way the firm can be said to have some sort of preparedness to internationalize, the physical and other human resources of the firm are often lacking and thus making it unviable to make such a commitment as an FDI is to the different the markets they enter. Preparedness is taken as an assumption by TCT (Solberg & Askeland, 2006). This implies that for a firm to carry out a rational economic analysis, as the TC theory assumes, it must have a certain level of preparedness for internationalization. Another factor is also the fact that these BG firms are often seen to enter several markets simultaneously and are often aiming for small niches in each country market and it may thus, not be justifiable to make large investments in each market. In addition, the economic theories appear to be too narrowly focused to cope with the complexity of the global competition.

Although it may be useful to establish whether the industry to which an SME belong is global or not and the writings on strategic groups (Caves & Porter, 1977) and globalization drivers may be seen to contribute strongly to the understanding of the emergence of global industry structure, the strategic options that are suggested according to this theory for the firms, are to grow and become a dominating player through the creation of structural barriers, and thus create oligopolies. This strategy is not very viable for internationalizing SMEs, and the theory thus seems limited in its ability to advice on moves of an SME, as is the focus of this study.

On the one hand, the “stages” view suggests an evolution to internationalization based on cognitive learning and competency development, which increases, through experience, over time. It is an internally driven approach to internationalization in which firms expand their market scope and operation modes as managers gain confidence and learn from personal experience. On the other hand, the network perspective shows that international market development activities emerge from and are shaped by, an external web of formal and informal relationships. From this network-driven behavior, cognitive development also occurs, with learning focused on markets entered, the modes of entry used, and the relationships developed during the process of internationalization. Therefore, both perspectives encompass cognitive processes. Integration of these perspectives brings the internally and externally driven views together, allowing a richer understanding of both drivers of internationalization, and the emergent patterns of international market development activities. It might thus, be useful to use these theories in combination as they complement each other, when analyzing firms’ internationalization process.

Chapter 3 Conceptual Framework

3.1 Introduction

The existing literature shows no agreement regarding the conceptual framework and constructs that should be used to explain a firm's internationalization (Andersen, 1997). The present framework will be based upon some of the most important contributions for explaining the pace of internationalization of SMEs. Bloodgood, Sapienza & Almeida (1996), argue that new ventures will seek an international presence for two reasons: (1) industry conditions (e.g. increased globalization) may *require* an international presence for the company to be competitive, and (2) a venture may seek a global presence to capitalize on its unique set of resources (e.g. the management team's experience in global markets, new technologies or innovations). According to the same authors, these conditions must be present for rapid internationalization to be viable.

3.2 Independent Variables

3.2.1 Globality and product characteristics

One reason for the differences observed in the speeds by which traditional multinational enterprises (MNEs) and fast globalizing firms become international/global, is due to different environmental conditions. "…the slowness of the whole process is a consequence of incremental adaptations to changing firm and environmental conditions rather than the result of a deliberate strategy" (Knight & Cavusgil, 1996:13). In other words, when the environmental conditions rapidly change, as they do when there is increased globalization, the process of internationalization is likely to speed up as well. In a closed domestic industry, a company accustomed to weak competitors and undemanding customers has little to fear, there are no new competitors that might grow strong in more demanding competitive arenas. In an open global industry, new and strong competitors abound (Yip, 1992). As a consequence, it is important to understand just how the industry globalization drivers affect the competitive environment of SMEs. When moving to the industry and company level, it has been argued (by e.g. Lindqvist, 1991) that increasing speed in the development of new technologies has led to shorter product life cycles (PLCs) and higher innovation intensity, which in turn leads to intensified global competition. The shorter PLCs have led to more emphasis on R&D, and on recognizing new opportunities and exploiting them as rapidly as possible with successful timing (e.g. PCs and cellular phones). In short, product characteristics are an important aspect to be considered. For firms with small home markets it may be difficult to achieve competitive advantage in terms of economies of scale. In the case of some products, significant economies can be achieved only by operating in multiple countries. The shorter the PLC, the shorter the time period for returns on investments for product development. Consequently, companies with small domestic markets need global volume, so that the costs for product development can be apportioned.

3.2.2 Individual resources: Experience & Network

The experience and background of founders and their relationships are important resources for a firm and are important drivers or facilitators of internationalization. International experience is defined as the understanding and realistic perceptions of foreign operations, risks and returns in foreign markets (Aulakh & Kotabe, 1997). The reasoning here, which is based on the organizational capability of the firm, is that firms are initially risk-averse when entering new markets, and therefore not willing to invest substantial resources in unfamiliar terrain. As a firm's management gets a better feel for the foreign markets, it gains better understanding of the risks and returns, and becomes more confident and aggressive, but also more realistic. This may be manifested by a willingness to commit more resources, but it may also enable management to make better investment decisions. For firms, international experience has traditionally been measured by making an assessment of the geographic scope and depth of the firm's experience. This is done by registering the number of different countries in which a firm is active and the length of experience in each of those countries (Erramilli, 1991). In the present study, the variable will be analyzed at the individual level. Information about the founder(s)' and/or other key employees' international experience will be collected. Several studies (Oviatt & McDougall, 1994; Reuber & Fischer, 1997; Ellis, 2000) show that key employees in BGs very often have extensive international experience from previous employment. Furthermore, Reuber & Fischer (1997) argue that decision-makers with more international experience are more likely to have a foreign business network in place and are more likely to have developed the skills needed to identify and negotiate with firms in a different culture. Oviatt & McDougall (1994) further argue that partnerships provide concrete critical resources, i.e. specific skills and finances, as well as more abstract resources, such as legitimacy and market power. These resources are seen as being particularly important when a new and young firm, with relatively small resources, attempts to increase foreign sales. The founders' or other key employees' relationships from previous employment may enable these firms to enter new markets at a faster rate than would otherwise be possible (e.g. by providing the firm with complimentary resources and by opening up markets). This view is supported by Ellis' (2000) findings, which support the notion that awareness of foreign market opportunities (which has been identified as being a critical antecedent of foreign market entry) is commonly acquired via existing social ties. McGaughey, Welch & Welch (1997) also emphasize the important role of personal networks in triggering initial export inquiries or orders. They found that the network's key individuals importantly affected the case company's international activities. These people were critical for both the content and direction of the company's internationalization. "…much of the ability of the company to initiate and carry through international operations resided in the decision-makers' personal networks" (p. 179).

3.2.3 The Conceptual Framework Illustrated

From the discussion above, a conceptual framework is proposed where four main factors are posited as having an impact upon the firm's pace of internationalization.

These factors are; (1) the experience and background of the firm's founders or other key employees, (2) the same person's network, (3) the globality of the industry in which a firm does its business, and (4) different product characteristics.

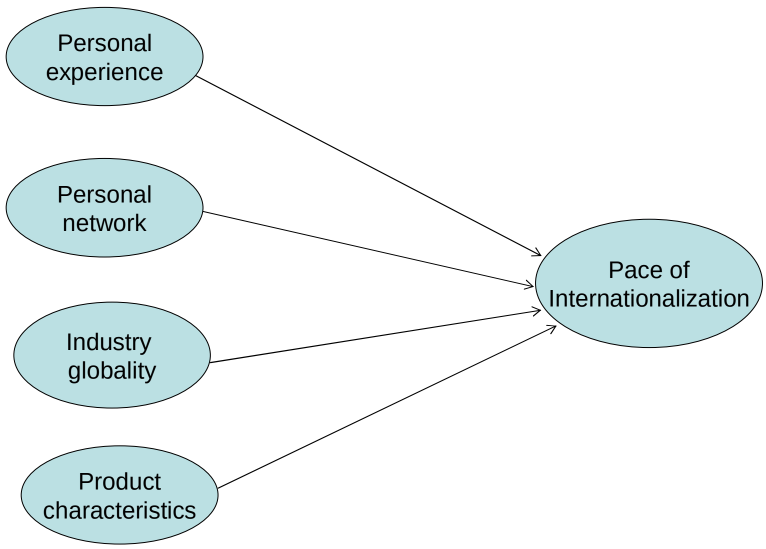

Figure 5: Conceptual Framework

Boundaries between domestic and international markets are becoming less relevant as businesses increase their activities abroad. A global industry is, in this thesis, conceptualized as follows: "an industry in which a firm's competitive position in one country is significantly affected by its position in other countries or vice versa" (Makhija, Kim & Williamson, 1997:680). In this regard, the global industry "is not merely a collection of domestic industries, but a series of linked domestic industries in which rivals compete against each other on a truly worldwide basis" (Porter, 1986:18).

In order to find an explanation as to why some SMEs still follow a more step-by-step approach, while others choose a faster and more erratic approach that leapfrogs over many stages, Madsen, Rasmussen & Servais (2000) argue that globalization may enable firms to more freely choose their own model for becoming international. International sales both become easier *and* more difficult, in the sense that international markets have become more accessible for most firms, but the level of competition and the demand for international competence have increased. There is both a "positive" pressure, from the increased level of globalization, in the form of an increase in the accessibility to markets, and a "negative" pressure from tougher competition, since it has become a necessity for a host of new companies to be present in many markets. Both of these pressures work to increase the pace of internationalization. The positive pressure *lures* the company to new territory, while the negative pressure *forces* the company to find new markets.

These pressures may work differently depending upon the size of the home market. According to Bloodgood, Sapienza & Almeida (1996), new European firms are more likely to consider internationalizing some of their activities when their enterprise is initiated compared with new US firms. One reason is the fact that a new US firm, operating in a 500-mile radius around its base, may do so without crossing borders, a European firm, with the same operating radius around its base, may have to deal with five or six other countries. Luostarinen & Gabrielsson (2001) state that global firms from large countries globalize because of the demand-based pull forces in global markets, but global firms from small and open economies globalize because they are pushed. Small domestic markets and the fear of expected future competition, from global firms in large countries, puts a lot of pressure on these firms, pushing them to find new markets. According to Hamel & Prahalad (1985), companies that safely nestle in their home beds will increasingly experience a resource disadvantage. "They will be unable to marshal (the) forces required for a defense of the home market" (p. 146).

3.3 The conceptual framework elaborated

3.3.1 Pace of Internationalization

A conceptual framework can be based on more than one theory (Andersen, 1997). A conceptual framework is not a theory since it will not have all the prerequisites of theoretical constructions. A theory can be represented by various conceptual frameworks. This model brings together a resource-based framework with industrial network elements. The organizational capabilities focused on here, is a firm's business relationships and its experiential knowledge both defined as important individuals of the firm's relationships and knowledge either developed in the present firm or in previous employment. Initial resources influence the relationships a firm is able to develop and experience, which again are assumed to influence the strategy a firm chooses when going international. As the firm becomes more international (e.g. in terms of having more international relationships and becoming more experienced) this increases its resource base in terms of relational capability (e.g. its ability to build new and develop/maintain existing relationships) and experiential knowledge which again influences further the international strategy of the firm. According to Moen (2000), there are numerous studies that have focused on the strategy-performance relation and there is strong support to the notion that strategy affects performance, i.e. it is important to study which strategies are used and what influence them.

With regard to the market selection dimension, Bell (1995) states that ”psychic distance” has become much less relevant as global communication and transportation infrastructures improve and as markets become increasingly homogeneous. Crick & Jones (2000) also found that decisions to enter markets with a perceived low psychic distance were less important than decisions based on global trends in technology markets and relations in networks.

Resource availability has not been a particular focus of much of the research on internationalization, but it is nevertheless an important issue to consider (Benito & Welch, 1994). For instance smaller firms, given their limited financial resources, can be expected to face a narrower set of viable foreign market servicing options than larger firms (Bonaccorsi, 1992). Still there is evidence of such firms succeeding in international markets. Knight (2000) claims that the success of SMEs under globalization depends in a large part on the formulation and implementation of strategy. A firm’s international strategy and its degree of internationalization are defined as the pattern of entry modes and subsequent foreign operation modes chosen, which market(s) are entered when and how large the export rate is after a certain time. According to the firms’ choices made on these dimensions, we get different categories of firms where some are more or less global on one or both dimensions.

A common assumption, thus, seems to be that firm size is one of the factors influencing the strategic options available and that firms should develop export strategies that reduce their size disadvantage if they are small and have limited resources (Moen, 2000). The entry modes traditionally used at the initial stage of internationalization seem to be shifting. Hedlund & Kverneland (1985) provide evidence of a speeding up of the internationalization process and posit that: “the establishment and growth strategies on foreign markets are changing towards *more direct and rapid entry modes* than those implied by theories of gradual and slow internationalization processes” (p.). Madsen, Rasmussen & Servais (2000) found that BGs were quite consistent in choosing foreign distributors as their main export channel, the authours did not think this was a very “global” way of governing foreign operations. Young (1987) suggests that alternative strategies, such as licensing and joint ventures (JVs), are being adopted more widely by smaller firms as initial foreign market entry mode. According to the same, this is most likely to be manifest among high-technology firms where high R&D costs, shorter product life cycles and a concentration of the market for high-technology products accelerate the pace of internationalization. This may be explained by the fact that BGs often operate on many different markets which are all important to them. Due to their limited resources, they are not able to invest in market knowledge and market infrastructure in all markets, they are often only able to invest in close market contacts in very few countries. Such factors may force them to use more low-commitment type of operation mode, in addition they may not need or want a higher commitment mode such as a sales subsidiary, since their targeted market segment may be too small to justify the investment.

hus, one reason for the difference observed, between traditional MNCs and BGs, may be that BGs are much younger companies that have not yet got the financial resources to invest in sales subsidiaries. Another explanation may be, as mentioned above, that such investments are not economical because their product is targeted towards a very narrow segment which cannot generate sales enough to warrant the establishment of sales subsidiaries in each single foreign market. Therefore, the BGs must rely on less capital intensive and more low-commitment type of modes such as cooperation with foreign distributors instead. Very young firms are not supposed to have established subsidiaries, but since these (BGs) are very global (despite their young age) and one characteristic of very global/international firms are that they have established subsidiaries or even local production units, they diverge from other very international firms.

There is an underlying assumption here that BGs are entering markets fast due to competitive pressure. According to Kim & Hwang (1992), the greater the intensity of competition in the host market, the more the firms will favor entry modes that involve low resource commitments, because such markets tend to be less profitable and therefore do not justify heavy resource commitments. This is confirmed in Madsen, Rasmussen & Servais's (2000) study, they state that BGs, because of their small size and limited resources often operate on arm's length in foreign markets. They found that BGs mainly export through agents, distributors and importers. Using low-commitment or collaborative modes, imply that not so large investments are being made and also the risk of being present in a foreign market is not perceived as very high. This may (if desired) enable the SME to enter more markets than if they were using high-commitment modes.

Some born globals have attracted investments enabling them to invest in high commitment modes, but organization is lagging behind very often leading them to deinternationalize after some time (Petersen, Welch & Liesch, 2000). Borsheim & Solberg (2002) also found in their study on four born global internet firms that the two companies using mainly subsidiaries as their initial entry mode have by far the highest revenues, but also the highest deficits, forcing them to downsizing on employees and consolidating and closing down subsidiaries after some time. The fact that not one of the entrepreneurs in Borsheim & Solberg's (2002) study had previous international experience, maybe one reason for "failure", their ambitions of growth exceeded their competence. This is not a new phenomenon and is labeled "the Penrose-effect" by Rugman & Verbeke (2001), i.e. a limitation to a firm's growth rate (is) due to managerial constraints (p. 6).

3.3.2 Key Employees' Experience and Background

To achieve the benefits of globalization, the managers of worldwide business need to recognize when industry conditions provide the opportunity to use global strategy levers; global market participation, global products and services, global location of activities, global marketing and global competitive moves (Yip, 1992:31). Zahra (1999) states that in such a dynamic and competitive environment (e.g. as a global economy is), entrepreneurial leadership will take central stage. It is assumed that the ability to recognize such opportunities is increased with top management or key employees' foreign experience level. Although much of the research on top management teams are based on large firms, the correspondence between top management experience and organizational outcomes is expected to be even more pronounced in SMEs, since these businesses reflect the dominant role of the founding team to a greater extent (Chandler & Hanks, 1994; Mintzberg, 1988). Crick & Jones (2000) found that several firms were started by managers with experience operating in international markets from firms in which they were previously employed. As such, they have developed experience in dealing with the complexities of international operations, have an appreciation of the risks and resource implications, and have developed a network of customers and contacts on which they could build after starting their own firms.

Although the traditional explanation is that firms can gain valuable knowledge and resources as they become older and larger, small and young firms are not necessarily disadvantaged if they develop other mechanisms to acquire the requisite knowledge and resources. There is some evidence in the literature to show that internationalization is more strongly affected by the characteristics of the decision-maker or management team than other variables such as firm size and age (Axinn, 1988; Reuber & Fischer, 1997). Hambrick & Mason (1984) also state that the top management team is a key source of competitive advantage for a venture, since the quality of decisions made by a venture is very much a reflection of its top management team. The small amount of variance in export behaviour explained by firm size (Calof, 1994) calls into question the relevance of firm size as a strong determinant. Also, the emergence of born globals (Oviatt & McDougall, 1994) questions the relevance of a domestic track record as a consistent predictor. Reuber & Fischer (1997) even argue that a domestic track record may influence a firm's chance to succeed internationally in a negative way. Ghoshal (1987) has argued that organizations that internationalize earlier are likely to develop fewer routines and resources which make it difficult for them to move out of domestic markets. Other researchers have also argued that large, established firms typically face "inertial pressures" that inhibit their flexibility. These pressures can be in the form of organizational routines (Dosi, Teece & Winter, 1990), structural impediments to change (Hannan & Freeman, 1977), or perceptual biases of managers (Bower, 1970). Thus, large domestic firms may find it difficult to operate in the international market. It is therefore argued here, in accordance with Oviatt & McDougall (1994), that in newer and smaller firms, the skills and knowledge of the top decision-maker(s) are likely to be more predictive of, and influential on, patterns of internationalization than more traditional factors such as age and size of the company.

3.3.3 Personal Network

Ellis' (2000) findings supported the hypothesis that knowledge of foreign market opportunities is commonly acquired via existing interpersonal links rather than collected systematically via market research. The focus here is on personal relationships of the founder(s) and other key personnel to individuals or organizations that they state have been of importance for the firm's road to internationalization. The founder(s) of socalled born globals and/or key employees are assumed to have established such (important) relationships *before* start-up of the firm. Traditionally, a *firm's* relations and the development of the *firm* through certain stages (e.g. both relationship- and internationalization stages) have been studied. It is assumed that key employees' *personal* development and networking prior to the start-up of these small fast internationalizing firms, influence the firm's road to internationalization in a positive way.

It is sometimes argued that interorganizational trust does not exist. This view is based on the belief that organizations cannot themselves "feel" nor can feelings be experienced towards them (Young, 1992). This is not an issue here, since the focus is on the individual level; founder(s) and or other key employees' personal relationships. The basis of trust differs, for example attraction and liking are seen as less important reasons of trusting in business relations, and competence and openness are even more important. An interpersonal relationship is defined as that which possesses "a tie of affinity" (Little Oxford Dictionary, p417 in Young, 1992 p. 53). In other words, there is some bond between parties; they are likely to have an (emotional) attachment to one another. In a continuing relationship this attachment will in part stem from shared past and expectations of a shared future. However, when interactions commence, there is no such history upon which to base expectations. Interfirm relationships are strengthened further if their development includes increasing socialization, i.e. personalization (Turnbull, 1990). The breadth of what is achieved via the interactions increases thus as business relationships also become social relationships. In early part of a relationship between firm members the motivation for cooperation may be to continue the relationship as a means of fulfilling economic goals and the resulting bonds between the parties would be more impersonal and utilitarian. As the relationship continues to develop, such economic motives can become "overlaid with social content that carries strong expectations of trust and abstention from opportunism" based on the personal relationships individuals have formed (Granovetter, 1985:490). This further bonds the parties, enhances and expands their ability to interact. It should be noted that this process of development is observed in Western countries. In Asia and the Middle East the personal relationship is likely to be more integral and may be a precondition for any commercial relationship (Albaum, Strandskov & Duerr, 2002).

3.3.4 Level of Globalization

As stated earlier, a series of globalization drivers (e.g. growing interdependence of national economies, improved international communication and transportation, homogenization of markets) has contributed to an overall trend towards integration of markets and competition. This trend should simplify and shorten the process of firm internationalization, which means, firms may skip stages of international development that have been observed in the past or the process may not occur in stages at all. This development (e.g. globalization) may thus be seen as major explanator of the born globals appearance. Facing the situation where a firm's position in one country is affected by its position in other countries (Porter, 1986), companies are believed to internationalize in a quest for scale, scope and learning economies (Benito, Narula & Pedersen, 2002), leading to an increasing minimum efficient scale (Hamel & Prahalad, 1985). We can conclude that globalization in a wider sense is the growing interdependence of national economies, involving consumers, producers, suppliers, and governments in different countries. Boundaries between domestic and international markets are becoming less relevant as businesses increase their activities abroad (Knight, 2000).

3.3.5 Product characteristics

Closely related to level of globalization are the characteristics of the product a firm offers. It is assumed that the product strategy of globalizing high technology SMEs is based from the start on an innovative, global product, which has been developed in response to a detected global industry shift (Alahuhta, 1990). It is also assumed that the product strategies of the high technology companies will be constantly updated through the introduction of new versions of the original, physical product and through additions to the product scope in the form of new physical goods and related value-added services. However, as pointed out by Alahuhta (1990), this will be done keeping within the companies' narrow business focus. We have earlier stated that increasing global competition, together with increasing speed in the development of new technologies, has led to shorter product life cycles and higher innovation intensity. The shortening of the product life cycle creates a need for large R&D costs. The shorter the PLC, the shorter the time in which returns on investment in product development can be earned. Thus, especially companies with small domestic markets need global volumes over which these costs can be divided. Short PLCs also call for higher innovativeness in order to launch new versions or products to compensate for the decline of original ones. The characteristics of the product the firm is exporting are thus likely to influence the firm's pace of internationalization.

3.3.6 Summary

From the foregoing discussion, it can be assumed that experience, network, industry and product factors may lead to greater preparedness to commit resources or a reduction in a manager's perception of risk or both, this again leads to a faster pace of internationalization. Experience is believed to change the perception of psychic distance, it may have the effect of reducing perceived psychic distance and this may thus explain the observed pattern where SME's enter several foreign markets simultaneously and these markets may as well be far away as close in terms of psychic distance.

Chapter 4 Research Design and Data Collection

4.1 Research Design

4.1.1 Introduction

A research design is the logic that links the data to be collected and the conclusions to be drawn to the initial questions of a study (Yin, 1989). Choice of methodology thus, depends on the research questions and the objectives of the study. The purposes of social research may be organized into three groups based on what the researcher is trying to accomplish, explore a new topic, describe a social phenomena, or explain why something occurs (Neuman, 1997). Studies may have multiple purposes (e.g. both to explore and describe), but one purpose is usually dominant. The objective of this study is to describe the process of internationalization of SMEs and to explore the reasons of some firms becoming gradual or traditional globals and some born globals. Even though there has in the last decade been some studies on the internationalization process of SMEs (Alahuhta, 1990; Junkkari, 2000) most research conducted in the field of globalization are mainly focused on large multinational companies usually originating from large countries (Junkkari, 2000). There still seems to exist a gap in the literature when it comes to explaining the rapid globalization of born global SMEs. The focus of this thesis was to identify which factors determine a firm's pace of internationalization. The process of internationalization is identified as having two main dimensions, that is, international market selection and the choice of foreign operation mode (Bradley, 1995). Thus, the research intent of the study was stated as: which factors influence the pace for SMEs to gradually increase their resource commitment to a foreign market and which factors influence the pace for entering new country markets?

Quantitative research looks at a large group of cases, people or units and measures a limited number of features. A case study is more distinct. It usually involves qualitative methods and focuses on one or a few cases during a limited time period. In this study it seemed most appropriate to start with an exploratory, in depth study to get a better understanding of the topic at hand. That is, the aim is more to develop new insights about the phenomenon of born globals (or fast versus slow pace of internationalization), "context of discovery", than in testing the validity of existing theories, "context of justification". However, it should be noted that since this study is going to probe the extent to which existing theoretical perspectives of the internationalization process can help explain why some SMEs expand faster internationally than others, the approach also includes aspects related to "context of justification". The intention is thus to draw on insights from the different theoretical perspectives when gathering data and analyzing the internationalization process.

Glaser & Strauss (1967) argue that social research should be inductive in nature and that theory development should be "grounded" in the data material. However, within the philosophy of science it has been argued that the notion of pure empiricism is impossible. Also when attempting to follow grounded-theory approach, the researcher *is* influenced by his/her frame of reference (Hanson, 1958). This fact has to be taken into account when carrying out empirical studies. Next, the process of data collection are described and then the cases studied will be presented and key concepts operationalized before different validity and reliability issues are discussed at the end.

4.1.2 Primary Data

The data has been gathered from in depth interviews. Saunders, Lewis & Thornhill (2003) have found that managers are more likely to agree to be interviewed, rather than complete a questionnaire, especially where the interview topic is seen to be interesting and relevant to their current work. An interview provides the respondents with an opportunity to reflect on events without needing to write anything down. This situation also provides the opportunity for interviewees to receive feedback and personal assurance about the way in which information will be used. Personal interviews are also advantageous to the researcher as Healey (1991:206) points out: "…the interviewer…has more control over who answers the questions" in comparison with a questionnaire, which may be passed from one person to another. Semi-structured interviews also provide the researcher with an opportunity to "probe" answers, when there is a need for the interviewees to explain or build on their responses. Case studies within business research are a very demanding exercise, and for that reason, only twelve cases were chosen.

The founder/CEO or another key employee (who has been in the company from the start) of the firm was contacted, with a request to participate in the study. The potential case companies were selected by using procedures that are appropriate for samples that are needed for theoretical purposes (Glaser & Strauss, 1967; Yin, 1994). The logic that justifies the use of samples for theoretical purposes is different from the logic of sampling for statistical purposes, which often requires random selection. Purposive sampling to explore theoretical considerations does not require too great a concern for sample size. The size of the sample is seen as relatively unimportant. What is important is the potential of each case to aid in developing theoretical insights into the dynamics of the internationalization process being studied.

The case companies were selected from a pool of respondents to a survey that was carried out in the autumn of 2001. The population of that survey was defined as being SMEs in Norway, founded after 1990 (and registered in Kompass Norge AS – a leading Norwegian Industry Directory). SMEs are defined as being firms with less than one hundred employees. The reason for choosing recently established firms is to ensure that the details surrounding the founding of the firm are not lost to history. The focus on SMEs is due to the fact that several studies have found that most of the rapidly internationalizing firms have far less than 100 employees (see e.g. Knight, Madsen & Servais, 2004). In addition, Solberg (1988) found successful exporters to be significantly smaller than unsuccessful exporters. This finding led him to suggest that smaller units are better able to create the right atmosphere for successful exporting, necessitating a closeness to the market and an open-minded organization, not always present in large corporations with rigid bureaucratic decision-making procedures.

Finally, firms that were stand-alone entities were preferred. This preference was due to the expectation that sub-units of larger firms have greater access to resources, i.e. capital, human resources and information (Harveston, 2000). Despite this, three of the cases chosen were not independent, partly because the dichotomy between dependence and independence is not always that simple to determine, and because it might be useful to have some cases that are not independent for reasons of comparison. A relatively wide population was chosen at the outset, in order to enable a continuum to be drawn with firms that have a gradual pace of internationalization, at one extreme and true born global firms, at the other. It is according to Churchill (1991) cases that display contrast or an extreme situation that are most useful. This is because it is easier to find differences or determine what distinguishes two extreme cases than to compare and find differences between two average or normal cases.

4.2 Operationalization

4.2.1 Introduction

Operationalization is about how to mirror concepts to give meaning in an empirical context. While measures of imprecise concepts are never completely valid or reliable, researchers strive to maximize these qualities (Knight, 1997). The research literature deals only to a modest degree with measurement problems when it comes to exploratory/"qualitative" research (Ghauri & Grønhaug, 2005). However, Berg (2007) goes so far as to say that failure to define and operationalize concepts will spell disaster in many cases. The problem is usually approached by using semi-structured questions, based on an interview guide as in this study. The interview guide was developed by surveying previous studies. Even though this type of study may be seen as "data-driven" problem solving, without the use of concepts and theory, an explanation (e.g. theory) will never emerge. Berg (2007) also claims that if it is not made clear what the concepts mean, the results may be meaningless in terms of explanatory power or applicability; "..if you have not worked with the literature in developing relevant meanings and measureable attributes, it will be impossible for you to see how eventual results fit into this extant body of knowledge" (p.37). Thus a mapping between empirical observations and concepts/theory should take place. The researcher should be able to demonstrate the validity of the findings and to do that the researcher must supply evidence. The questions, responses, inferences made and what support these inferences should be reported.

4.2.2 Pace of internationalization

Measuring the pace of internationalization was achieved by identifying *how many* regions an SME enters during a specific time period, *which types* of regions the firm enters, and, *in what order* (close or far away from the home market in terms of psychic distance). In addition, the export rate of the firms three years after founding was measured, since this is a common cut-off point for defining so called born global firms (Knight & Cavusgil, 1996; Knight, 1997; Madsen Rasmussen & Servais, 2000; Harveston, 2000; Junkkari, 2000). More specifically, these same authors define born global firms as SMEs with an export rate of more than 25% within three years of their founding. Finally, this research identified the entry mode which was initially used when the firm entered its first foreign market and, the foreign operation modes that were currently being used. This was done to measure the rate of resources committed to the market over time.

4.2.3 Key Employees' Experience and background

Top management experience is defined as the amount of experience that a manager has accumulated in an international context. Harveston, Kedia & Davies (2000) state that most studies using this construct have used the amount of time spent in foreign countries as an indicator. This indicator includes time spent at foreign assignments, at foreign educational facilities, and on vacation in foreign countries, as measures of international experience. This indicator accounts for one dimension of the construct, length. The second dimension is scope. From which continent(s) do key employees have experience? Have these key employees mainly worked abroad or at home? Another measure of foreign experience gages the extent to which the manager has engaged in foreign travel. They are asked about the number of languages that the manager speaks and how fluent he or she is in those languages. Was the top decision-maker born abroad? Has s/he lived abroad (Miesenbock, 1988; Reid, 1981)? What was the mindset of the founder at start-up (Harveston, Kedia & Davis, 2002)? In this study, international experience was measured by determining how long the founder(s) had been abroad, in which countries they had worked or studied, and what position(s) they held while living abroad. In addition, the foreign languages that were mastered were identified.

4.2.4 Personal Networks

According to Solberg (1997), the more global the industry structure is, the more important is the presence of an active and widespread network. Motives for entering a new market were investigated and the characteristics of prior relationships and the role they have played have been sought. Personal relationships, studied in this paper, were relationships that key employees define as having an impact on their road to internationalization. These are either relationships in their home country or relationships in the target country, established when previously working or studying abroad, or developed from their previous work assignments in their home country. What types of relationships exist between the key employees and the network of people they identify as being most important? How close are these relationships? This can be measured by documenting the frequency of contact (e.g. daily, weekly, once a month) and the type of contact (e.g. face to face, telephone, e-mail). We assume that the more frequent the contact and the closer the type of contact is (e.g. face-to-face), the more trust exists between the parties. Whether the contact is formal or informal may also be of some importance. We assume that the more informal the contact is, the closer the relationship, and the more closeness, the more trust. The interviewees were asked to elaborate upon the relationships they considered to be important for the development of the firm. How and on what occasion did the parties first meet, and, in what way did these relations contribute to the firm's internationalization process. In addition, interviewees were asked to characterize the type of contact they have at present.

4.2.5 Globalization

Globalization may be conceptualized in terms of a continuum from low to high, along which different industries fall (Porter, 1986). An industry at the very low end of globalization is highly independent of industries in other countries. An industry at the very high end is significantly linked to similar industries in multiple countries in which its various value-added activities are located. The extent to which an industry is characterized by international linkages within the industry is seen as being an important indication of its level of globalization (Makhija, Kim & Williamson, 1997). It is rather difficult to find good measures of an industry's global characteristics. However, according to Porter (1986) and Bartlett & Ghoshal (1989), establishing the extent to which an industry is global is a necessary first step, before one can adequately examine global strategies. Each industry's unique blend of competitive pressures is likely to result in varying levels of globalization, which in turn are reflected in the strategies the firm utilizes in these industries (Prahalad & Doz, 1987; Yip, 1992). One way to measure this is to use the ranking of different industries in Yip (1992:34), but in this study subjective measures have been used. That is, the managers in the SMEs are asked how they perceive their industry, according to a certain set of dimensions that aim at revealing the industry's global characteristics (Solberg, 1997:5). These dimensions are: *industry structure* (e.g. oligopoly or fragmented), which is influenced by the *strength of globalization drivers* (e.g. trade barriers, internationalization of customers/suppliers, international demand pattern), and the *interdependence of national markets* (e.g. international price sensitivity, intra-industry trade).

4.2.6 Product characteristics

Product characteristics, it has already been pointed out, are believed to be influenced by macro factors, such as the competitive conditions within an industry. Questions were asked about the product's life cycle and about its uniqueness when compared to competitive products. ("Is it one of a kind?") The degree of specialization of the product (Madsen & Servais, 1997) was also queried. The researcher asked managers to classify the product as being either an industrial product or a consumer product.

4.3 Selection of Cases (sampling)

4.3.1 Introduction

A central question in doing case studies is whether to include one or several cases. The problem with using only one case is that it limits generalizability and leaves little room for comparison (Eisenhardt, 1989). Use of several cases is a way to solve this problem (Leonard-Barton, 1990). Several cases open up for replication and enable us to compare results in one case with results you get in another. This can strengthen the results.

If we use experiment as an analogy, it is not number of cases that are important, but whether you achieve the variation required, at the same time as disturbing variation are "excluded" (Andersen, 1997). By selecting and limiting the cases in a way that give as much theoretical variation as possible at the same time as we limit other forms of variation, it is possible also with the use of case studies to reach a high degree of control (Andersen, 1997). To limit other types than the wanted variation, cases were chosen from one country and time of establishment are quite limited (e.g. between 1989-2000). By choosing all the cases within one country and within a short time period, it can be easier to study connections between relationships, experience, globalization and product characteristics on a firm's pace of internationalization, because several contextual factors are held more or less constant. At the same time the wish to do the study in a larger and more realistic context is maintained, as opposed to in an experiment.

In case studies you usually select cases based on theory (e.g. theoretical sampling). When using several cases, they should be selected so as to a) predict same results, or b) give opposite results, but for predictable reasons (Yin, 1994). When using several cases, it can be useful to use an explicit framework to choose from. This frame should be guided by the research question and the conceptual framework. The framework developed consists of a 2x2 matrix. The horizontal line stating volume of export reached within three years of founding and the vertical line stating number of market areas the firm is present in, i.e. it includes my two main dimensions measuring a firm's degree of internationalization or globality.

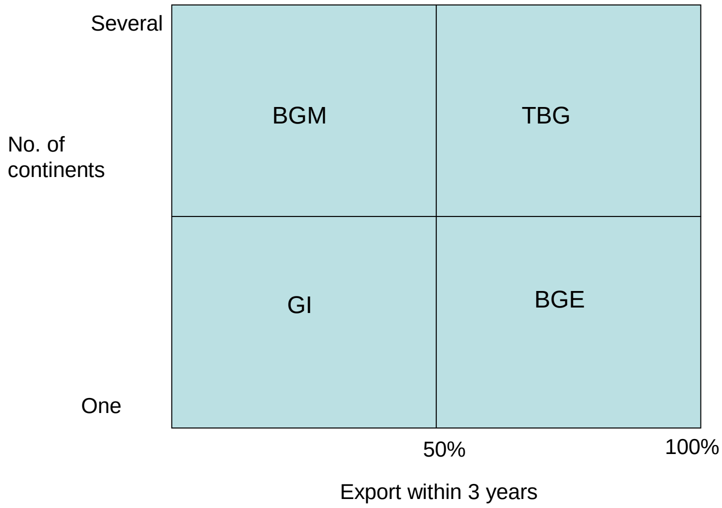

Figure 6: Classification of global SMEs

TBG = True Born Global
BGM = Born Global on Market dimension
BGE = Born Global on Export dimension
GI = Gradual International

4.3.2 Short Description of the Cases

The firms had to be selected as to satisfy the framework conditions and it was also desirable to find cases that fit each of the four types of "globals". The cases are presented below in alphabetical order. In the analysis (e.g. chapter 6) we will take a closer look at how each case fit within the framework.

ColorMatic AS was established in 1997 and started exporting in 2000. Export rate after three years was 90%, today it is 95%. They are present in Scandinavia, Western-Europe, North America, Australia and Asia.

Dolphin Interconnect Solutions AS was established in 1991 and started exporting in 1992. Export rate after three years was 90% the same as today. They are present in North-America, South-America, and Europe.

Fras AS was established in 1996 and started exporting in 1998 (90). Current export rate is 80%, after three years it was 20%. They are present on ships all over the world.

ICAS AS was established in 1989 and started exporting in 1992. Current export rate is 45%, after four years it was 30%. They are present in Europe and sporadically in South-Africa (2001) and Australia (2000).

Incatel AS was established in 1993/94 and started exporting 1996. Current export rate is 80%, after three years it was 50%. They are present in Europe.

IRTech AS was established in 1995 and started exporting the same year. Export rate after three years was 100%, the same as today. They are present in Europe, North America, Australia, and Asia.

Kay Lindegaard Incinerators was established in 1999 and started exporting the same year. Export rate after three years was 50%, same as today. They are present all over the world.

NOR-REG AS was established in 2000 and started exporting in 2001. Export rate after three years was 75%, same as today. They are present in Western Europe and Japan.

Norsk Display AS was established in 1993/1994 and started exporting in 1994. Current export rate is 60%, after three years it was 65%. They are present in Western Europe and North America.

Opera Software ASA was established in 1995 and started exporting the same year. Export rate after three years was 99%, same as today. They are present all over the world.

Optoflow AS was established in 1993 and started exporting in 1997. Current export rate is 90% and after three years it was 85%. They are present in Scandinavia, Western Europe, North America/Australia, Asia and Africa/Arabia.

Superject AS was established in 1990/1991 and started exporting in 1991. Current export rate is 80%, after three years it was 70%. They are present in Europe (mainly Western part).

4.4 Data collection

4.4.1 Introduction

It is recommended in case studies to make use of triangulation as method of data collection to provide stronger substantiation of constructs and hypotheses (Eisenhardt, 1989). In triangulation, "..researchers make use of multiple and different sources, methods, investigators, and theories to provide supporting evidence", (Creswell, 1998:202). Triangulation reduces the risk of the conclusions reflecting systematic biases or limitations tied to one specific method and also make it possible to increase the validity in a study (Denzin, 1970). Yin (1994) recommends that data should be gathered from a wide range of sources. This allows the researcher to strip away the biases, including her own, and try to get a true picture of what is involved. This study is mainly based on interviews and secondary data. The recommendation of triangulation is therefore at least partially fulfilled.

4.4.2 Personal interview

The use of personal interviews represents the most important data collection method in this thesis. These interviews were carried out by seeking insight from key informants in the different firms. The choice of informants were made with the use of organization maps and based on background knowledge of the firms in question. Most informants were founder/owner or some other type of key employee, for the firm's international development. In addition to the personal interviews some telephone interviews have been carried out when elaboration on pieces of information has been needed and also e-mail correspondence has been used in this regard.

Before the data collection took place, an interview guide was constructed which included the different areas to be covered. The starting point for this guide is the model in chapter 3. In studies consisting of several case studies on the same topic, it is recommended according to Miles & Huberman (1994) to use a relatively structured interview guide, so as to ascertain that all the topics are covered in each single case. The questions are asked of each interviewee in a systematic and consistent order, but the interviewers are allowed freedom to digress; that is, the interviewer are permitted to probe far beyond the answers to the prepared standardized questions.

4.4.3 Secondary data

In addition to the interviews secondary data has been used in the study. Secondary data can be defined as: "*data that have already been collected for some other purpose (than the researcher faces)*" (Saunders, Lewis & Thornhill, 2003:188). Secondary sources of information can have their origin from within the company and may include documents such as annual reports, reports to stockholders, different research papers, internal newsletters and company publications. However, secondary data can be gathered from outside the company as well. Sources here may include published information data from various trade and industry associations, governmental reports, public statistics, newspaper clippings and journal articles. In this study there has been made extensive use of the internet searching for articles related to the firms or their area of business. In addition reports have been bought with information on the financial situation of each firm from the "Brønnøysund register", this to get an update and to confirm the figures from the interviewees. Some interviewees supplied the researcher with annual reports, detailed customer lists (e.g. which year sold to who/which country), list over important relations and CV's of key employees and various other types of company publications, but some of the smallest firms did not have much written material and formal reports/plans.

4.5 Data Analysis

"Quality, not quantity is my measure." (Douglas Jerrold in Ghauri & Grønhaug, 2005:202).

A research design should not only tell you what data are to be collected, it should also state what is to be done after the data have been collected. That is, one should seek to find the logic linking the data to the propositions and criteria for interpreting findings, "it is the intimate connection with empirical reality that permits the development of testable, relevant and valid theory", (Glaser & Strauss, 1967 in Eisenhardt, 1989:532). In this part it is accounted for the way the data are analyzed. Data analysis in qualitative research is an ongoing process (Nachmias & Nachmias, 1992). A thorough description of this process enables others to better see how the conclusions are reached (Miles & Huberman, 1994). The same describe data analysis as consisting of three concurrent flows of action: data reduction, data display and conclusions and verifications (pp. 10-12). Data reduction is about transforming raw data into a more manageable form and this occurs throughout the research project (e.g. transcribing interviews, making summaries, identifying analytic themes etc). In the next phase, data display, the data ar presented are presented in as an organized, compressed assembly of information that permits conclusions to be analytically drawn (e.g. matrices and summary tables). These displays assist the researcher in understanding and observing certain aptterns in the data or determining what additional analysis or actions must be taken (Berg, 2007). After the data have been collected, reduced and displayed, analytic conclusions may begin to emerge and define themselves more clearly. A qualitative researcher should be aware that qualitative analysis needs to be very well documented for others to be able to see how you have arrived at the conclusions. The next paragraph will go into somewhat more detail of how the analysis in this study has been carried out.

Unlike hypothesis-testing research, more inductive research lacks a generally accepted model for the central creative processes and therefore does not follow an established format of analysis (Miles, 1979). One way to analyze data collected through case study methods is to look for commonalities and differences, this is particularly useful in this study where we have multiple cases. This phase, the analysis, is the most difficult and the least codified part of the process in a qualitative study, e.g "..one cannot ordinarily follow how a researcher got from 3600 pages of field notes to the final conclusions sprinkled with vivid quotes they may be" (Miles and Huberman, 1984 in Eisenhardt, 1989:539). Following Eisenhardt (1989) and Yin (1994) each of the twelve cases were analyzed independently, *within-case analysis,* which is basically a detailed case study write-up. This is often simply pure descriptions, but it is central to the generation of insight. There is no standard format for such analysis. The overall idea is to become intimately familiar with each case as a stand-alone entity. Another method used was to search for *cross-case patterns*. That is, categories or dimensions were selected and then within-group similarities coupled with inter-group differences were searched for. A 2x2 design was used to compare several categories at once. Overall the idea behind these cross-case search tactics is to force investigators to go beyond initial impressions, especially through the use of structured and diverse lenses of data. These tactics improve the likelyhood of accurate and reliable theory, i.e. a theory with a close fit to the data.

To sum up; within-case analysis gains familiarity with the data and preliminary theory generation; cross-case pattern search using divergent techniques forces investigators to look beyond initial impressions and see evidence through multiple lenses and these are the two methods of analysis chosen in this study.

This approach was guided by recommendations made by several authors (e.g. Pettigrew, 1990; Mintzberg & McHugh, 1985; Burgelman & Sayles, 1986), who argue that the division of the data analysis is critical in order to deal with the data in a meaningful way, given the almost overwhelming volume of data collected through a qualitative research project. In addition, the deep analysis of each case is important in order to understand its uniqueness (Gersick, 1988). There was clearly a need for the within-case analysis as a facilitating step in this study. A considerable effort was put into learning as much as possible about each case before a cross-case analysis was undertaken as recommended by Eisenhardt (1989).

4.6 Validity & Reliability

4.6.1 Introduction

While there are a number of situations favouring the use of qualitative research interviews, there are also a number of issues associated with them. One being data quality issues related to reliability, different forms of bias and validity and generalizability (Saunders, Lewis & Thornhill, 2003). Those who judge qualitative research using quantitative standards are often disappointed. Nevertheless, most people enjoy reading reports of qualitative research (Neuman, 1997:328). Case study is chosen because of its advantages for creating novel, rich and in-depth theory (Eisenhardt, 1989; Yin, 1994). Case studies are most appropriate in the early stages. "…although a myth surrounding theory building from case studies is that the process is limited by investigators' preconceptions, in fact, just the opposite is true. This constant juxtaposition of conflicting realities tends to "unfreeze" thinking, and so the process has the potential to generate theory with less researcher bias than theory built from incremental studies or armchair, axiomatic deduction" (Eisenhardt, 1989:546).

Qualitative social research relies largely on the interpretive and critical approaches of social science. The two approaches are both alternative to positivism, which is the foundation of quantitative research. The criteria for judging qualitative research according to Yin (1994) is reliability, construct validity, internal validity and external validity. There is a basic dilemma; to secure unambiguous evidence about causation, one frequently sacrifices generalizability. Designs that are strong on internal validity tend to be weak on external validity whereas designs that are weak on internal validity are, by definition, weak on external validity. Without internal validity, no generalizations can be made (Nachmias & Nachmias, 1992:143). The different types of validity that have to be considered in this study will be discussed next.

4.6.2 Construct validity

Construct validity is about establishing correct operational measures for the concepts being studied. Construct validity is strong if correct operational measures are established for the phenomenon, i.e. one must specify what to be studied and then establish measures and indicators of this. Often in qualitative research "what to measure" and "how to measure" might be somewhat unclear. If this was very straightforward, i.e. the relevant data can easily be identified and coded, it would probably be more appropriate to use a large-scale statistical study to test hypotheses. In order to increase the construct validity of these case studies, Yin's (1994:34-35) recommendation was followed, that the researcher must specify what to be studied and then establish measures and indicators for this. The research questions guided the data collection and also made it gradually clear what kinds of measures and indicators were appropriate. The main dimensions used for classifying data were export rate and number of market areas in relation to time since founding. At first resource commitment to the foreign market was also considered a relevant dimension for measuring pace of internationalization, but it soon became clear when analysing the data that this was not a very important dimension to these particular types of firms.

There are two main tactics to increase construct validity; (1) use multiple sources of evidence such as articles, annual reports and interviews with top executives and establish chain of evidence via case data, case notes and case descriptions, and (2) having drafts of the case study reports reviewed by key informant(s). These suggestions were followed in this study; multiple sources have been used as described above and the reports with the firms' milestones have been reviewed by most of the interviewees, this to ensure correct operational measures.

4.6.3 Internal validity

Internal validity is high if no alternative explanation can be considered. This type of validity is seen as important in explanatory or causal studies, not in exploratory or descriptive. Since this study has both a descriptive and an element of explanatory purpose, the internal validity of the study has to be considered. It is about establishing a causal relationship, whereby certain conditions are shown to lead to other conditions as distinguished from spurious relationships. Due to the closeness to the data and the unfolding nature of the study, familiarity with the data is high and thus there is reason to claim high internal validity (Glaser & Strauss, 1967). To deal with this validity problem, pattern search within each case have been used and we searched of evidence for "why" of relationships in the cross-case analysis.

All information was included in the transcribed notes. All interviews were written down soon after each interview and the interviews were taped in all but, one case (e.g. Optoflow). In the case were there was no tape recordings, notes were taken throughout the interview and written down in more detail straight after the interview when memory of the conversation was still fresh to ensure that as much information as possible was captured. In majority of the cases, interviewees were contacted after the interviews to clarify or expand upon the material. The generation of much "thick" data makes it reasonable to conclude that the data and theory closely describes the actual internationalization process in the twelve cases. The interviewees were also contacted this year (e.g. 2006), again to check that the information was correct understood by the researcher and to get an update of where they are now in terms of how international they are and whether there has been any organizational changes such as f.i. an acquisition, change of leadership and so on (see postscript for more detail on this).

4.6.4 External validity

External validity is about establishing the domain to which a study's findings can be generalized. That is, the extent to which a study's findings are generalizable beyond the cases studied. The aim is thus to generalize to larger populations and to more realistic settings. This design is believed to be quite strong with regard to external validity in terms of closeness to reality. External validity problem has been a major barrier in doing case studies. The scientific value of case studies is often questioned because it lacks generalizability, but case studies have generalizability, but to theoretical propositions as opposed to populations or universes. The case study (e.g. like the experiment) does not represent a "sample" and the investigator's goal is to expand and generalize theories (e.g. analytic generalization) and not to enumerate frequencies (e.g. statistical generalization) (Yin, 1989). The aim is thus to come up with analytic, not statistic generalizations. In analytic generalization the investigator is striving to generalize a particular set of results to some broader theory. A theory must be tested through replications of the findings in a second or even third company, where the theory has specified that the same results should occur. To deal with this one should use replication of pattern search in the cross-case analysis. According to Yin (1994), replication may be claimed if two or more cases are shown to support the same theory (if it does not support a rival theory, even more potent), which then provides a basis for a generalization to a "theoretical" universe. When doing case studies one should thus, aim toward analytic generalizations and avoid thinking in such confusing terms as "the sample of cases", or "the small sample size of cases", as if a single case study were a single respondent in a survey or a single subject in an experiment (Yin, 1989).

Case study methods are criticized for a number of reasons (Miles, 1979). One of the more critical issues is the generalization that is made based on one case study. In terms of generalization, it is believed that the more cases you have, the higher the validity of the study (Eisenhardt, 1989). The study becomes more robust in the sense that there are several cases that you can generalize from (Eisenhardt, 1989). As Glaser and Strauss (1967:30) argue: "A single case can indicate a general conceptual category or property; and more cases can confirm the indication". Only if one is able to relate the study to existing theory, will there be a situation where the findings can be demonstrated to have a broader significance than the cases that form the basis of this work (Marshall & Rossman, 1999). This relationship to existing theory will allow the study to test the applicability of existing theory to the settings under scrutiny. It will also allow theoretical propositions to be advanced that can be tested in another context.

4.6.5 Reliability

The lack of standardization in these interviews may lead to concerns about reliability. Reliability refers to the consistency of a measuring device, i.e. it should be able to demonstrate that the operations of a study can be repeated with the same results. In relation to qualitative research, reliability is concerned with whether alternative researchers would reveal similar information (Easterby-Smith, Thorpe & Lowe, 2002). If results are reliable, an investigator should at a later stage, by following the exact same procedures and by conducting the same case study, arrive at the same findings and conclusions (i.e. not replicating, but doing the same case). For this to be possible, documentation of procedures is needed (e.g. use case study protocol, and case study database). As many steps as possible should be made operational and research should be conducted as if someone were always looking over the shoulder. Reliability can be increased by the use of multiple measures. Multiple measures may be of particular importance if the variables are difficult to operationalize.

A case study protocol was developed for each case, where the purpose of the study is stated, field procedures to be followed (e.g. interviews, site visits), questions to be addressed, plan for analysis of the data, guide for case study report, i.e it is guiding the whole process of undertaking a field study. Using a case study protocol is seen as a major tactic in increasing the reliability of case study research (Yin, 1994). The notion of reliability was kept in mind throughout the project, emphasising note taking, the listing of facts, and the documentation of every step in the data collection process. To try to avoid systematic bias it was attempted to cross-check and triangulate data as much as possible. By triangulation is here meant the use of several types of data on one particular issue, which may be one strength of the case study method (Yin, 1994:91-94). Moreover, in order for the reader to assess the reliability of the findings, openness in the write-up of the case descriptions has been emphasized. This has been done by (1) providing extensive descriptions with the rich use of quotes (i.e. so the reader has a basis for interpreting the findings), (2) citing who is quoted and (3) listing the interviewees for each case.

4.7 Summary

The case study is preferred in examining contemporary events, but when the relevant behaviours cannot be manipulated (Yin, 1989). Case study relies on many of the same techniques as a history, but it adds two sources of evidence not usually included in the historian's repertoire, direct observation and systematic interviewing. Case studies are thus very demanding to carry out, for this reason only relatively few cases were chosen. The advantages of carrying out more in-depth case studies are that it allows the researcher to study complex issues in their real-life context and to collect and analyze multiple types of data (Yin, 1994). It is worth noting that qualitative and case study research is not identical, but "almost all qualitative research seeks to construct representations based on in-depth, detailed knowledge of cases" (Ragin, 1994:92 in Neuman, 1997).

The research objective was to find how the different factors in figure 5 influence an SME's pace of internationalization. The use of qualitative methodology has the advantage of giving the researcher the possibility of catching the complete picture surrounding this phenomenon. This is achieved by collecting data from actors that are in some way involved in the object or activity being studied (Støle, 1997).

There are several advantages of conducting a case study, but also some disadvantages, one being the issue of subjectivity. When it concerns the source of subjectivity that comes from interpretations of the data in the analysis, the challenge is to present the complex social reality without being too reductionistic, on the one hand, while presenting a clear cut and in-depth analysis on the other. In order to ensure that the interpretations made are in line with the understanding of the members of the organizations, drafts and milestones drawn up, have been given to the informants for revision during the period of analysis and unclear issues have been probed.

In order to reduce sources of bias different actions needs to be considered. It was useful to prepare carefully for each interview. By being informed about the organizational or situational context in which the interview was taking place the credibility of the interviewer was demonstrated and thereby the interviewee was encouraged to offer a more detailed account of the topic under discussion. A further benefit of this is made clear by Healey & Rawlinson (1994:136): "A well-informed interviewer has a basis for assessing the accuracy of some of the information offered". As a number of interviews were undertaken, it was possible to draw on the initial analysis that was made of the data previously collected. Credibility may also be promoted through the supply of relevant information to participants before the interview. First contact was established by telephone, then an e-mail was sent containing a list over the main themes to be covered in the interview. This should promote validity and reliability by enabling the interviewees to consider the information being requested and allowing them the opportunity to assemble supporting organizational documentation from their files. Access to organizational documentation and also use of public sources such as the Brønnøysund register also allowed for triangulation of the data provided.

It can be concluded that case studies, as were the chosen method of data collection in this study, are appropriate as a research design in a theory development context. The case study’s unique strength is its ability to deal with a full variety of evidence. The main weakness of the case study is the practical problems of analysing the results. As elaborated on in section 4.5.

Chapter 5 Case Descriptions

5.1 Introduction

The cases were chosen for theoretical rather than statistical reasons, to replicate and extend emergent theory under examination. Individual sample elements (e.g. key informants), is founder/owner of the firm, managing director/chief executive and key informants identified by managing director or founder. The data analysis is designed to identify patterns relevant to international market growth and the influence of the earlier mentioned factors on the case firm. To highlight this, critical events in the case firms' internationalization process have been used. This chapter will provide a detailed description of each case, a within-case analysis.

Data and interview notes were coded by the author using the software "HyperResearch". This was done for each firm along a number of dimensions. This makes it easier to identify the different statements that represent each dimension studied, because in the left margin of the document you see the codewords and the corresponding statement is then marked. In this chapter the cases and their internationalization process will be described in detail. Then the cases are classified according to the two dimensions that were deemed most important to describe their degree of globalization. In chapter 6 a comparison between the cases and groups of cases are made.

5.2 Description of each case

Since data displays help the researcher see patterns (Miles & Huberman, 1994:433) critical events of each case's history are drawn up (see below):

5.2.1 ColorMatic AS

Year	*Important events*
1983	Tronrud Engineering AS (parent company) was established
1991	2 printers, Mr Randsberg and Mr Bjelland started to develop the con- cept of an inkdosing machine
1995	The prototype was ready and the two printers approached Mr Tronrud
1996	Color Matic 2000 presented at Grafex and Nordgraf fair in Stockholm – no success - the machines were considered too large, complicated and expensive and thus difficult to sell (sold only 5-6 machines)
1997	Tronrud AS bought all the patents and ColorMatic AS was established – Tronrud AS is to produce the machines and ColorMatic AS to market and sell them
1998	The prototype of Inkdoser 2500 was presented at the Ipex fair in Birmingham

1999	The first machines were sold to England, Belgium, Denmark, Australia and New Zealand. Contact with the buyers was made in Birmingham. Mr Schaefer (the interviewee) was employed to strengthen the marketing effort
2000	USA, Germany and France were entered
2001	They are presently in 22 countries mainly using low-commitment modes such as direct export and distributors. They have one employee abroad, at a sales office in England. Their focus for the future is on the US and the Japanese markets

ColorMatic AS, which is a subsidiary of Tronrud Engineering AS, started up in 1997 as a sales and marketing function for the inkdosing machine. A previous version had not been very successful and the establishment of ColorMatic was an attempt to improve sales with more focus on that particular product. The product was also improved and the new version was ready for sale in 1999. The first edition was initiated by two printers, Mr Randsberg and Mr Bjelland, who approached Mr Tronrud in 1991, they had been looking for a machine that could mix paint in-store, but had been unable to find it anywhere and wanted Tronrud to build one. The first edition turned out to be too large and heavy and thus difficult to sell, the new edition was a completely new machine, but the basic idea was kept intact. The major change was the size, which was reduced to a minimum. The weight was now half of the old one and the design was also improved, it looked nicer and was easier to handle; "you can mix colours in a white shirt with this machine" (Inventor, Randsborg, 1998:6). ColorMatic got their first sales to England, Denmark, Australia and New Zealand in 1999, the interviewee stated that the sales came as a consequence of the IPEX fair in Birmingham in 1998 where the prototype were presented. They got sales to USA, Germany and France in 2000 following from this fair. ColorMatic presently sells to 22 countries around the world using relatively low-commitment modes such as direct export and distributors. Another motivation for establishing ColorMatic AS, in addition to creating a better sales apparatus for the Inkdoser, was that Tronrud Engineering AS wanted to exploit excess capacity in down-periods. The first entry mode used was direct export.

Experience/background of founder/key employees

ColorMatic's founder Mr Tronrud is the CEO of Colormatic's parent company, Tronrud Engineering, he has technical background. The interviewee who is the marketing manager of ColorMatic, Mr Schaefer, only started in the company in 1999, two years after start-up of ColorMatic. 1997-1999 was a product development phase, i.e Mr Schaefer was there when the first product entered the market in 1999. He has no higher education, he studied business for two years in the US. Mr Schaefer also worked in the Netherlands for 6 months, he was then employed in a Swedish company, it was in digital printing, his position there was export manager. His experience is from much the same markets as he works in now, the Netherlands, England, Germany and Denmark. The languages he masters are English, some German and Swedish.

Personal networks

Mr Schaefer, states that in ColorMatic they are not too concerned with establishing close relationships; "..it is more "purchase and sale – it is one shot and then we are out again – people buy a machine and that's it" (Schaefer, 2002). He states that the relations they have to their customers are very pleasant, but it is not continuous business where people buy more and more from them. Mr Schaefer states that he definitely has a network from his previous positions, but he will not put any emphasis on any of them in terms of one being more important than the other. In general the relations have aided them with regard to questions of infrastructure and things like "which are the five largest printing companies in Denmark?" (Schaefer, 2002). In other words, the relations help them get an idea of who to work with, which are the relevant suppliers and distributors in a new market. "It is convenient to have good contacts then you can check potential partners with people you know – confirm or disconfirm rumours. To succeed it is important with good alliance partners that know the local market" (Schaefer, 2002).

Industry globality

The industry ColorMatic belongs to, seems to have a relatively low degree of globalization; "England is more a local market, and USA is typically the same" (Schaefer, 2002). When the market is local it means there is not much intra-industry trade going on and it indicates relatively low interdependence of national markets. ColorMatic also have to make adaptations and modifications to the product to comply with the different standards in each country markets. The market is also described as consisting of some large, dominating actors and a vast amount of subsuppliers and third-part suppliers and the industry structure as such does seem to be rather fragmented.

Product characteristics

ColorMatic produces a standard product, an inkdoser. They have produced and installed about 100 machines worldwide. It is an industrial product, it is specialized and at least medium complicated. The product life cycle is relatively long, it does not have to be renewed very often. When it comes to price, ColorMatic actually did a test where they reduced the price by 20% the response they got was not very enthusiastic, "we could not see any significant change in demand after our little test" (Schaefer, 2002). The demand is very sensitive to quality on the other hand, partly because it is a very costly product in this market. The product is described as unique compared to competitors' products. Most others produce socalled industrial systems, that is, big systems where you need a large room to place it in and you need many permanent installations. The product ColorMatic deliver is described as more flexible and simpler systems, where the customer can start at a relatively low cost and expand the system after some time without losing any of its functionality, they just add to it. The product market ColorMatic is aiming for, is the packaging or wrapping market for boxes and cartons. It is seen as quite a narrow niche.

5.2.2 Dolphin AS

Year	*Important events*
1991/92	Dolphin AS was established by 20 previous employees of Norsk Data
1992	Direct export started to the US market
1994	Ownership of Dolphin AS moved abroad to the US i.e. parent company located in the US, but the owners are the same as at the outset.
1996	Buy-up in the US
1997	Dolphin AS established an agent in France
2000	Dolphin AS established an agent in England
2002	Dolphin established and agent in Germany
	Their focus for the future is on the US and the Chinese market

Dolphin Interconnect Solutions AS was established by about twenty previous employees at Norsk Data AS in 1991/92. Norsk Data was dissolved in 1990. Dolphin started out as a subsidiary, but they later got net financing and a little concern was established. In 1994 the ownership was transferred to the US, but it was the same Norwegian owners as at the outset. Dolphin "develops, manufactures and markets high-speed, high bandwith interconnect products based on the Scalable Coherent Interface" (Dolphin's homepage). Their first sales were to the US in 1991/92, the founders explains that with the product being made for larger systems than the one made by Norsk Data, "and for that, there is only an international market" (Løchsen, 2002). As we can see above this company uses only low-commitment modes, starting out with direct export to the US in 1991/92 and establishing agents in France, England and Germany in 1997, 2000 and 2002 respectively.

Dolphin started exporting the year after founding and the export share has varied from 100% in year 2 to 90% today (year 12). They are currently present in Europe and America (10-12 countries) and are thus quite international on the market dimension even though it is mostly in Western type of countries. The type of entry modes they use most frequently are agents.

Experience/background of founder/key employees

The interviewee is the present CEO of the firm and he is also one of the founders, Mr Løchsen. He has cand.real degree in physics from the University of Oslo, but he emphasizes that what he is really interested in and has worked with, is data and electronics in relation to computers. He explains that the physicists were early in making use of computers and that was the reason he decided to study physics. Mr Løchsen emphasized that he was interested in computers from the start. He has lived and worked 6 months in Sweden. He has not lived abroad other than in Sweden, but in all his working life he has travelled extensively both in Europe and the US both on the technical side and as a seller and in management. Mr Løchsen has not studied abroad and has only worked in Norwegian companies, but with international operations. He speaks well English, and some French and German.

Personal networks

When it comes to Dolphin, Mr Løchsen gives an example of how they got their agent in UK. The connection was made through relations. The seller they had in the US was British and had previously been a co-worker with the individual who became Dolphin's UK agent. Mr Løchsen describes the general business climate as largely of technical nature before and after the sale. He states that they always make contracts that give them a chance to get out. Mr Løchsen believes his network from previously has aided Dolphin in its internationalization process. His network in England has somehow disappeared or he did not consider them to be of much use, but in Europe (e.g. Germany, Switzerland and France) the contacts were of importance, they introduced him to distributors and potential customers in the foreign market. Another important type of relations that have had great importance is a European Research Cooperation. It is a framework program located in Brussel and it is part of the EU. The companies which are interested in cooperating, get together and write up a project proposal. They then apply for financing in Brussel. Dolphin took part in this from an early stage and Mr Løchsen believes they have established a good network from it and also quite a few good customer relations accordingly. The projects are described as of mainly technical nature, the cooperating parties have to be from different countries and the project should result in commercial products. The types of relations Dolphin has or the ones the CEO sees as important, are mainly research relations/projects.

Industry globality

The industry Dolphin is part of seems to have a high degree of globality, the interviewee have not experienced any barriers and there is no need to adapt the product to different markets both factors indicate strong globalization drivers being present, "in my opinion the industry we are a part of, electronics, is very international!" (Løchsen, 2002). Mr Løchsen also describes the competition as strong and describes how they do business with relevant actors "..whether they are in Korea, the US or Norway are of no importance!". This may be indicative of a strong interdependence of national markets and thus high industry globality.

Product characteristics

The product Dolphin sells is hardware. It is an industrial product and highly specialized, it is standardized in terms of them having to follow an international standard, it is also described as a very complex product, one has to have technical knowledge to sell it. The product life cycle for this product is described as medium long for being in the computer industry, about 4-5 years. Demand for the product is not very sensitive to changes in price, Mr Løchsen does not believe they will sell more if they lower the price. He believes the product is quite unique and they invest in product development to maintain this uniqueness, but he does not specify what exactly is unique about it.

5.2.3 Fras Technology AS

Year	*Important events*
1975	Mr Fjerdingstad (founder of Fras Technology) established a subsidiary of Parker Hannifin a subsidiary of an American corporation in Norway
1986	Mr Fjerdingstad established a subsidiary of Hägglunds Drive in Norway
1990	The first step for the product was to follow a customer out – namely they followed Norske Skog to France
1991	Mr Fjerdingstad was employed at Veritas as a strategy to prepare a a platform for the product
1996	Fras Technology AS was established by Mr Fjerdingstad
1998	Fras Technology AS established contact with Lloyds of London
1999	Fras Technology AS sold licences to Germany for the pharmaceutical industry
2000	Fras Tecnology AS followed Statoil to China
2003	Fras Technology AS is currently looking for new investors
2003	A cooperation agreement was formed with Lockheed Martin in the USA
	They do not focus on country markets but on product markets: offshore, ships, process industry and energy production

Fras Technology AS or its product was first a service of Norske Veritas. The founder, Mr Fjerdingstad holds all the patents, the product is his invention. The business idea was to work with preventive maintenance on large hydraulic and oil-lubricated systems, but the patent is described as being applicable for all liquids and gasses under pressure. The product, a fluid sampler (e.g. DynaSamp), is not so complicated in itself, but the surroundings are. The founder thus, describes the product as difficult to sell. Fras Technology has chosen to focus on a very narrow niche, lubricated technical systems and hydraulics. Mr Fjerdingstad believes that to get new technology into a market you need a large reference as an alibi to get the product on the market. The decision to work for Veritas was thus a very conscious one on his part and it was made to build a platform for the product. Fras Technology AS is described as a competence center for condition monitoring, troubleshooting and advisory service for the operation of fluid systems by the founder. By the use of unique technology and their patented DynaSamp fluid sampler/injector they can offer an accurate diagnosis of their customers' systems. In addition, they offer general consulting and third party services. The founder has more than 30 years of experience from the hydraulics industry. When it comes to other areas where the product can be made use of, they use licensees. For instance can the product be used in a pharmaceutical system or in hospitals as well. Fras Technology has a German licence producer that has started to work with the pharmaceutical industry and they have produced one sampler that is put up in Rikshospitalet University Hospital in Norway on the dialysissystem for kidney patients. It measures the purity of the water that is used for rinsing the blood. Another area for the sampler to be of use is clean water from the tap or to cleanse drainage water from different industries. Fras has no competence in these areas and therefore aim to license the product for such use. The years from 1990 to 1996 was an establishment and learning phase both for the founder and the market, they had to figure out what the product could do. The first step abroad was taken by following a Norwegian customer, Norske Skog, to France in 1990. The speed of the firm's internationalization is quite fast, on both dimensions. Fras actually exported before the company was established, because Mr Fjerdingstad, who has the patent, had his first sale on this product to France in 1990 while Fras was established in 1996. Because the method they use abroad is following large customers out or piggyback as it is more commonly known as, they are present all over the world, e.g they are very international on the market dimension. The export rate is currently 80%, but was only 20% 3 years after founding, e.g they are not that global on the export share dimension. The entry mode they use is "using other firms' network" (Fjerdingstad, 2002). For instance, Lloyds in London, but they do the selling directly themselves since it seems to be a very difficult product to sell.

Experience/background of founder/key employees

The CEO of Fras Technology AS is also the sole founder of the firm, Mr Fjerdingstad. He is an engineer and has also some business education. He owns 95.5% of the shares. The founder of Fras Technology has been through the process of establishing new firms on two earlier occasions. These establishments have been on behalf of large international companies. First he established a subsidiary for an American company called Parker Hannifin in 1975. He started on his own and led the subsidiary for ten years, the subsidiary has about 60-70 employees today. Then he established a subsidiary in Norway for the Swedish company Hägglunds, that was in 1986. After that, he worked in Veritas from 1990 to start-up of Fras Technology in 1996. He has always worked internationally, "..if you understand the technology – you can always communicate with people that understand the same technology no matter which country you are in" (Fjerdingstad, 2002). Mr Fjerdingstad has lived in Sweden and worked on developing similar products and has in general worked in very international industries so he sees no barriers in dealing with f.i. a French man compared to a Norwegian "you just have to learn to drink wine and bear with them and get to know them" (Fjerdingstad, 2002). He masters English, German, Danish and "Svorsk".

Personal networks

Fras Technology has had a conscious strategy to find Norwegian partners with roots abroad that is, they have aimed at the shipping and offshore industry. Then they have followed these customers out, which is a traditional and relatively low risk way of becoming international. Later on they have established relations to partners located abroad such as Lloyds Register in London and Naval Research in Washington. These relations come as a result of their close connection with classification companies. Fras Technology or Mr Fjerdingstad to be more specific, knows how they work. He states that they are conscious about building close relations. The strategy is not only to sell the product, DynaSamp, but to build in a service aspect into the product. Fras Technology has developed a service called CMP, the analysis is used to show the customer what the product can do for them. They have also developed a DNA analysis because they have found that many systems have growth of bacteria and this growth can be analyzed by the use of DNA analysis. The founder, has a network from working in the industry previously, it is described as a small industry, the hydraulics industry, where everybody knows everybody. He does not see different cultures as any problem, "..it is all about technology – if you know the technology you know the market" (Fjerdingstad, 2002). He has established an industrial network that he believes contributes to their business (and success). An example is a Norwegian employed at a cruise company in Monaco. Mr Fjerdingstad met this person in Sweden through Rolls Royce in 2001. This individual has many contacts with other ship owners that have similar types of ships, f.i. in the US, "..then rumours start to spread and we have now got many customers among these ship owners" (Fjerdingstad, 2002). There is regular contact between Mr Fjerdingstad and his relations. He has many contacts that he considers important, he meet them at trade fairs and they write Christmas cards to each other "they are my friends – that's the way it goes!" (Fjerdingstad, 2002). He has known many of his relations for years, f.i. some in Ulsteinvik where the ship building industry is big, he has known since the 1970s. Another important contact is located in England whom Mr Fjerdingstad visited this summer (e.g. 2002) to sing at his wedding. This contact works at Lloyds in London. Mr Fjerdingstad thus considers personal contacts as very important when it comes to export and turnover. He keeps in touch with the relations mainly by phone or e-mail. The relations are considered very important and he is very content with them. He defines a good relation as "cooperation with your friends", it is close relations and they are developed over time. He states that he enjoys the personal aspect and that the focus is not constantly on sales.

Industry globality

The industry Fras is part of is described as very international, "there is a global demand! We have to follow a market and not a country's borders…it is a very international industry - we work the same way as shipyards and shipowners and for them there is no borders" (Fjerdingstad, 2002). This indicates a strong interdependence of national markets in this industry and thus relatively high degree of industry globality. The founder also states, "we almost only work with large customers such as Statoil, Shell, Esso, Hydro, Lloyds and so on, because we have a very unique technology and it is particularly large customers that have high costs of termination" (e.g. they support a "mission critical" function with customers) (Fjerdingstad, 2002). Since the market they aim for are for instance companies in the shipping industry and this industry has been international almost for centuries, then it follows that the industry Fras Technology is part of is very global (even though the product can be of use for many other industries as well, maybe not so global e.g. the health industry).

Product characteristics

Fras Technology works with technical problemsolving and the markets they aim for are not country markets, but product markets, e.g. offshore, ship, process industry and energy production. The high-pressure fluid sampler can be used not only for sampling, but also for identifying growth of bacteria in the system. Their main competitor is seen as, “old-fashioned methods”. That is, the potential customers may prefer to stick with the way “they always have done it” and may be sceptical to try out new, and in Mr Fjerdingstad’s opinion, improved methods. It is an industrial product and it is specialized, the product itself is not so complicated, but the surroundings are. The product has a long product lifecycle. The demand is not seen as very sensitive to price, but to quality. Mr Fjerdingstad considers the product to be unique with regard to design and technology.

5.2.4 ICAS AS

Year	*Important events*
1989	ICAS AS was established by Mr Olving
1990/91	Legislation required that all homes in Norway have smoke detectors
	ICAS AS started production in Norway
1991	All production moved to the Czech Republic (55 employees) – only marketing and sales in Norway (5 employees)
1993	Established agent in Finland
1997	Started selling to Sweden – considered as the most important international market for ICAS AS
2000	Some sporadic sales to Australia
2001	Some sporadic sales to South Africa
2003	Established subsidiary with one employee in England
	The markets they focus on in the future are Germany and England
	The entry mode most used is agents or importers

ICAS AS’ initial business idea was to develop “smarthouse” solutions, that is, to make a house intelligent by communicating on the electronic net. In 1989 when the firm was founded, they had no possibility of financing such an ambitious project so in order to survive they focused on a simpler product, smoke detectors. The founder of ICAS, Mr Olving, knew that a new legislation would require all homes in Norway to have smoke detectors from 1990/91 and ICAS’ founder had already established contact with insurance companies that wished to be presented with such a product. ICAS started out producing the detectors in Norway in 1990, but within the same year they moved the production abroad due to high costs. All production is thus currently taking place in the Czech Republic. The products are distributed through wholesalers, insurance companies, electricians and suppliers of technical products to the farming industry. In addition to the smoke detectors, ICAS represent manufacturers of FG approved house alarms. The founder describes ICAS as market leaders in Norway and Finland, but they experience the fastest growth in Sweden and Germany. In England a subsidiary was established in 2003 in cooperation with English partners, ICAS owns 76% of the shares.

ICAS started exporting about four years after start-up, they then entered first Finland and then Sweden, the latter being described as the most important current market for ICAS. They started production in the Czech Republic already the first year, but had sales only to Norway the first three years after start-up. The export rate today is about 45% and it was about 30% four years after start-up, so the internationalization process can not be described as very fast for this firm. They started with the close Nordic market first, the first entry mode used, were agent or rather their first international experience was with the establishment of production facilities abroad, but their first mode in terms of outward internationalization was an agent.

Experience/background of founder/key employees

Mr Olving in ICAS is the CEO and he took part in the establishment of the firm together with two other men. Mr Olving has some education in marketing and he is also an electrical engineer, one of the other two founders has business education and the last one has technical background. Mr Olving owns about 30% of the shares. Neither of the founders had any experience from the industry they are presently in, before start-up. Mr Olving has never lived abroad, but he has worked in international organizations for 15 years. He has had the responsibility for export worldwide. Companies he has worked for is f.i. ABB and Musta International in Switzerland. He speaks well English and some German.

Personal networks

The founder states that they have many personal, international contacts, but they try to avoid the Norwegian Export Council which they consider a waste of time and money. He considers building relations as a continuous process. They support activities with the distributor. They consider themselves a support function to distributors' own sales staff. With regard to his personal networks, he states he might have some, "we manage to find the contacts we need" (Olving, 2002). He considers the experience from previous work life as of more importance than the relations. "With experience you know where to start and do not have to waste time – you go straight to the right organizations" (Olving, 2002). Mr Olving states that there is no particular important relation, it is more about knowing who to contact. Although afterwards, he states that the leader of the board of directors have lived abroad and have many contacts especially in Eastern Europe and also in rest of Europe that they find useful. Mr Olving has known this person for years through previous workexperiences.

Industry globality

The industry ICAS is part of does not seem to be very global since there are different rules and standards in different markets which work as barriers for foreign companies, "Germany has their own rules, they do not accept English standards, like we do in Scandinavia. It is the same in the US – they have a completely different set of standards which is a tradebarrier" (Olving, 2002). The founder also describes the competition as very strong, "there is no way we can compete against the cheapest Chinese solutions, so we try to have broader product offering and better technology" (Olving, 2002). The first point indicates not so strong globalization drivers in motion, but the latter where the founder describes strong competition from a distant country may indicate some interdependence of national markets and an industry at least moving toward some degree of globality, but it may currently more correctly be described as more of a multi-local or potentially global industry.

Product characteristics

ICAS' product is a consumer good and they have decided to aim for two product markets; fire alarms in households and in agriculture. It is not a very specialized product and many can produce similar products, but they try to differentiate themselves by making use of new technology and design, in addition they have good distribution channels. The product is standardized and massproduced. They try to get away from the focus on price and try instead to use technology and design as competitive factors. The product is according to the founder quite unique, they try to advertise it as environmentally friendly and in addition, they have a particular technical solution in the production phase that he believes make them unique. Mr Olving does not consider the product life cycle to be short, the product does not have to be renewed very often, but it is considered important to bring in new features and to signal that you keep up with the change in demand in the market.

5.2.5 Incatel AS

Year	*Important events*
1959	The founder of Incatel AS, Mr Vedeld made his first computer program
1961	Mr Vedeld started to work for IBM
Early 1980s	There was a pilot (INKA) in what was then called Televerket – the idea was based on the fact that if you could keep track of accounts by using computers it should be possible to keep track of a telephone network as well
1987	A firm called SysScan won a bid from Televerket to deliver a computer solution that should manage the telephone network – the solution was not complete
1989	A new company with former employees from SysSan was established, it was called Amis. It was to complete the product development. IBM had entered the scene and was to supply Amis with the Unix platform on which Televerket had demanded INKA to be developed – IBM Europe agreed to funding the product development in exchange for the marketing rights all over the world
1991	Amis demanded more funding which IBM refused – and it thus went bankrupt. The owners of Amis had put money into the project with intellectual property rights as security without IBM's

	knowledge – they moved these rights into an American company called Cimage corp.
1992	IBM Europe established a new firm called Corena which was to continue the development
	Mr Vedeld was employed in Televerket
1993/94	Cimage Corp came up with the best solution – Corena was dissolved
	Televerket made an agreement to buy the solution of Cimage Corp with IBM Norge as integrator
	Cimage Corp was closed down in Norway, and Incatel AS was established – it is owned by Telenor Venture (40%), IBM Europe (40%), Norpet/Vedeld (10%) and employees (10%)
1997	Incatel AS sold their software to Tele Danmark
1999	Incatel AS sold their software to Czech Telekom (KPN)
2001	Incatel AS sold their software to Belgia Telekom
2002	Incatel AS sold their software to the Swedish telecom, TeliaSonera
2003	Incatel As sold their software to ELISA, a telecom in Finland

Incatel AS started with a group of 10 persons. Historically it all started with what was a pilot project in Televerket (e.g. INKA) in the early 80s. The business idea was that if you can use computers for keeping track of accounts one should be able to use computers to keep track of a network of telephone lines. Televerket saw the potential for high profits if they could make this work. Incatel AS was established in December 1994. To understand the background of Incatel AS a more detailed description of the different phases of development is needed. The establishment of Incatel is also closely connected to the founder's previous work experience and this will be elaborated on under the experience section.

Phase 1 (1987-1991)

In 1987 a firm called SysScan won a bid from Televerket to deliver a computer solution, a system that could manage the telephone network. SysScan's solution was not complete at this time, this happened parallel with the entire public sector demanding Unix operative systems to substitute older systems. It was demanded that INKA (e.g. the Televerket's project) should be developed on Unix as well. The interviewee stated that this was in the childhood of Unix. IBM saw the danger of losing this large customer, Mr Vedeld thus went to SysScan asking for cooperation. He then started the lobbying to convince IBM centrally, of the large potential in winning this project and that this could be a standard application for IBM to sell internationally. It came to a large meeting in Televerket where the marketing manager for IBM Europe was present and Mr Vedeld who represented IBM Norway, the leader of the board of directors of Televerket were there, the Chief Technician and one of the owners of SysScan. The main issue for Televerket was whether IBM would commit long-term or if they would get tired of the concept in a year or so. IBM was interested because they had two analogue cases in France and Germany. In the meeting it was decided that SysScan changed their platform and IBM became the supplier of Unix. A new company, Amis was established in 1989, Amis brought with them the people from SysScan that had worked on the project, including one Mr Smilden. Amis was 100% owned by a group of Norwegian ship owners, more specifically Høegh Invest. IBM provided funding, that is, IBM Europe financed the product development in exchange for them getting the marketing rights for the product all over the world. Intellectual property rights were to stay in Amis, but IBM got derivity rights, e.g. IBM can do whatever they want with the code, but so can the owner. IBM would get the right to modify the product under certain circumstances.

Phase 2 1991-1993/94

Mr Vedeld then became member of an international steering committee and had many tough discussions with the French and the Germans concerning the features of the product. Televerket felt a bit sidelined and complained to Mr Vedeld. The situation became chaotic and it became critical around Christmas in 1991, the ship owners (e.g. Amis) told IBM that they have to fund more, they did not have the capacity to fund more themselves. IBM Europe answers that they cannot agree to this. The ship owners then brought Amis to the bankruptcy court. The ship owners had been clever and put money into the project with intellectual property rights as security, the French representative who was responsible at IBM, had not been aware of this. IBM then established a new firm, Corena that was 100% owned by IBM Europe, this was in 1992. Amis now became bankrupt and the ship owners moved the intellectual property rights into an American company called Cimage Corp. which they had 100% ownership of. The deadline was approaching fast, a pilot had to be finished by the end of 1992. Corena did not make it and IBM lost interest. In mid-1992 Mr Vedeld left IBM to work in Televerket. He worked in IT and the first co-worker he picked is now the CEO of Incatel. Mr Vedeld stayed in touch with IBM and the project, IBM asked if he had any solution to the problem that was still not solved. Mr Vedeld went to the ship owners at Cimage Corp. they had now come up with a new and simpler solution, the earlier mentioned Mr Smilden (currently executive VP in Incatel) was a key individual in this. The American company, Cimage Corp., had by now established a branch in Skytterdalen near Oslo with 9 employees. Mr Vedeld now had to balance between IBM and the ship owners, IBM was not too pleased about the way the ship owners had acquired the intellectual property rights. The projectleaders at Televerket asked Cimage Corp. to present a demo of what they had come up with, in Skytterdalen it became clear that something revolutionary had happened to the architecture. Televerket then went to IBM Norge and asked them to find a way to get an offer from Skytterdalen. They demanded that IBM Norge should be the integrator between Televerket and Cimage Corp. In the Autumn 1993, IBM Norge went to Corena and Cimage Corp. to get an offer, Cimage Corp. had the best offer. Corena, the company IBM had established was dissolved in 1994. A contract was written between IBM Norge and Televerket and

Cimage Corp. Cimage Corp. was closed down in Norway and a new company was established, Incatel AS.

Phase 3 1993/94
Incatel AS was owned by Telenor Venture (40%), IBM Europe (40%), Norpet/Vedeld (10%) and Cimage's employees (10%). All intellectual property rights were moved to Incatel AS including what IBM must mean they had. Incatel AS got ½ a million NOK from the shareholders in start capital and 1 ½ million NOK as responsible loan, that is, there is no interest on the loan, but it has an option to be converted into share capital, in Incatel's case the loan was paid back in its total. Incatel AS got a head start with this contract, IBM as integrator, Incatel AS as supplier to IBM and Televerket as customer.

In 1997 Incatel got a contract with TeleDenmark, then in 1999 they got a contract with Czech Telekom, in 2001 they got a contract with Belgia Telekom and finally a very important contract with Swedish TeliaSonera was finalized in 2002.

Since there is only one customer for this product in Norway they very early had to look outside the home market for new contracts. Their first foreign contract was with TeleDenmark this was about three years after founding and the export share was then 50%. Even though it is quite international the internationalization has been gradual in that they started at home first and when they went abroad they started with the neighboring countries. The entry mode they use is direct sale, "you yourself have to knock on the doors you want opened!" (Vedeld, 2002). 10 years after start-up they are still only present in Western-Europe.

Experience/background of founder/key employees

Mr Vedeld was one of the founders of Incatel. He was CEO of the firm until early 2001, then he became COO (Chief Operating Officer) and then Business Development Manager. These changes came as a consequence of him bringing in a new Vice President of Sales at the end of 2000 and then a new CEO, she took over the leadership in February 2001. Mr Vedeld has worked 30 years in IBM from 1961 to 1992, then 1½ year in Televerket before establishing Incatel in 1993/94. When taking his military service Mr Vedeld worked at the armed forces' research institute where he got his first contact with a computer called "Fredrik" at Kjeller on which he made his first computer programme, this was in 1959/60. At the same time he also attended the university where he studied statistics at a basic level. At the same time as he was employed by IBM he was admitted to Norwegian School of Economics and Business Administration (NHH) in Bergen. He studied there part-time for 2 years. He worked mostly on operation research, that is, optimalization of for instance production processes, e.g. calculate the optimal product mix based on sales price and raw material costs. In the mid-80s he was account executive in IBM where Televerket was one of the largest customers, later on he became the head of public sector which included all state institutions and Televerket was part of that. In mid-1992 he started to work for Televerket, the first co-worker he employed there is now CEO of Incatel. He has several years of experience in dealing with people from the other Nordic countries because of IBM's "Nordic Education System". This was a Nordic IBM-school, where new sellers were trained, Mr Vedeld taught at these courses in the early 1970s. He lived in Sweden when working for IBM from 1971-1972 and then in the US from 1983-1986. In Sweden he worked as an instructor at the Nordic IBM school and in the US he was marketing manager. We can conclude that the founder, Mr Vedeld has had extensive contact with international markets. The languages he speaks, are English, German and some French.

Personal networks

In the Board of Incatel they had a Mr Rinnan who is still manager at Telenor Venture, then there was one Mr Kumar who was responsible for the contact between IBM and Televerket, and then Mr de Vibe was in the Board, he was from IBM Norge (he is currently the head of Kistefos Venture). When Mr Vedeld was in IBM Mr de Vibe reported to him. Mr Vedeld states that personal relations are very important to him and much used when getting new customers. He has a list over his contacts from his time in IBM. Many of the relations are considered personal friends due to the long time they have been in contact and the closeness of the contact. One example of him making use of his contacts in going abroad is the extensive use of Telenor International. Telenor International has for instance let Mr Vedeld use their subsidiaries abroad as a base. Mr Vedeld elaborates that in Prague for instance, there was this employee from Telenor who said "I know the manager at Televerket – we were students together!" He then called the boss at the Telecompany in Prague and made sure he knew who Incatel was. Until now these services have been given without any form of compensation, but Mr Vedeld states that soon Telenor International will act as agents and get commission when their services lead to sales for Incatel. Another example of Telenor's assistance is in Moscow. Employees of Telenor stationed in Moscow pick up Mr Vedeld at the airport and provide him with a translator and driver who take him to different potential customers. According to Mr Vedeld Incatel would not be able to afford this on its own. Mr Vedeld has a lot of contacts in Telenor. They were his customer when he worked in IBM and later on he was headhunted by Telenor from IBM. In addition, he has a very valuable network from his time in IBM, the IT-director in TeleDenmark for instance, was his student when Mr Vedeld taught at the Nordic Education Center. We can conclude that he got an extensive network in the IBM system from working there and teaching at the Nordic Center. In addition, when he worked for IBM in the US, his job involved making study trips for Nordic customers of IBM. This gave him a wide network outside of IBM. Mr Smilden is another important relation who came from SysScan and took part in the start-up of Incatel. Mr Håkonsen, the chief technology officer in Telenor, has been the "godfather" of many projects in the Norwegian IT-environment according to Mr Vedeld. He is described as very visionary, "if he did not say INKA was a good idea – it would never have happened" (Vedeld, 2002). Mr Vedeld got in contact with Mr Håkonsen when IBM took part in the negotiations. That is, when Amis started up back in 1989. He also entered Incatel's Board of Directors after a while. Another relation that has been important is Mr Hesjedal, IT Director at Telenor, he was Mr Vedeld's superior in Telenor. A Mr Torgersen has been of great help in Russia, he is the Executive Vice President in Telenor International. Mr Vedeld describes that for a period he made use of the entire top management at Telenor. Mr Hermansen was important when negotiating with the Danes, and Mr Vedeld adds that the Danish are very tough to negotiate with. When the net-manager at TeleDanmark came to visit, Mr Vedeld made sure that Mr Hermansen came into the office where the TeleDenmark manager met someone from Telenor, and when he was asked how the Inka project was going Mr Hermansen answered; "oh very well!" That is how they work; "good references is everything!" (Vedeld, 2002). When Incatel got their contract with the Swedish Telekom a very important reference was Alcatel who had used their technology in the Czech Republic, "it is always more efficient when someone else say something is great – than to say it yourself" (Vedeld, 2002). When the Swedes took their decisions they sent out a very nice press release. For the future Mr Vedeld believes the Swedes will be their best reference. The founder is very satisfied with the relations they have.

Industry globality

The industry Incatel is part of is global according to the founder, but there is a need for some sort of adaptation when it comes to languages which might be particularly complicated in f.i. Asian countries. Since he also states the importance of "local presence" it does not seem to have reached a truly international demand pattern as yet and the globalization drivers can be seen as not so strong. However, the demand is quite global in that there is similar need all over the world if the wish is to have a modern and efficient Telesystem and the founder also states that they do not experience barriers of any kind. The competition as described seems to be quite transparent and dominated by a few large actors which indicates oligopoly structure which again indicates higher degree of globality. In conclusion the the degree of industry globality may be described as potentially global.

Product characteristics

Incatel's business concept is based on the fact that the network structure of different Telecommunication operators is very similar. The pilot in Televerket belonged to something you call geographical information systems (GIS). Based on a data model that represents the network structure, Incatel were to develop, market and maintain standard software that will optimize Telecom's use of resources (e.g. ducts, bores, cables and transmission equipment) in the physical and logical network. Incatel aims for niches "we are the world's largest supplier of standard software in our niche" (Vedeld, 2002). The niche is software for established Telecoms. It is an industrial product and very specialized. It is standardized and has a relatively long product life cycle. The product is not very price sensitive, but very sensitive to quality, it is in the core of a firm's operations and contributes to rationalizing. One very important feature that makes Incatel's product unique compared to its competitors according to the founder, is the fact that they can hook up or connect the product they started with to the new version they have come up with lately. According to Mr Vedeld is not one of the competitors able to do that. They are the only ones to offer a product on both areas that can be integrated, GIS and logical level. Another thing that is unique for Incatel is that they base themselves 100% on ITU-standard 805. Mr Vedeld also claims they are the only ones to have object oriented database, a more intelligent solution than the competitors' with lines on a drawing, "lines do not know who they are" (Vedeld, 2002).

5.2.6 IRTech AS

Year	*Important events*
1980s	Elkem AS developed a system to detect cracks in the surface of steel
1982/83	First system sold to Germany by direct export
1983	System sold to the Czech Republic
1984	Systems sold to France, USA and Germany
1985	System sold to South Korea
1986	Systems sold to England and China
1987	Systems sold to South Korea and Japan
1988	Systems sold to England, Taiwan, Sweden, Turkey and Germany
1989	System sold to USA
1991	Systems sold to USA and Australia
1993	Last system sold to Italy. Elkem AS considered the market to be saturated and wanted out
1994	A licence agreement made with Daido Steel Ltd in Japan
1995	IRTech AS was established by Mr Hovland who had been employed in Elkem Technology AS on this system since 1981 – IRTech AS now took on the responsibility to give support to the about 20 systems around the world
1999	IRTech AS did some upgrading of a system in England. They changed the old electronics with new
2000-02	One plant has been closed down in Australia, one in Sweden, one in South Korea and one in Taiwan. Mr Hovland is currently using agents from the time in Elkem in South Korea, Japan and the Czech Republic. To the rest of the world he travels himself

The product of *IRTech AS*, the Therm-O-Matic, is an automatic billet/bar surface inspection system. It was the interviewee, Mr Hovland, who started up *IRTech AS* on his own. That is, he took over when Elkem AS did no want to carry on any longer. It was Elkem that started to develop the system in the early 1980s. The system is made to detect cracks in the surface of steel material. To get an understanding of why the firm was founded we need to get into the founder's background. Mr Hovland worked in CERN in Genova from 1973 to 1981, he then came back to Norway to work in Elkem Technology AS on this system. It is described as very much a niche product to the steel industry. Mr Hovland states that there is no market for this in Norway so they have never sold anything at home. The very first system was operational in 1983. After Elkem had installed 20 systems to the largest actors around the world, they considered the market to be saturated. In addition to deliver new systems they had to further develop the electronic signalling part of the system, Elkem was not interested in carrying out this development. They decided it was not core business anymore and wanted out. This was in 1993 and the division was reduced from 16 to 3 employees. Elkem made several attempts at selling the whole system, but with no luck. Then Mr Hovland decided to take on the responsibility of giving support to the old customers, to which Elkem was responsible for giving support for a certain number of years, this was in 1995. Mr Hovland then established IRTech AS to take care of this. With the income from the support and sale of spare parts, he has managed to further develop an important part of the system, the task that Elkem was not interested in carrying out. Above we see when they installed the different systems around the world, this information is found on a list the CEO provided. The first system was sold to Germany and the entry mode used was direct export. When it comes to the country markets selected, it did not matter where in the world the market was, the founder stated that they just had to aim for markets where there was a large steel industry. Mr Hovland would like to build and sell new systems, but the firm is currently too small and lacks financial resources.

IRTech have sold plants to 13 countries all over the world the first market entered were Germany. They have an export rate of 100% and they have not sold anything to the "home market" because, according to Mr Hovland, there is no market for the product at home. The entry modes they use are agents and direct sales.

Experience/background of founder/key employees

Mr Hovland in IRTech is CEO of the firm and he took part in the establishment. He has technical education from Sweden, EPA-engineer e.g. electronics. He took over the operations when Elkem wanted out. Mr Hovland worked as a project engineer in Elkem from 1982 until start-up of IRTech in 1995. He worked at CERN in Geneva before that, as mentioned above. He speaks English, French and German, which he sees as a great advantage when entering these markets. He did not start the development of the product, Therm-o-Matic, but he was in it from a very early stage. He has lived three years as student in Sweden and worked eight years in Switzerland, in addition he worked in the armed forces from 1967-1973 in the secret services and spent a year in the US in that connection and also quite some time by the Russian border in the Northern part of Norway.

Personal networks

The type of contact IRTech has with their relations is very much direct contact. The founder describes it as "close" where telephone contact is mostly used. IRTech develops products together with suppliers, f.i they have had a very good cooperative relationship with Scanmatics. Mr Hovland goes so far as to say that the new development would not have taken place had it not been for a certain individual working at Scanmatics. This man at Scanmatics had previously worked on the Therm-o-Matic system at Elkem. The people Mr Hovland works with, are people he has known since he installed the plants 15-20 years ago, "..we are almost personal friends now! The reason I have done so well are the personal contact!" (Hovland, 2002). He also states that the personal contacts simplify the negotiations. The most important relations are the ones that he knows from Elkem, it is vital for future development of the product that they have frequent contact.

Industry globality

The industry IRTech is part of appears to be very global, "we sell the same product all over the world – the demand pattern is global!" (Hovland, 2002). In addition, the founder states that they experience low barriers to trade across borders, both of the abovementioned factors indicate strong globalization drivers in motion and thus a high degree of industry globality. In addition, the customers are described as large and very international, a further indication of interdependence among national markets and thus high degree of globalization.

Product characteristics

IRTech's product is a system that is made to detect cracks in the surface of steel material. Elkem sold about 20 systems that were installed all over the world. It is very much a niche product to the steel industry. It is very specialized and technologically quite advanced. IRTech has not got the capacity to produce and install new products so they only do service and upgrading on the existing ones today. The founder of IRTech believes he is the only one in the world today that knows the testmethod this is based on. The product has a long product life cycle and it is very complex, according to Mr Hovland, the Japanese have tried to copy the system twice and failed both times, in the end they had to buy a license. When it comes to price it is difficult to compare with competitors "..for a plant that does the same job, our price is about 30% above that of the competitors, but our plant has far larger capacity so it is difficult to compare! The costs of running the operations are also far higher for the competitors," (Hovland, 2002). Mr Hovland claims that the ones that have tried their system will never go back to old methods, the demand is thus not seen as sensitive to price. He also believes they have a very unique product.

5.2.7 Kay Lindegaard Incinerators AS

Year	*Important events*
1932	Kay Lindegaard AS (parentcompany of KLI) was established
1960	KL AS started producing incinerators to local waste
1970s	KL AS started producing incinerators for ships and they thus became international since many Norwegian shipowners built ships abroad – first foreign sales were to Poland – they followed a customer out
1979	Mr Hendriksen (interviewee and CEO of KLI) started to work with this product
1990s	KL AS found that it was too costly to produce in Norway and moved the production to Croatia
1999	KLI AS was established and Mr Hendriksen became the CEO

2002	KLI AS has agents all over the world KLI AS is considering starting production in South Korea as it is seen as the most important future market along with the Russian market

Kay Lindegaard Incinerators AS (KLI) is a subsidiary of Kay Lindegaard AS. KLI was established in 1999/2000 as a continuance of the oven division in Kay L, they started producing incinerators for local waste in the 60s. Kay Lindegaard AS was established in 1932, but their focus was on the home market, only in 1970 when they started with a niche product, incinerators on ship, did they become international. Norwegian ship owners built many ships abroad, this explains why KLI became international when they started producing for ships. KLI had their first foreign sales to Poland some time in the 1970s. The interviewee, Mr Hendriksen, has worked with this product since 1979 it was thus natural for him to be in charge when KLI was separated from the parent company in 1999. All production has been moved to Croatia. KLI have been in contact with this producer for 20 years, they produced on licence for 10 years, but then in the early 1990s KLI found out that it was too expensive to have production in Norway especially when they had a good and professional firm that could take care of it in Croatia. They are currently considering establishing production in Korea which is the most important future market with over 100 ships built a year. Russia is another very important market, it is believed that about 500 ships are about to be built there. KLI wants to take part in that. Their Croatian representative is working towards the Russian market.

KLI exported first to Poland and since they sell to ships they were very fast present in most parts of the world. The export share is about 50%, but they have more and more sales to the home market these days, "we deliver to almost every yard in Norway!" (Hendriksen, 2002). The company is thus, very international on the market dimension, but not so much with regard to volume, export share. The modes they are using are following customers out and agents in addition, all production is taking place in Croatia.

Experience/background of founder/key employees

Kay Lindegaard Incinerators (KLI) is not an independent firm, its parent company is Kay Lindegaard AS, but Mr Hendriksen who is the present CEO of KLI took part in establishing this subsidiary. Mr Hendriksen has no ownership in the firm, but he felt it was natural that he should run the operations when it was separated from the parent company in 1999. The reason for that is that he has worked with this product for more than 20 years, since 1979. Mr Hendriksen has technical background, he is an engineer. He has never lived abroad nor worked in international companies, but he has travelled extensively all over the world and worked on many different boats. He has worked as a service technician, that is, he goes on board and carries out something called commissioning, he tests the plant after it has been installed on board the ships. He starts it, do adjustments and hand it over to the yard and the ship owners. Mr Hendriksen speaks reasonable well English, German and French.

Personal networks

KLI had one very important relation about 30 years ago, his name was Mr Risøen and he was an agent in Bergen. This agent sold other products to yards and he knew a lot of people in the yard industry and among ship owners, he was thus the one who got KL in contact with the customers. The general contact is characterized by discussions on prices and technical details, but it may vary. Mr Hendriksen states that some relations are closer than others. He does not believe he has a network of importance from previous work, but he has worked in KL since 1979 and thus the most important connections are made within this company. Before 1979 they were contacted directly by the yards, there were no need for assistance to "find" customers. Today the most important relations are the network of agents they have worldwide. In the Norwegian market there is an agent in Ulsteinvik that has turned out to be very valuable for them, the sales in the home market has risen markedly in the last 2-3- years and he believes it is largely due to this very active agent.

Industry globality

The industry Kay Lindegaard Incinerators is part of is quite global in that they sell the same product all over the world, the demand pattern can thus be seen as global. They sell to ships all over the world and the shipping industry is described as much the same everywhere. There are international standards KLI has to comply with that are made by IMO (International Maritime Organisation), but it is the same for everyone. However, there exists some type of barriers in some markets, f.i. Korea demand local production. Since most of KLI's competitors already have production in Korea it is hard for KLI to enter the market. It may seem to be quite some interdependence among national markets even though there are some countries that have special demands, this indicate a rather high degree of industry globality.

Product characteristics

The niche Kay Lindegaard Incinerators is focusing on is very small. According to Mr Hendriksen there are only two other competitors. He states that there are only one Danish firm and one Norwegian firm that sell incinerators for ships. KLI's product is an industrial product and quite specialized and complex. The founder believes KLI has a slightly lower price than their competitors, he thinks the low price is the reason for their strong foothold in the home market. The product does not have to be renewed very often so the product life cycle is described as quite long. The customers are very focused on prices according to Mr Hendriksen.

5.2.8 NOR-REG Machine AS

Year	*Important events*
1967	NOR-REG AS was established (parent company)
1997	Parent company got agents in Denmark and Sweden
1999	Parent company established sales subsidiaries in Sweden, UK and Germany

2000	NOR-REG Machine AS was established. Mr Ingeberg (interviewee) became CEO – they started production in Germany - Germany is seen as a core area in the packaging industry
2002	Merged back with parent company – Mr Ingeberg became business developer They aim to only use subsidiaries as foreign operation mode due to bad experience with agents and distributors The most important future market is seen as the snacks market and the US market

NOR-REG Machine AS was separated from the parent company in 2000, but is today (2002) merged with its parent company again and the interviewee's position has changed from CEO of NOR-REG Machine AS to business developer in the parent company, NOR-REG AS. NOR-REG AS was established in 1967 by two brothers. NOR-REG AS claims to be a leading supplier of end-of-line packaging solution in Europe, with Scandinavia, UK and Germany as strongholds (NOR-REG AS Homepage). NOR-REG Machine AS makes transport lines and palletizing equipment and machines that forms the wrapping/packaging before filling. The parent company's product is similar, but it is more about the filling and sealing of the packages. The decision to establish the subsidiary, NOR-REG Machine AS, was based on a need to focus on certain tasks that the parent company itself did not consider core activities. NOR-REG Machine AS was supposed to only supply the parent company, but they became a lot more independent than intended, less than half of their deliveries were to the parent company. When it comes to their internationalization, it started with NOR-REG Machine AS getting an agent in Denmark in 1997, when they entered the German market later in the same year it was also through an agent. This entry was made, according to Mr Ingeberg, because of the parent company having agents there. The first sales subsidiary was established in Sweden then in Germany and UK, all of them in 1999. These subsidiaries are described as being established by NOR-REG Machine AS although it was not separated from the parent company until the year after, in 2000. In 2000, NOR-REG Machine AS also established a production unit in Germany. This establishement was explained by the advantages of the Euro being more stable than NOK and also the fact that they see Germany as a core area for the packaging industry "this is a very German industry" (Ingeberg, 2002). Their most important geographical market today is, according to the CEO, the Scandinavian market and the British.

They started export relatively parallel with home sales, "it is like this, the market is international and the market in Norway is limited" (Ingeberg, 2002). They are currently present in 7 countries, mainly Western European and Japan, but started out relatively slow and gradual with regard to the market dimension, "we started with the closest – Scandinavia and UK" (Ingeberg, 2002). The entry mode mostly used is wholly owned subsidiaries, but they also have a couple of agents. The export share two years after start-up is 75% and increasing. The firm has moved fast in terms of two dimensions, the export share is high after only a few years of operation and they make use of high-commitment modes at an early stage in the internationalization process, but they move rather gradual on the market dimension. Even though Mr Ingeberg stated that they started with entering the closest markets first, they entered several markets more or less simultaneously so in that respect they moved quite fast on this dimension as well.

Experience/background of founder/key employees

NOR-REG Machine AS is not independent, it was a subsidiary for about two years (from 2000-2002), but is now merged back in with its parent company. The parent company was established in 1967 by a man with technical background. The CEO of the subsidiary whom was interviewed, Mr Ingeberg, was the CEO from the start and is today Business Developer in the parent company. He has a Bachelor of Science Degree in Marketing and Finance from Denver, Colorado (4 years). In addition, Mr Ingeberg worked in Germany for one year and in Sweden for four years. He speaks English, German and some Spanish and French.

Personal networks

NOR-REG Machine AS has many very large customers and the relations to them are not very close, “Our large customers such as Kraft, General Foods, Nestlè and that kind of customers, we don’t have very close relations to them! We are kept at a distance which suits us fine - we are not very good on relations anyway” (Ingeberg, 2002). Opportunism is seen as large a problem, “..if we are approached in a way we consider informal, suddenly the “table catches” – they hold against you anything that has been said earlier. We have become much better at this now – and the contracts have become much longer he he..”, (Ingeberg, 2002). Mr Ingeberg states that he has some sort of personal network, “but a surprisingly small network really, maybe I’m not very good at staying in touch” (Ingeberg, 2002). He has a network from his time as a student, but he does not feel he is very good at using it. He still believes it has helped somewhat in the internationalization process, he knew some people in the packaging business from previously. There is no particularly important relation. Mr Ingeberg has people from earlier jobs and from his student days he can contact when something comes up, but cannot pinpoint anyone of particular importance.

Industry globality

For NOR-REG Machine it seems the industry is not that global, “you may say, in France I don’t think we have ever experienced not competing with at least two or three French companies and the French companies do not sell anything outside French borders! There is relatively high degree of adaptation…but it does not matter which country we sell to – we make customer adapted solutions…” (Ingeberg, 2002). Mr Ingeberg states that it is global markets they are operating in, but it seems to differ a bit according to which product markets they target with their packaging machines. When it comes to the industry’s degree of globality, it seems there exist some sort of oligopoly, “..there are 4 or 5 really large industrial concern that work on this all over the world, then there are 10-15 under them again and then its full stop. We are positioned relatively high up among the 10-15" (Ingeberg, 2002) and then the customers and suppliers are described as "relatively international", but it seems certain markets (e.g. French, USA) demand certain local aspects, so the industry does not seem to be truly global as of yet.

Product characteristics

The niche NOR-REG Machine AS is focusing on, is "end-of-line packaging solutions", that is packaging for transport and display purposes, including conveyor systems and palletizing. Their most important market today is the snacks market e.g. potato chips, peanuts and so on. This is an industrial product and it is quite specialized and complex. The product life cycle is 5-8 years so it is quite long, "..this is not computer equipment!", (Ingeberg, 2002). They sometimes retrieve old machines and rebuild them to markets with lower standards. Mr Ingeberg assesses NOR-REG Machine's products to be in the medium to high price category compared to competitors. NOR-REG Machine's product is unique especially in the snacks market and Mr Ingeberg believes them to have a technological advantage in this market compared to competitors. That the product represents high quality is illustrated by the last order they have received, "We just got a large order that we actually share with a German company named Schubert. And if you ask anyone in our industry what Schubert represents, it is like the Rolls Royce….we are going to deliver 60% of the order and Schubert 40%." (Ingeberg, 2002).

5.2.9 Norsk Display AS

Year	*Important events*
1993/4	Mr Wahl establishes Norsk Display AS – they got their first sales this year to the Netherlands – they used direct export which is the only mode used
1995	Norsk Display AS got sales to Denmark and Finland
1996	Developed their homepage on the Internet – got sales to Germany
1997	Norsk Display AS got sales to the USA
1999	Norsk Display AS got sales to Belgium and the UK
2002	Norsk Display AS currently has direct export to about eight countries They see the US and Germany as the most important future markets

The initial idea of *Norsk Display AS* was to make displays for the transport market, that is, personal transport (e.g. railroad, bus, train, airplanes). To get a head start and to build trust in the market, they started out making some simpler products that could generate income already from the start. The way it turned out, even these simpler products demanded a lot of time and energy, moreover the projects ranged from 1 million to 20-30 million which the CEO, Mr Wahl sees as difficult to handle without having back-up from a larger owner. Norsk Display thus, planned initially to do more advanced things, but it became too difficult and capital- and time demanding it was therefore not given priority. Instead they decided to take the simpler products a little bit further. Examples of the more complex products they wanted to make, are the plates at Oslo Centralstation showing the departure times, but he emphasizes that it consists not only of the plates, but also of the data and the system surrounding it. A relation in a firm close to where Norsk Display is located in Drammen, was established before start-up when the founder was working as a consultant. This relation later became the direct cause of Norsk Display AS entering the US market. The first foreign market they had sales to was the Netherlands in 1994. This sale came before they had any sales at home, the mode used was direct export, which is the only foreign operation mode they use. They have since had sales to Denmark and Finland in 1995, Germany in 1996, the US in 1997 and Belgium and UK in 1999. The founder sees the US and Germany as the most important future markets.

The export share has been up to 90-95%, but is currently around 60%, it varies quite a bit because they have few and large customers. This company can be said to have relatively fast pace on their internationalization process on both dimensions. There was not any delay between start-up and export, the export rate was very high from very early on, and they went to two foreign markets in their first year of operation, but the market dimension is not that fast in that they mainly stick to Western countries. They use only direct export as an entry mode.

Experience/background of founder/key employees

The founder of Norsk Display AS, Mr Wahl, has never worked nor studied abroad. He was about to take a master in the United States, but then he got his first child and it was cancelled. As he has only worked on the technical side, he has not had direct contact with foreign countries/customers. Mr Wahl still believes that he, through his previous work before starting on his own, has worn off any unnecessary respect for foreign products, services and demands, “it is not worse out there than here!” (Wahl, 2002). He speaks English and a little bit of German and French. Mr Wahl states that the technical language is English so he does not consider it important to know other languages in the industry they belong to.

Personal networks

Before start up, the founder had been in contact with several potential customers and he had already made systems that had been accepted. Based on this they felt they knew what to expect for the first years. Many personal relations have “disappeared” somehow since firms grow and people change jobs, but the founder, Mr Wahl, has one relation he considers particularly important. This relation is a man who lives in Drammen, he has been very stable in the firm he is working for and he has been very active selling for Norsk Display. Mr Wahl considers him the direct cause of them entering the US market. The relation contacted his company’s headquarter in the US and sold in Norsk Display’s product. Mr Wahl has regular contact with this relation, but only through work, not privately. The relation started a bit before start-up of the firm, when Mr Wahl worked as a consultant. They keep in touch both by telephone and face-to-face. In general they use little direct contact with customers abroad. They use middlemen in Norway and believe that this strategy has been quite successful in that they feel they have built up much trust and credibility in the market, Mr Wahl believes Norsk Display has a good reputation. He believes the good relations to larger well-known customers make less need for direct contact with the smaller customers, the large customers' work is seen as invaluable as references for Norsk Display. Mr Wahl himself describes the general contact with customers and suppliers as "not too good". He does not feel they spend enough time to cultivate contact with customers. He explains this by them being too technically oriented. They are too absorbed in technical things and not in nursing personal contacts. They have some contact, but from a seller's perspective it is sporadic and not very close. Despite this, Norsk Display has managed to make all their Norwegian customers approach their headquarters and sell in Norsk Display's products even if several of the headquarters both in Sweden, Denmark and the US have own products that do what Norsk Display's products do. These companies have closed down their own production to buy from Norsk Display. Mr Wahl believes the sales they get are very much based on trust, trust in that they have competence in what they do. When they started out they hoped that they should be able to build that kind of trust with their customers so that they could cooperate in making as good products as possible. They have not accomplished this, which means they have to use their own knowledge and experience to make the products, there exists no R&D cooperation. Mr Wahl feels relations are very important for current and future success and the relations they have work well, but he finds that it is often difficult to find the right person in large companies to relate to. Mr Wahl does not feel their sales efforts have been successful, they sell mostly through relations, he can not see that own sales and marketing efforts have influenced sales much.

Industry globality

The founder of Norsk Display states that the industry they are part of is very international, but in addition he states that there are most often many local small suppliers and that the industry is very fragmented and he does not consider the competition to be very strong, an indication of the industry not being very global. The product does not need to be adapted to different country markets, and they manage to stay in touch with customers from their office outside Oslo, this may indicate relatively low barriers to trade. In conclusion the industry may seem to be potentially global.

Product characteristics

Mr Wahl states that they focus on niches, that is products to producers of electronic scales (i.e. truck scales, train scales etc). The founder feels they have ended up very much in the weight industry, but they want to show that they can be used for other things as well, they wish to differentiate. Mr Wahl believes the combination of niche and a few large customers is not so good, it makes them too vulnerable for fluctuations in the demand of the few large customers. It is an industrial product they sell and is described as a relatively simple product that is easy to understand and use. Mr Wahl adds that there is no need for service and it can also easily be sent by post. It is also a highly standardized product with a relatively long product life cycle, but he believes it is important to continuously improve it to make it better, but, "..it is rare that one can afford to make a whole new generation" (Wahl, 2002). Mr Wahl does not see that the product is very sensitive to changes in price, quality or trends, he position themselves as a bit below those delivering quality products and a bit above those producing very simple products "we deliver quality products at a relatively low price" (Wahl, 2002). Norsk Display uses LCD technology, which is seen as quite unique compared to competitors. They use it on large formats and the lighting makes it look different from others, and Mr Wahl also states that their product is seen as more reliable than others.

5.2.10 Opera Software AS

Year	*Important events*
1991	One of the founders, Mr Tezchner started to work for Telenor Research
1994	The Opera browser started out as a Telenor project
1995	Telenor did not wish to pursue this product and Mr Tezchner and Mr Ivarsøy founded Opera Software AS – they got permission to keep the research.
1996	The first Opera browser was released on the internet
1998	Embraced emerging market of internet devices
2000	Opera Software AS teamed up with key players in the internet device market: Ericsson, Nokia, Sony, IBM and Psion. Opera Software AS acquires Hern Lab (Sweden)
2001	Opera Software AS became part of Symbian (a strategic alliance of leading handset and mobile computing manufacturers: Ericsson, Motorola, Nokia, Panasonic and Psion) They aim for the cellularphone- and the digital-TV market

Opera Software AS was established in 1995. The Opera browser started out as a research project in Norway's telecom company, Telenor in 1994, and in 1995 the project branched out into an independent development company. One of the founders, Mr Tetzchner worked for Telenor Research from 1991 to 1995. In 1995 he and his colleague, Mr Ivarsøy, founded Opera Software AS. Telenor decided at some point that an internet browser was not something they wanted to pursue and therefore abandoned the project in 1994. Mr Tezchner and Mr Ivarsøy still believed in the idea and got permission to keep the research, Telenor even provided the new company with offices and consultance at start-up. Opera Software AS developed the Opera web browser "a high–quality, multi-platform product for a wide range of platforms, operating systems and embedded internet products" (Opera Software Magazine: Highlights 2001:4), which was released in 1996. The firm operates in two major markets, browsers for desktops/traditional PCs and browsers for internet devices (Solberg & Borsheim, 2002). This company has hardly had any sales in Norway at all, the export share is 99-100%, they sell all over the world and all distribution is over the internet. Everything is run from Norway.

Experience/background of founder/key employees

The founder of Opera Software has technical background from the University of Oslo. The CFO, whom was interviewed, has business education from Copenhagen, he did not take part in the start-up in 1995. The CFO, Mr Jebsen, has previously worked in the Royal Bank of Scotland and Nomura International and Enskilda Securitas, e.g he has a very international background as he has lived abroad most of his grown-up life. He speaks English and some French.

Personal networks

The CFO of Opera Software, Mr Jebsen, states that they have very close contacts with customers. This is because they work on very large deals and it is very research based, e.g. they work towards markets they think will emerge in the next few years and they are dependent on new technology. An example is the deal with IBM, it took them six months just to negotiate a contract and then another year of developing a product. All the time they cooperated very closely to end up with a product. The same goes for Nokia, Ericsson and all the other large customers, they work with them and take part in the development of new products. Mr Jebsen has got a personal network from previous studies and worklife, but he does not consider it to be of importance on sales, but for financing.

Industry globality

The industry Opera Software is part of is characterized by a few, large actors. There exists no barriers of trade in this industry and the demand pattern is global, "we can in most cases sell the same product all over the world without any need of adaptation" (Jebsen, 2002). This indicates strong globalization drivers present and we can conclude that this industry has a high degree of globality.

Product characteristics

The product follows for instance the trends in cellular phones so in that way the product life cycles varies, but tend to be very short. It is a consumer product even if they sell to large industrial firms such as Nokia and Ericsson, the end-product is meant for consumers. The question of adaptation is a bit tricky, they adapt to the large customers (e.g. Nokia, Ericsson), but they sell a standardized product to a massmarket. Mr Jebsen, believes their price level is about the same as the competitors'. The product is described as unique in terms of it technically being very strong, it is smaller and faster than other similar products.

5.2.11 Optoflow AS

Year	*Important events*
1993	Mr Gjelsnes established Optoflow AS
1994	Mr Gjelsnes was awarded a Reodor Price for his invention
1995	The product is ready for sale – first sale to Norway
1996/97	A prototype was sold to England – it was an OEM contract (seen as least costly)

1998	Established contact with most of the distributors (e.g. Sweden, Denmark, Germany, England)
2000	The firm was sold and changed name to BioDetect BioDetect got a distributor in Japan (has waited with that market because far away wrt service) Optoflow has sold to 12 countries: In addition to the ones mentioned above, Belgium, the Netherlands, France (agent), Italy (agent), Jordan, USA (2 agents) and Singapore The founder prefers agents – he is disappointed with the performance of the distributors

Mr Gjelsnes started *Optoflow AS* on his own in 1993. Eight years later it was bought by investors and the name was changed to BioDetect AS. The firm lost a lot of money last year which is very disappointing to Mr Gjelsnes. Mr Gjelsnes is pleased with making money on the sale, but disappointed on the result. He does not have much contact with the firm today. The management is new from when he was running the firm. Mr Gjelsnes started on his own, but soon needed money and to get that he issued shares several times and thus his ownership declined. He owned 30% of the firm when it was bought in 2001. The product is called a portable flow cytometer which is made for detecting microorganisms in f.i. water. He states first that they started by selling abroad, but then it becomes clear that the first sales were actually to the home market. However, it is emphasized that the Norwegian market is not a sufficient base for the establishment of such a firm, so he was all the time thinking export. He was awarded a Reodor Prize in 1994 because of an invention he made. At the time of start-up, Mr Gjelsnes came from a job where he had travelled for about two years selling a product that counted bacteria and cells and that is how he came up with the idea of starting on his own, he saw the need for a new type of product he believed there was something missing in the offers that were given at the time. In addition to him seeing the need for a new product, he explains the start-up by his private life being changed. His children had grown up and he was now ready to take the risk that was involved in a start-up. It takes time to develop such a product, the product was thus not ready for sale until 1995. The price of such a system is about 2-400 000 NOK. A prototype was sold to England in 1996/97, this was Optoflow's first foreign sale. Mr Gjelsnes was actually aiming for the German market, but the German firm he was negotiating with was cooperating with a Welch firm and it was through this Welch firm he got his first sale abroad, to England. Today they get orders from several countries' military research institutes, f.i. from CDC (Center of Disease Control) in the US.

Even though it took some years from start-up (1993) to sales abroad (1996/7) we can say the internationalization was relatively fast because the product was not ready for sale until 1995, "the development of a new product takes time!" (Gjelsnes, 2002). Mr. Gjelsnes wished to enter the German market first because of their demanding and critical nature especially to technical products, "if it gets acceptance there it is easier to get acceptance in other markets", (Gjelsnes, 2002). The first entry mode used was original equipment manufacturing (OEM), "when you don't have resources you just have to choose the method that cost the least – it's the economy that drives the decision!" (Gjelsnes, 2002). They have used distributors, but are currently moving more and more towards manufacturers' representative or agents. He seems to have negative experience with distributors that do not perform as expected. The export rate is about 90% and it has been at that level from the start. The most important markets today are Germany, Japan and the US. He finds it difficult to guess which market will be most important in the next three years, both Germany's and US' economy is struggling, but he seems very focused on the German market, maybe because he knew of that market from earlier work. The entry modes used are low-commitment modes such as agents and distributors.

Experience/background of founder/key employees

Mr Gjelsnes in Optoflow founded the firm on his own in 1993. He has 3 years of education in electronics from Oslo Technical School, he states that "it was almost impossible to get in those days - the ones who did get in was very dedicated!" (Gjelsnes, 2002). He also has some courses from BI that he has taken while working. When it comes to Mr Gjelsnes' international experience he has travelled quite a bit, but he has only been employed in Norwegian companies. The positions he has held are; head of development, head of laboratory, head of marketing, product manager and CEO. He travelled mostly in Europe and the US. When he startet up Optoflow he was intending go abroad from the outset. In 1994 he received a prize for his invention in a competition staged by SND. Mr Gjelsnes is referred to as an inventor, but "that is not what I am!" (Gjelsnes, 2002). He states that he only had to invent something to cover a market, get a niche, he therefore started from scratch. He describes the risks as quite high and he had to work as a teacher for a year to afford paying for the patents, but as he states, "..luckily teachers have a lot of holidays so I could work on my invention and travel abroad on the side" (Gjelsnes, 2002). He masters very well English and German and understands French.

Personal networks

Mr Gjelsnes believes he has some sort of network, but he states further that the most important he has got from life is the workmethodology, trial and error, finding which methods work. There is one Swiss man, Mr Grieder-Leon that was very important in the very early days, he contacted Mr Gjelsnes and offered his consulting services and distribution in Switzerland when Mr Gjelsens was employed in another firm, Skatron AS (Gjelsnes, 2002). Mr Grieder-Leon gathered ten to twelve firms in Switzerland for a presentation of Optoflow's product before start-up. Mr Grieder-Leon was the distributor of a firm Mr Gjelsnes worked for previously, they often met travelling in Germany and San Fransisco and they then often went out for a dinner and a drink. The contact has not remained, "I don't know whether he is dead or alive today" (Gjelsnes, 2002). Mr Gjelsnes does not think he could have started the firm if he did not have experience from the industry. He knew the small firms and distributors that he got together at start-up from his previous work-life and they were therefore positive to attend his presentation of the new concept. Mr Gjelsnes believes the network has contributed to simplifying the internationalization process of Optoflow AS. Other personal relations such as colleagues at The Norwegian Radium Hospital and at Sintef have been very important to him in that he can call and ask them on matters not so familiar to him, such as biology. The relation to customers is not very close, maybe because the product in not something you buy several times, and there is no cooperation with the customers, f.i. in developing the product. Optoflow AS cooperates with Sintef and The Norwegian School of Veterinary Science on research and development. The customers get a finished product.

Industry globality

The demand for Optoflow AS' products is described as global. There is no need for product adaptation regardless where in the world it is sold. The competitive pressure is not very strong since it is a completely new product "conservatism is our greatest competitor!" (Gjelsnes, 2002). The founder believes total market and purchasing power and how well they manage to spread the word is what matters. Within their industry there are two large competitors, one in the US and one in Japan. Mr Gjelsnes was very well informed of these firms' activities before start-up, he knew their strategies. He was very careful not to step on their toes "I adjust the product to make it cover an area they are not covering" (Gjelsnes, 2002). Their customers are for instance several of the largest breweries in the US and Germany, "Carlsberg withdrew in the last minute and bought cheaper equipment from someone else – it does not have the same use at all! It is as if I needed a car, but bought a bike because I cannot afford a car" (Gjelsnes, 2002). The demand is seen as global as stated, and the founder claims there is a huge need for the product in the Third World such as in Africa, to get clean water, but the problem is who is going to pay for it. They sold the product to Jordan to clean the Jordan River. It was Terje Røed-Larsen and UD that managed to get financing, but to start such a project in Africa they need a lobbyist to get money for instance from WHO, but he considers this to be difficult to accomplish. As described above the industry structure can be described as an oligopoly, the demand pattern as global which indicates strong globalization drivers and also there seem to take place an extensive intra-industry trade, all factors indicating a high degree of globality.

Product characteristics

Optoflow's product, a compact, portable flow cytometer, is described as an industrial product, very specialised and complex. It does not have to be renewed very often, it has a very long life cycle like most biotechnology products, "it is not like PCs where the new versions are almost too old by the time they reach the market!" (Gjelsnes, 2002). Things move very slowly in biotechnology it is a very conservative industry, new medicines f.i. may take up to 10 years to develop. The demand for Optoflow's product is not very sensitive to price, but very sensitive to quality, "there can be no slack on the quality!" (Gjelsnes, 2002). The product is also described as very unique, it is the only portable instrument in its category. The alternative to using their product according to Mr Gjelsnes, is to do it manually or have large, not portable, expensive and complicated systems that can do similar things.

5.2.12 Superject AS

Year	*Important events*
1990	Superject AS was founded
1992	Superject AS had its first sales to Sweden by direct export – it is considered the firm's most important market
1993	Superject AS was nearly bankrupt and Mr Stokkan (interviewee) took over Established contact with the largest distributor in the Nordic countries, Elof Hanson – also got sales to Finland
1994/95	Superject AS entered Denmark by the use of distributor
2000	Superject AS entered Germany by the use of distributor
2001	Superject AS entered France by the use of distributor They used direct export mode to USA, Italy, Poland
2001	Mr Stokkan is awaiting a take-over bid The most important future markets are seen as pulp and paper and Sweden

The interviewee, Mr Stokkan, was partly involved in the founding of Superject AS. That is, the firm was established in 1990 and Mr Stokkan came in 1993 at that time the firm was close to bankruptcy. He claims to be the one who has made the company to what it is today. The business idea is based on a patent, seals to rotating shafts. Their first foreign sales were to Sweden by direct export in 1992, this market is still considered to be the most important country market. The mode has since changed to distributor in Sweden in 1993 and they also entered Finland the same year. In 1994/95 they entered Denmark, then Germany in 2000 and finally France in 2001. Pulp and paper is their most important product market. Mr Stokkan considers their main competitors to be the distributor's other products and "old methods". This firm is very special in that the four employees carry out all the tasks themselves, nothing is outsourced. One is involved in product development, managing and sales (Mr Stokkan), one is in production, one is taking orders, and one keeps the accounts. A way of overcoming the disadvantage of being small for Superject, is the close contact with the largest trading house in the Nordic countries, Elof Hanson, this contact was established in 1993. Hanson has about 25 sellers dedicated to selling Superject seals. Mr Stokkan was at the time of the interview (2002) awaiting a bid to take over the firm.

The firm has had a high pace of internationalization on most dimensions. Three years after start-up the export share was 70%, today it is 80% and they started exporting the same year as the firm was established. When it comes to the marked dimensions they started by direct export to Sweden and this market is still seen as the most important foreign market, i.e. they are not all that global on this dimension.

However, within few years they have established contact with distributors in 5 European countries, so they move relatively fast on this dimension as well.

Experience/background of founder/key employees

Mr Stokkan in Superject has partly contributed in starting up the firm that is, the firm was founded in 1990 and he came in as CEO in 1993, at that time the firm was nearly bankrupt according to Mr Stokkan. Mr Stokkan owns 34% of the shares. He is a mechanical engineer, but has also taken some courses in business subjects and marketing. The initial founder had business education. Mr Stokkan has worked abroad previously on projects in Norwegian companies. He worked as a CEO mostly in industries of building and construction, and shipping. He travelled in Western countries such as Sweden, Denmark, Finland, Poland and the US. Mr Stokkan has never lived nor studied abroad, but has had extensive contact with foreign markets as mentioned above. He planned to go abroad from the start when starting in Superject. The language he speaks apart from Norwegian is English.

Personal Network

Mr Stokkan states they have both close and less close relations in Superject, but relations with distributors are close and long-term. He further states that he has a personal network and this network is seen as very important for the firm's development. There is one relation in particular who has been of great importance, it is both a personal and a business relation. This person works in the Swedish trading house, Elof Hanson. Mr Stokkan has known him since 1993 and is in contact with him on a weekly basis, both face-to-face and by e-mail and phone. The Swedish trading house acts as distributor and supplier of Superject. Mr Stokkan states that they seek quite consciously to build relations, but "the end result we are after is of course increased sales" (Stokkan, 2002). Mr Stokkan goes so far as to say that finding the right partners are the key to successful business, and he believes that this is where the previous owners failed. When it comes to practical use of the relation to the Swedish trading house, they are allowed to use the trading house's facilities abroad, f.i. if they wanted to get established in another foreign country such as Brazil. Superject has been very conscious about aiming at large, well known customers "we compensate for the small size by the association to something larger" (Stokkan, 2002). Due to this, he does not see that their size is an issue today, the references they get from their large partners is sufficient. Most of their customers become long-term relations.

Industry globality

The industry Superject is part of is described as very international according to the interviewee, "..to a high degree – very international customers and suppliers – *only* international!" (Stokkan, 2002). "We can sell the same product all over the world – it is one of the most global products you can find!" (Stokkan, 2002). There are few barriers and the ones they compete against are a few, large companies. These factors indicate strong globalization drivers and thus we can from this conclude there seem to be a high degree of globality in this industry.

Product characteristics

Pulp and paper is Superject's most important product market, their main competitors are the distributor's other products and "old methods". It is an industrial product and it is highly standardized. The product is not very complex and the product life cycle is very long, "it has lasted for 150 years so far.." (Stokkan, 2002). The demand for the product is not very sensitive to changes in price, but very sensitive to quality. They charge a relatively high price compared to competitors, but their quality is also much higher according to Mr Stokkan. The product is claimed to be very unique and Mr Stokkan states that Superject is the sole supplier of this product, seals to rotating shafts, in the Nordic countries.

5.3 Summary

As one can see from the above case-study profiles, the history of a firm sometimes begins long before the firm has been established (e.g. ColorMatic, Fras, IRTech, Incatel, KLI, NOR-REG and Opera). In many cases, the pre-history of a firm provides very useful knowledge, because the development of the founder can be a very important key to understanding the establishment and the further development of the firm. This is also true for cases where the firm is not independent (e.g. ColorMatic, KLI and NOR-REG). The history of the parent company has importance for an understanding of the establishment of the firms studied here.

A more compact version of the key data for this research is provided in table 2. The reader will note that low commitment modes prevail (i.e. direct export, agents and distributors). The exception are firms that have parent companies i.e. ColorMatic and NOR-REG Machine both prefer to use wholly owned subsidiaries abroad, and KLI is currently considering the establishment of their second production unit abroad. This mode too, may be considered to indicate a high commitment (and resource demanding) mode.

	No of empl.	Sales	Founded (export)	Internat.sales (after3yrs)	Profit NOK	Type of FOM	No. of mrkt areas
ColorMatic	3	5.26	1997(00)	95% (90%)	- 2.41	Distrib.	4-5
Dolphin	10	47.44	1991(92)	90% (90%)	- 19.52	Agents	3-4
Fras	4	8.65	1996(98)	80% (20%)	-0.01	Follow cust. out	worldwide
ICAS	61	33.79	1989(93)	50% (10%)	2.26	Agents	2-3
Incatel	65	76.23	1993/4(97)	80% (50%)	10.16	Direct exp.	2-3
IRTech	2.5	6.01	1995(95)	100% (100%)	0.80	Agents	4-5
Kay L	2	4.67	1999(99)	50% (50%)	0.02	Agent production	worldwide
NOR-REG	20	107.18	2000(01)	75% (75%)	3.69	Subsidiaries	2
NDisplay	3	2.28	1993/4(94)	60% (65%)	-0.41	Direct exp.	2-3
Opera	110	51.10	1995(95)	99% (99%)	-14.85	Direct export	worldwide
Optoflow	10	1.23	1993(97)	90% (85%)	-4.26	Agents	4-5
Superject	4	4.96	1990(91)	80% (70%)	0.57	Distributors	2

• All the numbers from the interviewees were verified with transcripts from the "Brønnøysund register" except for NOR-REG Machine AS where only the financial statements of the parent company was found. All numbers in mill NOK from 2002.

Table 2 Summary – key figures and internationalization dimensions

An attempt will be made to classify each case into the different categories identified in the framework (e.g. fig. 6), e.g. True Born Global (TBG), Born Global on Export dimension (BGE), Born Global on Market dimension (BGM) and Gradual International (GI). The cases will be analyzed, propositions developed and the findings compared with both conflicting and similar literature. Their similarities and differences on the four factors within and between groups will also be looked into and this comparison might enable us to see how the different factors influence each firm's pace of internationalization.

Chapter 6 Case Analysis and development of propositions

6.1 Introduction

The analysis in this section is based on the twelve cases and seeks to generate propositions that can be tested with large scale data sets (Eisenhardt, 1989). Analysis and proposition development will be segmented into four topics: (1) experience/background of founders, (2) personal networks, (3) industry globality and (4) product characteristics. In the interviews, the focus was on understanding the drivers for the international character of the SMEs in greater detail.

To make sense of data, theory is needed. The purpose of case studies even descriptive ones, is never merely to collect and present facts; "What makes fact practical and valuable is the glue of explanation and understanding, the framework of theory, the tie-rod of conjecture. Only when the facts can be fleshed to a skeletal theory do they become meaningful in the solution of problems", (Ferber et al, 1964:153). The cases are now compared and a discussion is made of how and why they differ according to where they are placed in the framework. Finally, some propositions of how the four factors studied here are believed to influence a firm's pace of internationalization is presented. The propositions made are based on the findings in the twelve cases studied.

6.2 Pace of internationalization

6.2.1 Introduction

It turned out the majority of the case firms used low-commitment foreign operation modes when venturing abroad. This research finding is in line with *the resource-based argument*. Pedersen and Petersen (1998) have argued that high-commitment modes (e.g. subsidiaries) require set-up costs which may represent a capital investment beyond the financial ability of a small, newly established company. Madsen, Rasmussen & Servais (2000) also found that born global firms make extensive use of low-commitment modes. Since the entry modes of the firms studied here are found not to vary much in terms of resources committed to the market, the focus will be on the market selection dimension and export rate in the further discussion of the firms' pace of internationalization.

6.2.2 How the case firms moved on the two dimensions

The firms studied were chosen with the expectation that differences would be found in the pace to internationalize. Finding differences would enable placing these firms in different global categories. According to several studies (Knight, 1997; Knight & Cavusgil, 1996; Harveston, 2000, Madsen, Rasmussen & Servais, 2000; Junkkari, 2000), BGs are defined as SMEs with an export rate of more than 25% within three years of their founding. The author finds this definition to be too broad for the 12 firms in this study. We can imagine, for instance, a Norwegian SME that exports 30% of its products to Sweden and Denmark within three years of its founding. The author would not categorize such a firm as one that was born global. In other words, one needs to incorporate the type of market (and how many) an SME must be present in before deciding to label it a BG firm. In addition, most of the very international SMEs usually have a far higher percentage of foreign sales than 25% (e.g. Luostarinen & Gabrielsson, 2001). In this study, a born global firm is defined as an SME that exports a minimum of 50% of its products within 3 years of its founding. However, to be defined as a "true born global" (TBG), the SME has to be present in more than one continent simultaneously. To exemplify, a Norwegian SME that exports 80% of its products to European countries would not be termed a TBG. The TBG is found in the upper right corner in figure 7, and the firms that gradually become international ones are found in the lower left corner. The upper left corner categorizes BG firms when considering the market dimension. The lower right corner categorizes BG firms when considering the export dimension. Note that all case firms in this study would be termed born globals according to earlier definitions used (see above), the strength of this study is thus the nuanced picture that is given of the different types of globals that exist. The definition used here is more precise when it comes to categorizing a firm as a truly born global firm.

The world was divided into seven parts with increasing psychic distance from the home market (in this case Norway); Scandinavia, Western Europe, Eastern Europe, North America and Australia, Latin America, Asia and the remaining parts of the world (Africa and Arab countries). This division is in accordance with Junkkari (2000:160), who classifies areas from hot (business transactions are close-by, in terms of distance) to cold (far away).

Just four out of twelve cases started their international activity in a Scandinavian country (e.g. ICAS, Incatel, NOR-REG Machine and Superject). The other eight cases started their internationalization mostly to central European countries, but one (e.g. Dolphin) started also by going to the US and one (e.g. Opera) by going globally from the start. Currently the cases are present in from five markets (e.g. ICAS) to worldwide (e.g. Fras, KLI and Opera), but most are present in fewer than ten countries. It seems they are aiming more for the right market or niche markets than as many markets as possible. They are mostly present in European countries or the US, but in addition to the three cases present worldwide (e.g. Fras, KLI and Opera) two cases are also present in more exotic places e.g. IRTech in South Korea, Japan, China and Taiwan and Optoflow in Jordan, Japan and Singapore.

Based on the description of the firms' degree of internationalization in chapter 5, it is found that two firms qualify to be classified as gradual internationals (e.g. ICAS and Incatel). Two firms qualify to be classified as born global on the market dimension (e.g. KLI and Fras). Four firms qualify to be classified as born global on the export dimension (e.g. Dolphin, NOR-REG Machine, Norsk Display and Superject) and finally four firms were found to qualify to be classified as true born globals (e.g. ColorMatic, IRTech, Opera and Optoflow).

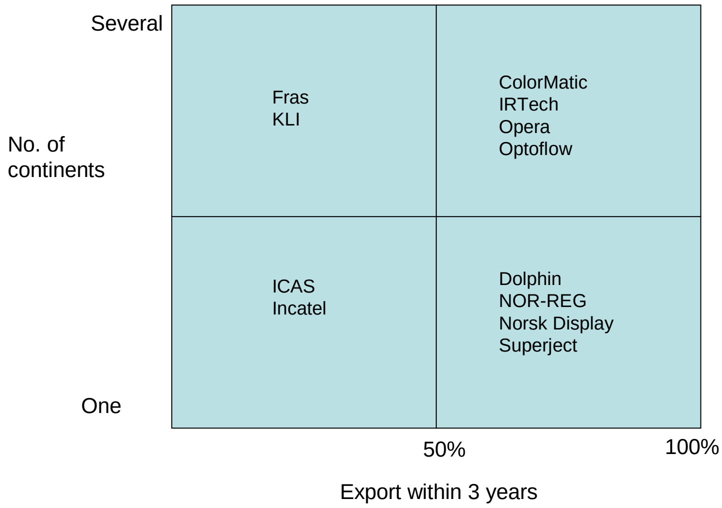

Figure 7: Different categories of "globals"

The figure above gives a quite static picture of the firms' internationalization. To give a more dynamic illustration of the internationalization process, the firms' development is drawn up in a graph with the two axis representing the two dimensions of internationalization, export rate and number of market areas entered. Each graph represents each group of "globals" and their trajectory when undergoing internationalization. Note that the x-axis is changed and shows the increase in export rate at different points in time (not just after 3 years as shown above)

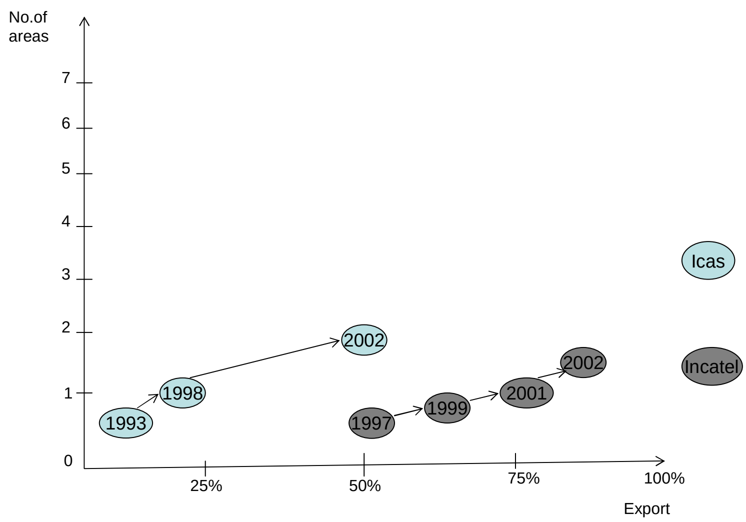

Figure 8: Internationalization trajectory of Gradual Internationals

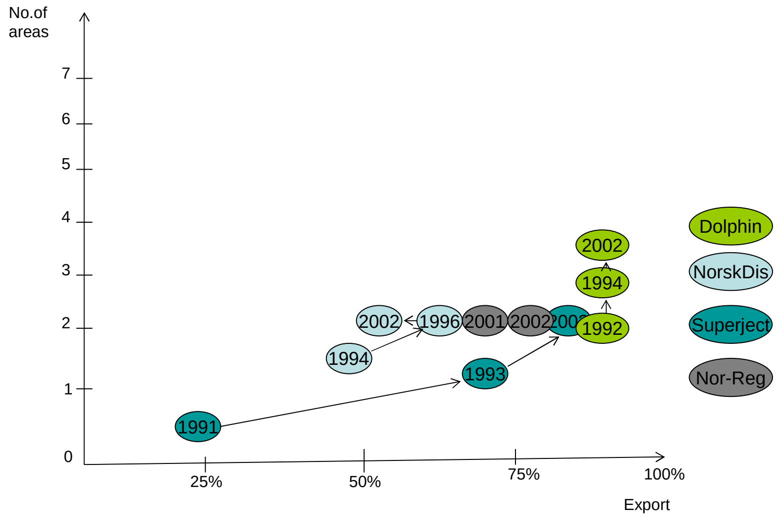

Figure 9: Internationalization trajectory of Born Globals on the Export dimension

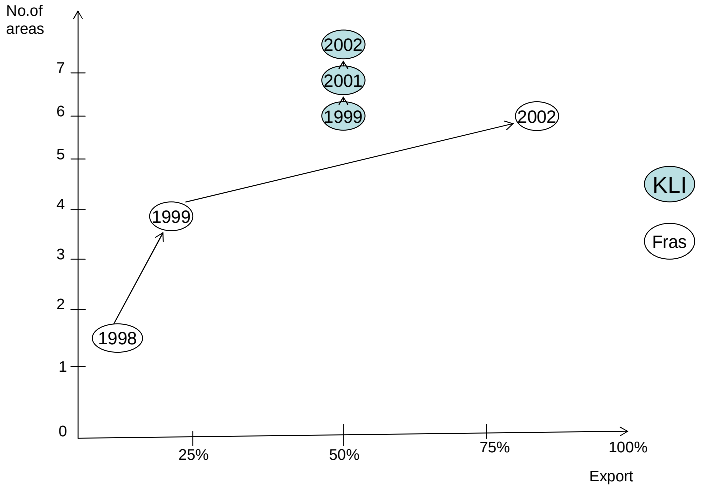

Figure 10: Internationalization trajectory of Born Globals on the Market dimension

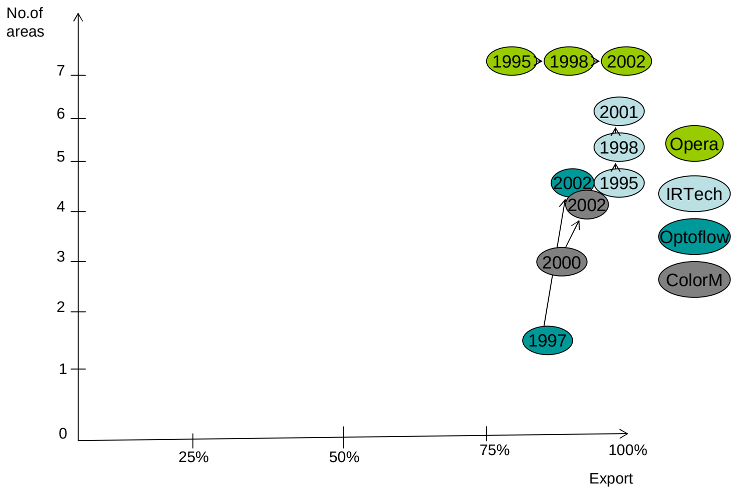

Figure 11: Internationalization trajectory of True Born Globals

The trajectories of the case firms undergoing internationalization are shown above. The first year of each firm identifies the year the firm started exporting. The second year indicates how international the case firms are on the two dimensions three years after their founding, except for the two firms that have the most gradual pace of internationalization, e.g. ICAS and Incatel. These two firms only started to export after four and three years, respectively. However, apart from its relatively slow entrance into international markets, Incatel moved quite fast on the export rate dimension and might thus be characterized more as a BGE than a GI. As a consequence, the first year shown in figure 8 shows how international ICAS and Incatel are after four and three years respectively. The last year shows how international the firms are in 2002. Since each software sold by Incatel amounts to the same percentage of its total turnover, it is easy to calculate the increase in export share on the basis of each new contract. When Incatel got the TeleDenmark contract, in 1997, the export share was thus 50%. In 1999, Incatel contracted with Czech Telekom, and the export share rose to 65%. In 2001, Incatel contracted with Belgium Telekom, and the export share rose to 75%. The final contract, in 2002, with Swedish TeliaSonera, resulted in an export share of 80%.

Regarding the market selection dimension, Andersen & Buvik (2002) propose a relationship approach. Their assumption is that the type of customers that a firm aims to have, will influence its approach to international market selection (IMS). The firm will either rely upon traditional selection procedures or one that is based upon relationships. The traditional approach assumes that the firm selects a country that consists of "faceless" customers and that the IMS is episodic in nature. The relationship approach, however, assumes that certain markets (e.g. industrial and institutional markets) have relatively few and large customers. This assumption will lead firms that are interested in securing sales to estimate the potential demand more directly by contacting the customers.

The relationship approach was supported in the present study. Several of the founders (e.g. in Fras, Opera, IRTech, Incatel and Optoflow) stated that they aimed at securing particular customers. They were not concerned about the markets in particular countries. These firms pursued relationships with suitable customers, wherever they were found to be and they did not pay much attention to international borders. Firms selling to consumer markets are, by contrast, more likely to focus upon market potential at a country level (Andersen & Buvik, 2002).

Another assumption made by Andersen & Buvik (2002) is that the choice of foreign market/exchange partner may influence and be influenced by the entry mode. Fras, for example, has a very fast pace of internationalization on the market dimension. Within four years of their first international steps, Fras defined itselves as being a firm with worldwide scope. This may be explained by the fact that the one and only foreign operation mode that Fras uses is "follow thy customers" or piggybacking, e.g. Fras goes wherever their customers go. At one time, they went to China in order to follow Statoil. At another time, they went to France in order to follow Norske Skog. Superject is a firm that is as global as Fras is, on the export share dimension, but not as global as Fras is on the market dimension. Superject's choice of market might be explained by the fact that their main customer and partner is located in Sweden, and is a large trading house. As a consequence, Sweden becomes an important market for Superject, and the Swedish market may also be sufficient for Superject's products.

The type of product a firm sells may influence the choice of foreign market/exchange partner. Superject mass produces a standardized product and seems not to have any ambitions for entering new markets in the near future. Superject reports that Sweden is its most important current and future market. Incatel, on the other hand is constantly forced to find new country markets in order to sell their product, since there are only a few (and in some cases only one) suitable customers (e.g. established tele-communication companies) in each country market. This understanding is in line with the strategy labelled "unique products development", which Knight & Cavusgil (2004) found to be a frequently used one by BGs in the US. This strategy relies upon the creation of distinctive products and customer loyalty by uniquely meeting a particular customer need.

With regard to the influence of the founders' previous experience and network, all but one case (e.g. the gradual international case, ICAS) have extensive experience from the industry from earlier and most have quite some international experience as well. This make them less sceptical to venture abroad, as one founder put it "it is not worse out there than here" (Wahl, 2002). If that is the case or if it is ethnocentricity (Albaum, Strandskov & Duerr, 2002) kicking in, is of less importance. The main point is that the founders experience less psychic distance (Johanson & Vahlne, 1977) and are thus not as risk averse when it comes to choosing which and how many new markets to enter. When it comes to the founders' networks it is varying, and there are different types of networks that are emphasized as being of importance for the firms' internationalization. While some founders focus on more traditional types of relationships (e.g. to customers and suppliers) to increase the firms' competitiveness, others cooperate closely with potential competitors and research institutions while at the same time keeping the customers and suppliers at more arms' length. This is in line with Uzzi's (1997) findings who found that the same individuals simultaneously acted "selfishly" and cooperatively with different actors in their network.

6.3 Patternmatching

6.3.1 Within- and between group comparison

The cases have been written up using phases and dimensions to structure them, the next step is to look for within group similarities and inter-group differences. There will be sought for similarities and differences *within* each group of cases (e.g. GI, BGE, BGM, TBG) and also *between* each groups of cases. The cases will be compared on each of the dimensions; personal experience/background, network/personal relationships and level of globalization/ product characteristics to try and establish how these factors influence the firms' pace of internationalization.

6.3.2 True Born Global

Founders/key employees' background/experience dimension

The firms belonging to this category are ColorMatic, IRTech, Opera and Optoflow. All the founders of the TBGs have technical background, two of them were electrical engineers. In Opera and ColorMatic the CFO and the Marketing Manager were interviewed respectively, when experience is mentioned hereafter it is the interviewees that are referred to not the founders, unless explicitly stated. The founders of IRTech and Optoflow speak English, French and German, the interviewee of ColorMatic speaks English, German and Swedish and the CFO of Opera speaks English and French. All of them have either worked abroad for years or travelled extensively, e.g. the founder of IRTech worked 8 years in Switzerland and 1 year in the US and studied 3 years in Sweden, the marketing manager of ColorMatic studied in the US and worked in Sweden, the CFO of Opera has lived most of his grown life abroad in the UK or Sweden and the last one, the founder of Optoflow have neither lived nor studied abroad, but have travelled extensively throughout Europe and the US in his previous jobs.

Relations dimension

ColorMatic and Optoflow both describe their sales as "one-shot" and there is thus no ground for building relations with the customers. The interviewees in both these firms have some relations that come forward as important for the firms' development, but both are hesitant to emphasize it. Mr Gjelsnes in Optoflow states that "work methodology" is the most important he has got from life, not relationships. Experience from previous work-life and finding which methods that work, is seen as most important for the success of the firm. This is said despite the fact that a very important Swiss connection aided him at start-up. He admits that this person was very important at the time, but he does not have any contact with him presently, "I don't know if he's still alive" (Gjelsnes, 2002). In addition he has important personal relations at The Foundation for Industrial and Technical Research (Sintef), The Norwegian Radium Hospital and The Norwegian School of Veterinary Science that are aiding him on subjects were he has insufficient knowledge and they cooperate on R & D. Mr Shaefer in ColorMatic also has a network that informs him of potential customers and distributors in foreign markets, but will not put forward anyone as being more important than the others,

> *"they have aided us in identifying who are potential suppliers and distributors. For instance they give us 5 names then we can start analyzing them a bit. It is always good to have contacts, it enables us to cross-check things, confirm or disconfirm information, but there are no relation of particular importance"* (Schaefer, 2002).

Mr Hovland in IRTech describes his contact with business relations as close and he even states that many of them have become his "personal friends",

> *"the reason I have done so well is the personal contact!"* (Hovland, 2002).

He believes the personal contact simplifies negotiations. They also cooperate on developing new products with the suppliers. With regard to his personal network from previous work, the relations from Mr Hovland's time in Elkem come forward as very important, he states that they are vital for future development of the product and they have frequent contact

> *"..for instance in a recent development we cooperated very well with Scanmatics. That new development would not have been possible without the man that now works for Scanmatics, but previously worked for Elkem. When he worked for Elkem he worked full time on the Therm-o-matic system"* (Hovland, 2002).

The CFO of Opera states that they have very close contact with their customers. Mr Jebsen explains that with the fact that they work on large contracts and that it is very research based. An example is the deal with IBM, it took them 6 months just to negotiate a contract and then another year for developing the product.

> *"We are dependent upon new technologies within mobilephone-technologies. It is a R&D cooperation and it is typical a large contract. For instance with IBM the deal took more than six months to negotiate and then the development takes about a year. In all this period we work very closely together to create a product. This procedure goes for Nokia, Ericsson and all the others – we work for them and take part in their development of a new product"*

Globalization dimension

We can see from figure 11 and table 2 that the three most global firms, in descending order; Opera, IRTech and Optoflow are all independent and they are all part of an industry that can be described as very global as Mr Gjelsnes in Optoflow expressed it:

> *"The demand is global, there is no need for adaptation wherever in the world the product is sold and we experience no barriers across borders"*

Mr Jebsen in Opera expressed it in even more extreme terms:

> *"The industry structure is concentrated around a few large actors and there exist no trade barriers whatsoever in this industry. The customers and suppliers are extremely international!"*

The fourth TBG's company, ColorMatic's can not be described as global as Mr Schaefer expressed it:

> *"In Europe we operate much within EU-markets. England is more a local market – they serve their own marked and in the US it is*

much the same. There has to be done certain adjustments to the product in each different market for instance in the US they have their own standard we have CE marking and they have UL. The biggest challenge today is that they use different types of packaging in different markets, Japan has one type, Europe one and in the US yet another type – that is the biggest challenge on the packaging side of business today"

The reason why ColorMatic has become a true born global despite this fact, may at least partly be explained by them having a parent company backing it, it is not an independent firm, it is a subsidiary.

Product characteristics dimension

The products the true born global firms sell are Inkdoser (ColorMatic), system for detecting cracks in steel (IRTech), software (Opera) and cytometer, a system for detecting microoganisms in for instance water (Optoflow). ColorMatic, IRTech and Optoflow all sell industrial goods. Opera defines their product as a consumer good; even though they may sell to large industrial companies such as Nokia and Ericsson, the end-product is meant for consumers.

> *"You can say we have a completely electronic product, which is quite distinct from other products. That is, we make software, and nothing is being burned on a CD or wrapped. There is no distribution network, all distribution is through the internet! There are two customer groups; one is individuals who download our software from the internet and we have had about 15 million downloadings and installations in the last 18 months. Then we have the large customers, typically, Nokia, Ericsson, IBM etc and even there, the product is an attachment to an e-mail."* (Jebsen, 2002)

They all state that their product is unique or very unique. Three of the founders also add that their product is very specialized and complex. With Opera it is a bit more complex, they aim for two types of markets, browsers for desktops/traditional PCs and browsers for internet devices. That is, they sell to customers like you and me through the internet and that product is standardized, but the product they sell to the large industrial firms is adapted to each customer, but the end-product is still standardized to a mass market. The product life cycle (PLC) is long or very long for three of the TBGs, only Opera has a very short PLC. Opera's product is sensitive to price, the products of the tree other firms in this category are not sensitive to price.

Summary within-group comparison

To sum up, all of the interviewees of the firms belonging to the true born global category have extensive international experience from abroad. Three of them have lived and worked abroad for several years. The last one, the founder of Optoflow has not lived abroad, but has travelled a lot in his previous positions mainly to the US and Western Europe. It might thus not be as surprising that these are founders of the most global firms. When it comes to the products they sell, they are all described as unique and highly specialized which corresponds with the statement three of the interviewees (e.g. in IRTech, Opera and Optoflow) came with when asked about competition,

> *"the strongest competitor for our product is old methods"* (Hovland, 2002; Jebsen, 2002 and Gjelsnes, 2002).

The only one not uttering this was the interviewee of ColorMatic. What is more striking is that all four of these most global companies are offspring of other, large companies; Opera of Telenor, ColorMatic of Tronrud (e.g. is still a subsidiary), Optoflow of Norsk Data and IRTech of Elkem. When it comes to the globalization dimension, three of the cases' industries are defined as having very high degree of globality only ColorMatic's industry is defined as low. It could thus be puzzling that a firm is born global in a multilocal industry, however ColorMatic is not only the offspring of Tronrud, but also the subsidiary and can thus probably enjoy even more support in terms of finances and other resources from the parent company and this then might enable ColorMatic to expand fast to foreign markets. With regard to how relational the different founders are, the findings are diverse. ColorMatic and Optoflow's founders are not considered relational, both interviewees describe their relations to customers as "one-shot" in other words the type of product might have an influence on the type of relationship a firm is able to build with its counterparts. This is how Mr Schaefer in ColorMatic expresses it:

> *"Unfortunately it's like this – only purchase and sale. It is "one-shot" and then we're out again, people buy a machine and that's it. And we have relatively few sales of accessories and other things to our machines. Some service, but very little. We do have nice relations to our customers. But it is not like continous business where people buy more and more from us."*

Another thing is that during the discussion it turns out both Mr Schaefer and Mr Gjelsnes have some relations that have been of great importance especially in the very early phase of the firms' development, but they are both hesitant to put any emphasis on them, it just becomes clear as they tell the story of the firm. These relationships were perhaps critical in explaining their rapid internationalization.

6.3.3 Born Global on Export dimension (BGE)

Founders/key employees' background/experience dimension

All the founders in this category have technical background as well. The founder of Superject has also got some business and marketing background. Three of them speak three languages or more. The international experience varies quite a bit. The founders of Dolphin and Superject have only worked for Norwegian companies, but have travelled extensively in Europe and the US, the founder of Dolphin has in addition lived and worked six months in Sweden. The founder of Norsk Display has very limited international experience. He explains it in the following way, *"I have never worked abroad, nor studied abroad. I have only worked in companies with Norwegian owners. I have always worked on the technical side of a company so I have not been in direct contact with foreign markets or the export side of firms. But, the unnecessary respect for foreign products, services and demands is worn off – it is not worse out there than here!"* (Wahl, 2002)

The CEO of NOR-REG Machine on the other hand has studied four years in the US (e.g. marketing and finance), in addition he has worked in Sweden for 4 years and in Germany for 1 year. The CEO has been in NOR-REG Machine since it departed from the parent company NOR-REG AS. The founder with the technical background which is referred to at the top is the initial founder of the parent company, NOR-REG AS in 1967. The firms have too many connections on a daily basis, it is thus difficult to see NOR-REG Machine as a separate unit it was therefore referred to the original founder.

Relations dimension

Neither of the four cases (e.g. Dolphin, NOR-REG, Norsk Display and Superject) belonging to this category are very relational. Mr Løchsen in Dolphin for instance, describes the general business climate as "largely of technical nature" (Løchsen, 2002). On the personal level on the other hand, there is a network of importance for Dolphin. Mr Løchsen emphasized the relations he has acquired through a European Research Cooperation. Parties from different countries in Europe cooperate on projects, usually of a technical nature, and apply for funding in Brussel. NOR-REG Machine also describes their relations to customers as "not very close", and adds that this suits them fine. Mr Ingeberg in NOR-REG Machine has a network from previously from the packaging industry that has aided them in the internationalization process, but he cannot pinpoint anyone of particular importance. Mr Wahl in Norsk Display also describes the relations to customers as "not too good", but he states quite clearly that he wishes them to be closer and express feelings of failure because they have not managed to build better relations.

"When we started out, we hoped that we should manage to build the kind of trust with our customers so that we could cooperate on making as good products as possible. We have not managed that, which means we have to use our own knowledge and experience to make the products and in addition be attentive to details. There exists no R&D cooperation. We find relations very important for our current future and success. We feel that the relations we have work well, but it is often difficult to relate to the right people in the large companies, difficult to find the right person to bond with. The aim, as I see it, is first of all to achieve sales. We always wanted to create relations that give us tasks, also development. That has turned out to be difficult in practice." (Wahl, 2002)

Despite what he says it seems that the relations might be somewhat better than he thinks referring to the fact that they managed to get the Norwegian subsidiaries to “sell in” their product to the parent companies abroad. This can be seen as an indication of Norsk Display having a good reputation in the market. Both Mr Ingeberg and Mr Wahl explain the arm’s-length relations to customers with the technical nature of their product. They believe they themselves are too technically focused and not very good sellers. Mr Wahl has one very important relation, this relation is considered to be the direct cause of Norsk Display entering the US market. The subsidiary located in Norway “sold in” Norsk Display’s product to the US headquarter. The last firm in this category, Superject, has both close and less close relations to customers, but they have in general very close relations to their distributors. One relation in particular is very important for Superject, it is the relation to a Swedish trading house.

Globalization dimension

The firms fitting this characteristic, are part of an industry that can be described as having medium high (e.g. Nor-Reg Machine and Norsk Display) or very high (e.g. Dolphin and Superject) degree of globality. Mr Løchsen in Dolphin describe their industry in the following way,

> *“I would say the whole business we’re in, electronics, are very international. No adaptation is needed in the different markets, the marketing might have to be local, but the product is global.”*

One of the firms has a parent company, NOR-REG Machine, and that may also have contributed to the relatively fast internationalization for that particular firm.

Product characteristics dimension

The products these firms sell are; hardware (Dolphin), packaging machines (NOR-REG Machine), electronic signs (Norsk Display) and seals to rotating shafts (Superject). All the products in this category are defined as industrial products. They are also described as unique or very unique. The products of Dolphin and NOR-REG Machine are seen as both specialized and complex while the products of Norsk Display and Superject are seen as simpler products which are highly standardized. The product life cycle of these firms are ranging from medium long (Dolphin) to very long (Superject), but none of them describe the PLC to be short. Whether the product life cycle is considered short or long might obviously be a relative matter depending on the industry they are in. In this study it is relied upon the subjective judgement of the founder in question, as Mr Ingeberg in NOR-REG Machine put it,

> *“The lifetime (of the product) is relatively long and we don’t mind to take back machines in return and rebuild them and use them in other markets that don’t have as high standards. So you can say that with regard to technological cast offs/discarding well…it is not computer equipment – our product can last five to eight years maybe, quite long durability on the product in other words.”*

The founders of Dolphin and Superject state that their product is not sensitive to price while the founder of NOR-REG Machine find that their product is sensitive to price. When it comes to Norsk Display it is a bit unclear, they claim to deliver *"high quality product at a relatively low price"* (Wahl, 2002).

This may indicate some sensitivity to changes in price.

Summary within-group comparison

Before summing up the different case companies according to each dimension, it has to be mentioned that overall it varies quite a bit. There is no very distinct pattern to be seen as to the case companies in the first group, true born globals. When it comes to international experience, it varies from none (e.g. Norsk Display) to one having lived and worked a total of eight years abroad (e.g. NOR-REG Machine). The other two have worked and travelled abroad in their previous jobs and one (e.g. Dolphin) has lived in Sweden for some time, but neither have extensive international experience. Two of these founders (e.g. in NOR-REG Machine and Superject) also state that "old methods" represent their strongest competition. With regard to the characteristics of their products the founders of NOR-REG Machine and Dolphin describe their products as both unique and specialized, while Norsk Display describe theirs as simple but also with unique features and Superject's products are described as highly standardized but also very unique. Two of the founders describe their industry as very global (e.g. in Superject and Dolphin), while for Norsk Display and NOR-REG Machine the industries have more medium degree of globality. The fact that the industries' globality is not very strong fits rather well with the fact that the two firms are classified as medium globals and not true born globals. Dolphin is very close to being a true born global since it has 90% export within 3 years of founding, but since it sells to mainly western markets it cannot be classified as a true born global. Superject could be expected to be more global since industry globality is described as very strong, but other factors might be more influential than the industry's degree of globality for instance the lack of international experience and network might play a part and the fact that the product is very standardized might make it easier to find sufficient markets nearby than for some of the companies with very specialized products for which there exists very limited markets even worldwide. This will be discussed in more detail later. The most striking finding in this group is that neither of these founders emphasized a network of importance. The founder of Norsk Display expresses a wish to develop closer relations with the firm's customers, but cannot be considered to have a strong network at present. Both Dolphin and NOR-REG Machine's founders state that the contact is very much on technicalities and that the contract is very important, both factors characterising a more arm's length relationship. For the founder of Superject on the other hand it varies. He has a very close relationship to a large distributor which is quite essential for the firm's success, but rather arm's-length type of relationships to other actors in the market.

6.3.4 Born Global on Market dimension (BGM)

Founders/key employees' background/experience dimension

Both founders of Fras and KLI are engineers, the founder of Fras has some business education as well. They both speak English and German and the founder of KLI also speaks some French. They have both "always" worked internationally, but have never lived abroad. The founder of KLI has travelled extensively all over the world in relation to installing and having service on large incinerator systems. The international contact of Fras' founder are more through his establishment of subsidiaries in Norway on behalf of large international companies, he states that he sees no barriers with regard to a country's boundaries, they go where the market is whether it is at home or abroad.

Relations dimension

One of the companies here, Fras, is very relational both in terms of building a personal network and a network towards customers. The founder very consciously went out to find Norwegian partners with roots abroad, aiming at the shipping and offshore industry. The founder of Fras, Mr Fjerdingstad also has a very important personal network which he refers to as "my friends". The industry they are part of, the hydraulics industry, is described as very small "where everybody knows everybody" (Fjerdingstad, 2002). The other firm in this category, KLI, is not very close to its customers, but it may vary as the CEO Mr Hendriksen put it,

> *"The contact varies according to who it is. We have better contact with some than others. We have known some of the customers for years and years and feel that we know them. The contact is (still) mainly on prices and technical details."*

> *"There was one important relation, an agent 30 years ago, but he is dead now. He was located in Bergen and was the one that established contacts and made sales for us. He had contacts and sold other products to the ship yards already and he helped us also to get contracts from foreign ship yards"*.

There is currently a new agent that they got a few years ago that has turned out quite valuable for the home sales and Mr Hendriksen believe it is due to him they have about 80% market share in Norway.

> *"He started out as an agent and worked for commission, but now he prefers the role as customer. He loves to sell, is technically competent and we work very well together."*

The CEO of KLI, Mr Hendriksen states that for the *firm*, the network of agents are important. He personally has no network of importance for the development of the firm.

Globalization dimension

Even though KLI's industry is described as only medium global, the firm is on the border to be characterized as TBG (see graph figure10), this may be due to the support it gets from its parent company when needed. The other firm in this category, Fras, is part of an industry with very high degree of globality and it is thus not so surprising that it is as global.

"What is important for us is to go after markets – like for instance the offshore market is one market we target – it is international and knows no countryborders really. There are four market areas we aim for; the offshore industry (oil and gas), ships, the process industry and energyproduction that is where we want to be!"

Product characteristics dimension

The products they sell are high pressure fluid samplers (Fras) and incinerators for ships (KLI). Both firms in this category define their products as industrial products. The founders in both firms also state that the product is specialized, Fras' product itself is quite simple but the surroundings are complex. The founder, Mr Fjerdingstad described it in the following way,

"The business idea was to work with preventive maintenance on large hydraulic and oil-lubricated systems, but the patent is of use for all liquids and gas under pressure. It is a small niche in the productspectrum where the product can be used. The fluid sampler is patented in 19 countries, not just the product, but the principle for the technology – it is I who have invented it. The product is very simple, but we have to build up technology around it that makes it…because it is a completely new technology – noone understand how to sell or buy such a product – why you should need it. So we have to build up a whole platform for the product you might say."

KLI's founder states that the product is somewhat complex "it consists of several components at least" (Hendriksen, 2002). The product life cycle for both products is long. When it comes to price, Fras' product is not sensitive while KLI's product is very sensitive to price.

Summary within-group comparison

To sum up, both founders in this group has "always worked internationally", but neither have lived abroad. Their international experience is more with foreign firms in Norway and/or travelling worldwide in their previous work. The establishment and success of Fras is very much due to the founder's network. He very carefully built relations and even was employed in a company he deemed suitable for that purpose (e.g. Veritas) before starting up on his own. KLI on the other hand, as a subsidiary of a larger and older company relies very much on the network of the parent company. Both products in this group are described as specialized and Fras' also as unique and not price sensitive. While KLI's are not seen as unique and is also price sensitive and thus not being a "typical" born global product. Finally, with regard to the industries' degree of globality, Fras' is described as very global and if we look at the trajectory of Fras, we can see that it has now become a true born global which can be expected of a company in a very global industry. KLI is part of an industry that is described as medium global. KLI is also very close to being a true born global, but the reason why it is very global even in an environment of only moderate globality might be because it has a parent company with everything that goes with it (e.g. network of agents, financial resources and so on).

6.3.5 Gradual International (GI)

Founders/key employees' background/experience dimension

The founder of ICAS is engineer with some marketing background, the founder of Incatel has got most of his "education" through 30 years in IBM.

> *"I am primarily a result of having been 30 years in IBM. What I did most was operation research. That is, to drive optimalization phenomenon in the firm f.i. a production process. I could find the mix one should make of two products if there were different selling price and different price of raw material – then the optimal mix could be calculated. I was 30 years in IBM , 3 of them in the US and 2 of the years in Sweden – then you get an extensive network you can use. I have several years of experience in dealing with the Nordic (market) because (in IBM) we had the Nordic Education System, where we trained new sellers."*

Mr Vedeld (Incatel) lived in the US for three years and in Sweden for two years while working at IBM. Mr Olving (ICAS) has never lived abroad, but he has worked in international organizations such as ABB and Musta International, both located in Switzerland and he has always been responsible for the export part of the business. They both speak several foreign languages.

Relations dimension

The founder of Incatel is very relational both at the personal level and firm level. Mr Olving the founder and CEO of ICAS states on the one hand that they have many personal, international business contacts and he considers building relations as a continuous process. On the private level however, he is more hesitant. He manages to get in contact with the ones he needs to, but considers the *experience* from previous work life as being of more importance than the relations he has made, he has learned whom to contact through that experience.

> *"You can say it is more that you have previous experience (from a country) and know where to start, you don't waste your time and go to the right organizations. We don't have a particularly important relation, we have people for instance our chairman of the board has lived abroad for years and we have many contacts in Europe that we have known for years through previous work."* (Olving, 2002)

Incatel is a firm that is very much built up around different network connections and the personal network of the founder very much coincides with the firm's network connections. When Incatel was founded, Telenor Venture owned 40%, IBM Europe 40%, the founder 10% and the employees 10%. The founder, Mr Vedeld, very much depends on his contacts from his time in IBM and Telenor for getting access to new potential customers, which are large, established telecompanies. He also refers to his network connections in the industry as his "friends".

Globalization dimension

The industries that Incatel and ICAS are part of, can be described as having a medium and low degree of globality respectively, this may account for the fact that both these firms have experienced a relatively slow pace of internationalization. As Mr Olving in ICAS described it,

> *"Yes there are barriers. They were supposed to harmonize the legislation in Europe for instance, but it has not been done yet. It is a typical trade barrier – England has their standard, Germany has their standard and Scandinavia accept most standards, but in addition Denmark has one they demand."*

Product characteristics dimension

The products these firms sell are fire alarms (e.g. ICAS) and software for established telecoms (e.g. Incatel). ICAS' product is thus a consumer good and Incatel's is an industrial product. The product of Incatel is very unique and very specialized while ICAS' product is mass produced and not very specialized, the product itself is not considered unique but the production process is. Incatel is targeting a narrow niche and believe themselves that they are successful at it, as Mr Vedeld put it,

> *"We target niches. The following statement has come up and it is accepted: "We are the world largest supplier of standard software in our niche!" And what is our niche? It is software for established telecommunication companies. There is no other supplier that can provide the software we provide to be responsible for such large telecommunication companies."*

Both products have long product life cycles. Incatel's product is not sensitive to price, ICAS tries to get away from the traditional price competition that is typical in this market with very cheap products coming in from f.i. China. The strategy is to differentiate themselves by the use of new technology and design. In Mr Olving's (2002) own words,

> *"That is what it all comes down to, price and quality. But, that is what we try to get away from (that price is of such significance), by using other means than just price as the Chinese use extensively. We then choose technology and design as competitive factors."*

Summary within-group comparison

ICAS' founder never lived abroad, but he has worked in international organizations. Incatel's founder has lived and worked in the US and Sweden for several years. It might thus be a bit surprising that this case is not experiencing faster internationalization, but there might be other factors that are more important such as type of product. One of the founders in this group is seen as very relational (e.g. Vedeld) and thus emphasize the importance of a network for the development of the firm while the other (e.g. Olving) is more hesitant to emphasize the roles of his relations. The founder of Incatel even characterize some of his business associates as “friends”. ICAS’ founder on the other hand will not emphasize his personal network as being of any particular importance, he states;

“it is the experience from a life of hard work that is important” (Olving, 2002).

The industries the case firms of this group belong to are both described as having relatively low degree of globality. This fits well with the relatively slow pace of internationalization both these firms have experienced. Neither product is seen as price sensitive, but apart from that they differ quite a lot. While Incatel’s product is seen as a unique and very specialized industrial product, is ICAS’ described as a rather standardized consumer product. Incatel’s founder also sees “old methods” as the strongest competition (e.g. same as ColorMatic, Fras, IRTech, Nor-Reg, Opera, Optoflow and Superject) and their product also supports activities described as “mission critical” with the customer (e.g. same as for Fras and IRTech).

6.3.6 Concluding remarks

One surprising finding is that even though the founders state that they have a network of importance and find it rewarding to cultivate these relations, they might not have a very relational attitude towards other actors in the market, f.i. customers. The founders of Fras, Incatel and IRTech all refer to their business relations as “personal friends”, these companies are also the ones that sell products that are supporting needs of the customers that are referred to as “mission critical”, is there a connection? The customers with processes of the type, mission critical, are obviously very dependent on reliable suppliers.

When it comes to the background of the founder, the most striking, but maybe not so surprising is the fact that most of the founders have technical background. In addition, it seems that one of the founders of the gradual global firms (e.g Incatel) have quite extensive international experience and network and it is thus slightly puzzling why it has not moved faster on the internationalization process. We might find answer to that in type of product they sell and globalization of industry.

Almost all of the cases’ products have a long or very long product life cycle no matter which category they belong to, this is quite opposite of what was expected. Not so surprising is the fact that all but two cases produce and sell industrial products, only Opera (e.g. software) and ICAS (e.g. fire alarms) sell consumer goods.

Eighth of the twelve cases’ products are very unique and not price sensitive, the products are seen as so special and performing so much better than the alternative (if there exists one), that the customers are believed to be willing to pay a little extra for it. Opera’s product on the other hand is unique, but also price sensitive. Opera is competing against large actors in the market (e.g. Microsoft), that is not as common among the born globals in this study, most express that they aim for smaller niches in order not to step on the big actors’ toes. It is only KLI that does not claim its product is unique, both NOR-REG Machine and Norsk Display also say it is unique, but it is a bit unclear if the product is price sensitive. Two of the true born globals, ColorMatic and Optoflow, have had a product development phase of 2-3 years, but still they had a very fast pace on their internationalization process, they are very innovative and that might be what gives them the competitive edge.

The case firms and how they can be described, on the basis of five different dimensions have been discussed. A summary is made below (see table 3).

	ColorMatic	Dolphin	Fras	ICAS	Incatel	IRTech
Experience	Some	Some	Experienced	Some	Very	Very
Relational	Not	Varying	Very	Varying	Very	Very
Globality	Low	Very High	Very high	Low	Medium	Very high
Product	S,U,longPLC	S,U,medPLC	S,U,longPLC	Long PLC	S,U,longPLC	S,U,longPLC
Pace of Int.	Very fast	Fast	Fast	Slow	Medium	Very fast

	KLI	NORREG	NorskDisplay	Opera	Optoflow	Superject
Experience	Some	Very	None	Very	Experienced	Experienced
Relational	Varying	Not	Varying	Very	Varying	Varying
Globality	Medium	Medium	Medium	Very high	High	Very high
Product	S,long PLC	S,U,longPLC	U,longPLC	S,U,shortPLC	S,U,longPLC	U, longPLC
Pace of Int.	Fast	Medium	Medium	Very fast	Very fast	Medium

Table 3 Key findings

In order to compactly view the similarities and differences between case firms, the data material, consisting of detailed answers from each interviewee, has been reduced, and each variable has been given relative values on a continuum, which are summarized above. The *experience* continuum has values that vary from *some* experience at the low end, to *experienced*, in the middle, to *very* experienced, at the high end. The network variable has been termed "relational". The term indicates whether the founder or another key employee has a network of importance or not, and reflects his/her relational approach. This variable is a continuum from *not* relational, at the low end, through *varying*, when the firm occasionally uses a relational approach, suggesting placement in the middle of this continuum, to *very* relational, at the high end. An industry's global characteristics are found to vary between low, medium, high and very high, based on the founder's perceptions of the industry in which he/she does business. When characterizing the product, S means that the product is specialized, U means that the product is unique, and the product life cycle is either described as being long, medium or short. The dependent variable, the pace of internationalization, varies on a continuum between slow, medium, fast and very fast. The relative values are assigned based upon the number of countries entered and the export rate measured three years after founding.

6.4 Development of propositions

6.4.1 Introduction

The findings from the within- and between-case and within- and between-group analysis are compared with theory on the field. Based on the preliminary findings some propositions will be presented that might be interesting to test in a follow-up study. The purpose of the study was to describe the process of internationalization of SMEs and to explore why some become gradual international and some are born global.

6.4.2 Experience/background

The behavioural approach emphasises the need for a sequential process of learning when foreign business activities are undertaken. This study's findings show that all of the founders have some international experience, either from working with foreign companies at home or from travelling and visiting partners abroad and/or living abroad for some time, either studying or working. For all parties, a gradual and sequential process of learning has taken place. For some parties, much of the learning has taken place before starting the case firm under study. This finding is supported by Bloodgood, Sapienza and Almeida (1996), who stated: "since international experience of a firm is confined within individuals, new firms formed by these individuals may be able to capitalize on their experience and expand internationally" (p.6). Johanson & Vahlne (1977/90) who base their classification of market knowledge on Penrose's (1959) definition of knowledge and experience, claim that an increase in market commitment follows as experience increases and it is suggested here that this claim is valid at an individual level. The current study, in part, focuses upon the knowledge and experience of key individuals in the firm. Following Johanson & Vahlne (1977/1990), this study supports the idea that traditional theories are not as outdated as some claim (Melin, 1992). Bloodgood, Sapienza and Almeida (1996) argue that a new firm that has specific advantages, including special knowledge and experience of key individual employees, will probably have an accelerated pace of internationalization and a better chance of being successful in its efforts to internationalize. Mr Gjelsnes, the CEO of Optoflow stated that "work methodology" is the most important skill he has attained from life, not relationships. That is, he knows who to contact in the potential organization and how to approach them and the knowledge is gained through years in the industry, before starting up the firm in question. In light of this discourse in the literature, and the findings in this case study it seems reasonable to expect that a firm's pace of internationalization will be affected by key employees with international experience.

Proposition 1

The pace by which a firm enters new markets and the increase in the firm's export share are a result of the accumulation of international experience of the founder or other key employees.

6.4.3 Personal Network

One surprising finding is that even though the founders state that they have a network of importance and find it rewarding to cultivate the relationships in their network, they might not have a very relational attitude towards other actors in the market, e.g. customers. Mr Løchsen in Dolphin, for example, describes the general business climate as being "largely of a technical nature". At the personal level, on the other hand, he has a network of importance, and relationships within a network created to foster European research and cooperation is emphasized. The founder of Optoflow, Mr Gjelsnes, describes the firm's sales as "one-shot" and he believes that there is no reason to build relationships with customers, but he too nurtures important relations to different research institutions.

As can be seen from the case firms in this study, even though there are only three subsidiaries out of the twelve cases, eight of the cases have large, well-known companies backing them and of the last four cases, three have strong relationships to at least one important actor. As the founder of Superject put it, "(it is very important for a newly started firm) to get associated with something bigger" (Stokkan, 2002). ColorMatic is the subsidiary of Tronrud Engineering, KLI is the subsidiary of Kay Lindegaard, and NOR-REG Machine is the subsidiary of NOR-REG. The large company behind Dolphin was Norsk Data; Veritas supported Fras; Incatel was supported by IBM and Telenor; Elkem supported IRTech; Telenor was behind Opera; ICAS closely cooperates with insurance companies; Optoflow has very close relations to different research institutions; and Superject has a very strong and long-lasting relationship with a large distributor, Elof Hanson in Sweden. The remaining firm, Norsk Display, does not have a large firm backing it, but the founder expresses a wish to have closer relationships with customers. The founder of Norsk Display does have an important relationship to someone he met before starting his firm, who has since helped him to locate customers. This supports the findings of Crick and

Jones (2000), who found that several firms were set up by managers with experience from international markets, and most importantly, that these managers had already developed networks and made contacts which could be built upon after setting up their own firms. From this we can pose our second proposition:

Proposition 2a)

The pace by which a firm enters new markets and the increase in the firm's export share, are a result of the founder's or key employees' network.

Based on the results it seems clear that it might be advantageous to dig deeper into the term "relations" or "network" to create better understanding of how it might aid a firm in its internationalization process. Although only three firms are defined as subsidiaries, most of the case firms turned out to have a firm backing it in one way or another and three of the most global firms (e.g. Dolphin, IRTech and Opera) can be seen as regular spin-offs to large, established firms such as Norsk Data, Elkem and Telenor respectively. This gives us the next proposition:

Proposition 2b)

The pace by which a firm enters new markets and the increase in the firm's export share, are expected to be fast for SMEs starting out as spin-offs from larger, international firms.

The experience that Mr Gjelsnes attained from previous work and the discovery of the particular methods that work in the business world are, in his opinion, *most important* for the success of the firm. This is his view in spite of the fact that a very important Swiss connection aided him at start-up. Mr Gjelsnes admits that this man was very important at the time, but he has no contact with him at present. In addition, he has important relationships with various research organizations, such as Sintef, The Norwegian Radium Hospital, and The Norwegian School of Veterinary Science, which aid him on matters where he considers himself to have insufficient knowledge and these institutions cooperate with him on R&D. This downplayed understanding of the role of relationships in business is a finding that is in keeping with Uzzi's (1997) perspective. Uzzi pointed out that any assumptions about individuals being either innately self-interested or cooperative are too simplistic. He found that individuals simultaneously act "selfishly" and cooperatively with different actors in their network. In other words, self-interest is also involved when social relations play a role in the business world. The conclusions made from Uzzi's findings are that the motivation for establishing close ties is neither purely rational nor selfish, but *expert*. This fits well the findings in this study where several founders appear to be very solicitous about with whom they wish to establish a closer relation to. Mr Løchsen in Dolphin also emphasized the great importance of his relations to research institutions, but his general business relations are described more as being largely of "technical nature". A pattern thus appear of it not being traditional relationships to parties like customers or suppliers, but different strategically chosen actors that these fast internationalizing firms need (e.g. researchers) in order to further develop a solution or a product. We thus get the following proposition:

Proposition 2c)

The kinds of relations most prevalent in fast internationalizing SMEs are "expert" relations.

The embeddedness of such close social relations in the market has a very important side-effect apart from the actual research or funding or other it contributes, it creates economic opportunities that are difficult to replicate via market contracts or vertical integration and thus is a good basis for sustainable competitive advantage for the firms involved. The advantages of such relationships is also emphasized by Turnbull (1990) who states that the breath of what is achieved via interactions increases as business relationships also become social relationships. As seen with Incatel for instance, the founder used his connections both to get important contracts but also to find good leaders, e.g. one of his co-workers was recruited from his time in IBM and one from his time in Telenor.

6.4.4 Industry Globality

Internationalization processes of firms, according to the network theory (Johanson & Mattson, 1988), are assumed to be much faster in internationalized conditions (e.g. high degree of industry globality). There are a number of indirect relations with foreign networks even for a purely domestic firm. Even market investments in the domestic market are assets, which can be utilized when going abroad. Bell (1995) also found that international market selection was strongly influenced by domestic and foreign client followership, the targeting of niche markets and industry specific considerations, rather than psychic distance.

An underlying assumption (of the traditional models that explain the transition from a national to a global firm) asserts that firms are well established in the domestic market before venturing abroad (Bell, McNaughton and Young, 2001). This assumption is rejected by most of the interviewees in our study, although many of the firms had some sales in the home market before selling abroad. Ten out of twelve interviewees stated that they intended to go abroad from the start. All ten pointed out that the home market is not large enough for the firm to be established. One explanation of this deviation from traditional development might be the recent changes in the degree of globality of many industries. For many, especially high-technology, products there is a global market potential. In addition, it is often not seen as feasible to establish a new firm if based on sales mainly to the home market, since the product in many cases is so advanced and specialized that there exist only very few potential customers in the home market. This is confirmed by Madsen, Rasmussen & Servais, (2000) who found that the product is often developed for a global-/international market.

Market selection for rapidly globalizing firms is characterised by starting activities in many markets quickly and not always in markets that are geographically close. Bell (1995) explains this phenomenon in the following way: “psychic distance has become much less relevant as global communication and transportation infrastructures improve and as markets become increasingly homogeneous” (p.62). In other words, founders of rapidly globalizing firms may be assumed to perceive the world as *a world that is getting smaller* and it thus seems more accessible even for smaller firms to globalize. From this we get the next proposition:

Proposition 3 a)

The pace by which a firm enters new markets and the increase in the firm’s export share, are a result of the industry’s globality in that it makes foreign markets more accessible for internationalizing firms.

In addition, it is believed that global firms from small and open economies, such as Norway, are believed to globalize because they are pushed (Luostarinen and Gabrielsson, 2001). In such economies the domestic market is often too small to justify start-up and the founders might also fear future competition from global firms in larger countries and these factors push these firms to find new markets. If we look at tables 2 and 3 above, we see examples of this way of thinking in our study. Fras and Opera, which are very global on the market coverage dimension and, in fact, present on all continents, have interviewees that describe their respective industries as being very global. As Mr Jebsen (2002) in Opera expressed it, *“The industry structure is concentrated around a few large actors and there exist no trade barriers whatsoever in this industry. The customers and suppliers are extremely international!”.* Both interviewees stated very clearly that they are not concerned with country borders, and that they aim at finding customers wherever they can be located in the world. We can from this assume that globalization at industry level and the increased competition that results from it, is one of the reasons for the change found in export behaviour:

Proposition 3 b)

The pace by which a firm enters new markets and the increase in the firm’s export share, are a result of the industry’s globality in that it increases competition and by that many firms are forced out not to lag behind.

6.4.5 Product characteristics

Differentiation strategy, that is, offering products perceived by customers as unique by offering superior quality products in niche markets is much used by these case firms. All of the TBGs (e.g. Opera, Optoflow, IRTech and ColorMatic) have very unique, high quality products. As the founder of Optoflow put it:

> *“There are two giants, one in the US and one in Japan – I knew these well and I knew their strategies and I made sure not to step on their toes, not to*

touch their turf – we adapt our product to an area they are not covering" (Gjelsnes, 2002).

Several of the founders also expressed the need to "create or establish" a market for their product (e.g. Mr Fjerdingstad in Fras). This is in accordance with Andersson, Håkanson and Johanson (1994) who claim that the environment is not completely given by external forces, but can be manipulated by the firm. Mr Jebsen in Opera also states that

> *"it is very researchbased what we do and we work towards markets we think will come in the next few years" (Jebsen, 2002).*

This is also typical of entrepreneurial minds that they see the opportunities before others (Stevenson, 1984). On the other hand, new and improved technology may aid firms with small home markets in that economies of scale are no longer a key factor to succeed globally. The improved production technology makes it possible to produce and sell smaller quantities at a profit. In addition, for the unique and differentiated products that most of the case firms sell, the price and thus cost is not vital. It is the unique features that is important and for which the niche buyers are willing to pay well. Many of the founders came with more or less the same statement, *"..once they have tried our product, they will not return to the older, outdated product used earlier".*

Almost all of the products sold by the case firms have long or very long product life cycles, and this is true for all categories of globals. This is quite the opposite of what was expected. Only Opera has a short PLC and they describe it as being very short. This particular product characteristic may not be as important in determining the pace of internationalization as was expected. Perhaps other characteristics of the product have more influence on the pace of internationalization? All of the very rapidly internationalizing cases (e.g. Fras, Opera, Optoflow, IRtech and ColorMatic) describe their product as being very unique, "one of a kind" and highly specialized. This finding accords well with Knight & Cavusgil's (2004) findings, that the most important strategies employed by *born global* firms, in their investigation, underscore global technological competence, unique product development, quality focus and leveraging foreign distributor competence. In addition, Bloodgood, Sapienza & Almeida (1996) found that ventures were significantly more internationalized if they were seeking competitive advantage through product differentiation. This finding is consistent with their reasoning that ventures internationalize earlier on in order to exploit a distinctive competence or feature.

Optoflow's founder stated very clearly that they were careful not to step on the toes of the big actors in the industry. This concern is in line with Porter and Caves (1977) who stated that *focus* allows the small player to avoid head-to-head competition with larger, broadly-based firms that tend to target mass markets. The finding that small firms often follow a niche focus strategy (Moen, 2000) is consistent with Solberg's (1997) framework, which aims at analyzing the strategic options for small and medium sized firms competing in international markets. His view implies that small firms operating in markets that are exposed to international competition do not have any other choice than to focus their resources on an international niche strategy targeting small customer groups. Christensen (1991) provides a similar description, linked to what he calls "the small and medium-sized exporter's squeeze" (p.49), where mainly external factors make it necessary for small and medium-sized firms to start exporting, when they lack internal resources and export competence (Moen, 2000). We thus get the final proposition:

Proposition 4

The pace by which a firm enters new markets and the increase in the firm's export share, is positively related to the product offering's degree of specialization and uniqueness.

6.4.6 Performance

It is quite striking when looking at table 2, that two of the largest firms (apart from Opera), ICAS and Incatel both with 65 employees, have the slowest pace of internationalization of all the case firms. This is in accordance with Solberg (1997) who states that small firms are better suited for acting fast in an international environment. All the firms, except from Dolphin, have grown both in terms of employees and turnover, Dolphin has reduced the number of employees from 20 at start-up to 10 today. Opera has increased the most, from 2 employees at start-up, to the current (2002) number of 110. Opera had a large negative result in 2001 of - 21 mill, but the financial director explains this with them working long term "*we still follow the plan from 1999*" (Jebsen, 2002) and they expect to be profitable by 2003 "*we have to have a long-term perspective – it has to do with the market being established*" (Jebsen, 2002). Five out of the twelve cases had negative results in 2001, but two of the firms with the largest negative results, Incatel aand Opera with – 43 mill and -21 mill respectively in 2001, were positive of the future. Opera expected to have a positive result of about 10-20 mill this year (2002) and Incatel forecasted to have a positive result of about 10 mill by 2002 following from the contract with TeliaSonera. Looking at the numbers from 2002 (source: Brønnøysundregister) Incatel had a positive result of 10.16 mill NOK and Opera, a negative result of -14.85 mill NOK. Incatel in the "Information Memorandum" describes themselves as having "stable growth and healthy economics" (p.20). They achieved revenue growth of 35% from 1994 (9 mill) to 2000 (54 mill) and they have been around break even or profitable every year except for year 2001. The explanation given for the fall in revenue growth in year 2000, and the weak revenue and profit figures in year 2001 was that they had made a significant investment in product development, that they increased sales and marketing efforts to strengthen their Nordic position and also the fact that the times were difficult in the telecom markets in 2001. The efforts in product development and sales and marketing seems to have paid off for 2002 and the years to follow, they forecasted revenues of 80 mill for year 2002. These two firms, Incatel and Opera, was in addition rated as 2 out of

26 hottest firms in Norway and were chosen to take part in the "Norwegian Tech Tour" where they are to make themselves attractive for representatives of the world's largest "venture-moneybags". The criteria to be selected were that the firms had to be in ICT (e.g. Information Communication Technology), energy or biomarin business. They should be in a phase of expansion, have unique technology and be international on a large scale.

Dolphin, with the largest negative result (-19 mill), explains this by the fact of the USD falling in March 2001, the result in 2000 was 79 mill and turnover was 63 mill in year 2000, the sales and the profits accordingly thus seems to fluctuate quite a bit. ICAS is the case with the best financial result out of these twelve cases in 2001 and in third place in 2002 (e.g. behind Incatel and Nor-Reg) this may be explained partly with the firm being cautious in their expansion strategy, referring to their slow internationalization, they still only have an export rate of about 45% 13 years after start-up and they are present in about 6 countries mainly in Europe, with Sweden being their most important market accounting for 40% of their total sales. Another explanation for the good results may be that the product ICAS sells is a rather simple product made for a mass market and thus not demanding large investments in product development. Last, but not least, ICAS is the "oldest" firm of the sample (established in 1989) and it follows then that it has had the time to get established in the market and to pay off debt. We saw above that both Opera (established in 1995) and Incatel (established in 1993/94) with relatively large negative results in 2001 expected this to change in the very near future and already the year after it had greatly improved.

6.4.7 Summary

The propositions presented give a good starting point for a further study, but first the assumptions behind the propositions will be elaborated. ICAS is the least global case and Opera the most global case on both dimensions (e.g. export share and number of markets). Why is that so? What are the differences between these two firms that might explain their different paces of internationalization? Both ICAS and Opera produce consumer goods, but Opera also has large industrial firms as customers. In addition, Opera also has a large and powerful supporter in Telenor, where the founders previously worked. Telenor supplied Opera with locations and consultants when Opera started up. ICAS had no large company to support its establishment. The products of these two firms are also very different. Opera's software has unique features and is very specialized, differentiating it from other similar products. Opera's software has a very short product life cycle, demanding constant updates. ICAS' smoke detectors are neither unique nor specialized and they have a long product life cycle. Opera's product is also special because it can be distributed over the internet. It makes no difference where the customers are located, as long as they have access to the internet. This obviously simplifies the process of internationalization. Finally, the founder of ICAS describes the industry's level of globality as being low, because products must meet different standards from country to country, while in Opera's case, the industry's level of globalization is described as being very high, with no barriers whatsoever and a demand pattern that is described as being a global one. Both founders describe their competition as being very strong, but while Opera has its competitors from a few and very large American companies, such as Microsoft, ICAS' founder state that its competition is from many small and large companies, especially from China. Another factor that might have influenced the extremely different pace of internationalization may be the characteristics of the founders. Opera's founder is 35 years old and he has extensive experience living and working abroad, and the relations to actors in the market are described as close, while ICAS' founder is 57 years old and he has neither lived nor worked abroad, although he has some experience working for international firms and he will not point at any relation of particular importance to the firm's development.

From the discussion above we get that the strategy to become a successful fast internationalizing SME (e.g. born global) when originating from a small economy, is to offer unique and specialized products or services to well-defined niches and making use of low-commitment foreign operation modes which enable the firms to be present in many international markets even when having limited resources. The main challenges for such firms are to convince customers of the superiority of the products or services (e.g. "would never change back to the old methods") and also to protect themselves from larger actors in the market copying their products. Being a very small actor which most Norwegian firms are on a world scale, also means they sometimes have to work hard to prove they are here to stay (especially a problem when supplying a customer's mission critical process, e.g. Fras, Incatel and IRTech).

Chapter 7 Conclusions and Implications

7.1 Main Findings

The most important finding is that firms fitting the traditional definition of born globals might be seen as a much more heterogenous group of firms than previously assumed. Based on the findings in this study, we find that it might be useful to divide the born globals into more specific categories (e.g. born globals on export dimension, born globals on market dimension and true born globals). There is found to be certain similarities on firms within each category on the four variables studied (e.g. experience, network, industry globality and product characteristic) and differences on these variables between the firms in the different categories. This will be elaborated on below.

Most of the founders who were interviewed in this study have some international experience, either from working and/or studying abroad or from working in an international firm in Norway. The founders of the firms with the slowest pace of internationalization, ICAS and Incatel, have *some* and *very much* experience, respectively. This finding may be somewhat surprising. One of the founders is also described as being very relational, meaning that he recognizes the importance of networks for the development of the firm. The explanation for the slow pace might be found in the two other factors. The global characteristics of the industry are described as being relatively *low*, for both industries, and the product characteristics are both described as having long PLCs, and in ICAS' case, the product is a standard one, and easy to sell, even in the home market. In contrast, the product of the true born global firm IRTech, is so specialized and designed for such a narrow niche that potential customers in the home market do not even exist. The products of all the most global cases (e.g. Dolphin, IRTech, Opera and Optoflow) are described as being very specialized and very unique. We must from this assume that technological excellence helps rapidly globalizing firms to develop products that appeal to niche markets around the world.

With regard to the relational variable, it seems that all firms have networks or at least a few relations of importance, but there is some variation regarding the degree to which founders are willing to acknowledge their importance. Our findings support the idea that founders should not be described as being either relational or not. The founders of Dolphin, KLI, Norsk Display, Optoflow and Superject all vary with regard to whether or not they should be classified as being relational. While some, like the founder of Norsk Display, sees the lack of close relations to key actors in the industry as a weakness and wish to improve this area of their performance, others, like the founders of Dolphin and Optoflow, are not very relational toward typical actors in the industry, i.e. customers and suppliers, but they both have very important relations to different research institutions which they consider vital for the success of their firms. In other words, they are very selective regarding the parties with whom they build relationships. The kind of relations they build may also depend upon the kind of product the firm is offering. Both ColorMatic's and Optoflow's sale is described as "one-shot". That is, they do not consider there being a basis for building relationships since there is very little or no repurchase of their products. This study thus, gives a more nuanced insight to the different types of relations that exist among the different parties in the market arena and how these different types of relations may influence a firm's process of internationalization.

When it comes to the globalization variable, almost all firms with a very rapid pace of internationalization, on both dimensions, (e.g. ColorMatic, IRTech, Opera and Optoflow) described the industry as having *very high* or *high* global characteristics. The exception is ColorMatic. ColorMatic has a parent company and this relationship may make it easier for the firm to access resources, i.e. capital and human resources. This configuration might explain the firm's rapid pace of internationalization despite the *low* global characteristics of the industry. It can be concluded that firms originating from peripheral and small countries may not be at such a disadvantage in the current globalizing environment. Globalization drivers such as improved communication and transportation technology vastly increase these firms' ability to sell and market their products in foreign markets. Previously there has been a positive correlation between trade and proximity, but today distance is in many cases not seen as an obstacle to internationalization.

With regard to the dependent variable studied here, the pace of internationalization, it was found that one dimension, the entry mode dimension, was not as valuable for distinguishing among the different case companies and for classifying them into different categories of "globals". The reason for this was the little variance found in the types of entry modes used by the case companies in particular with regard to the resources committed to the foreign market. Most of the case companies made extensive use of relatively low-commitment and thus low resource demanding modes such as OEM-agreements, agents, distributors and direct export, not only at the very early stage of internationalization, but it was often the preferred mode even at later stages. As a consequence this dimension of a firm's degree of internationalization was not considered important for classification and the two dimensions; market selection or market spreading and export share was used for this purpose. As most studies on internationalization and the increased involvement of firms in international markets has focused on the choice of entry modes or foreign operation modes used by the internationalising firm, this study thus departs from this tradition.

7.2 Limitations of the Study

As all studies, this study has been undertaken with certain resource constraints. The most important one is that the study has been undertaken by only one researcher. It is likely that a team of researchers would have been able to go deeper into the material and provide a more nuanced view. Secondly, several authors (e.g. Saunders et al, 2003; Yin, 1994; Van de Ven & Huber, 1990) have pointed out that different biases must be kept in mind as a limitation. Any researcher will have biases about the companies studied. An important limitation of any study is thus the personal biases of the researcher. The danger is to find only what you are looking for, but due to the open-ended structure of the questions allowing for each interviewee telling their story in their own words it is believed that this was not the case here. In addition, contrary to previous researchers who studied the pace in particular industries such as high-technology manufacturing industry (e.g. Lindqvist, 1991; Bell, 1995; Burgel & Murray, 2000; Junkkari, 2000), the case firms in this study represented several very different types of industries. Also the twelve case firms were completely unknown to the researcher before the research started. However, there is still a danger of unconscious bias, this is attempted amended for by writing out the cases in detail for colleagues to read to test the interpretation, in addition quotes are used extensively to allow the reader to make up his or her opinion of whether the conclusions drawn are plausible.

7.3 Practical Implications

The findings reveal that a change in policy is warranted by an arm of the Norwegian government. It was claimed by several of the interviewees that the Norwegian Industrial and Regional Development Fund (SND) or Innovation Norway as it is called since 1 January, 2004, requires all new firms to have a foothold in the home market before granting them financial support for export. This view is in line with traditional theories on internationalization. Such a requirement unnecessarily complicates matters for most of the firms affected by this ruling. The home market in Norway is too small or non-existent for many industries and there is no economic basis for establishing a large number of firms if they are primarily required to base their incomes on home sales. The markets for many newly established firms are seen as being international and, in many cases, the market is a global one. This reality should be made known to those in the Norwegian government who are responsible for creating the guidelines for fund allocation to SMEs in Norway.

In a study of the factors influencing entrepreneurship in Norway (Røste & Schanke, 2006) it was found that personal characteristics and competences are of utmost importance to succeed, but experience and access to resources were also found to be of importance. The same also found that the founders were not dependent upon public incentives to succeed, although to what degree a potential founder has access to resources may indirectly be influenced by public policies and initiatives made to encourage increased entrepreneurship activity. According to Mr Bakke and Mr Snedal in Innovation Norway there is no established policy stating that a firm should be well established in the home market to get financial support and mr Bakke even stated that “we are familiar with several firms being born global” (April, 2006). However, as our discussion proceeds it turns out they are a bit sceptical to globalisation at the point of start-up, as they believe internationalization will be very resource demanding and Mr Bakke also explicitly states that the firms applying for funding will be evaluated on what they have achieved at home first and foremost and thus, it seems the comments from the founders may reflect the reality. Mr Snedal also states that as it is more difficult to document market potential for a product in a potential international market, than in the home market this may in reality mean that the potential born globals will not be first in line to get funding from Innovation Norway. As Mr Bakke put it; “no firm is entitled to support, and an evaluation of the risk involved in the venture may be decisive!” An international venture is likely to be considered more risky and thus is less likely to get funding.

Access to capital is seen as a major barrier for new ventures in Norway. It is according to Spilling & Steinsli (2003) widely recognised that unavailability of risk capital, particularly in the early stages of development, may represent a barrier to development. The same argue further that there are weak traditions in this field in Norway, and that the Norwegian venture capital market is immature. This is in keeping with Mr Vedeld (telephone interview, April 2006) who stated that “Norwegian investors jumps in at the first stage, but then they are happy to sell…”. He further elaborated that “it is as expensive to sell a product as to develop it”, and he believes the Norwegian business community do not understand this. That is the reason for good Norwegian high-tech products are developed and reach venture stage, but then it is often sold to foreign owners so they can take it further and commercialize it. The exceptions are Opera and Opticom which so far have remained in Norwegian ownership. Mr Vedeld claims there is too little know-how of international marketing (except in the shipping industry) in Norway. There are many good brains who invent new software for instance, but it all too often disappears abroad in short time. This founder’s view is in keeping with Spilling & Steinsli (2003) who state that there has not been a clear focus on commercialization and how research institutions and intermediate institutions may be designed in order to improve these processes. It seems the former government (Bondevik) were aware of these deficiencies and has now established an Entrepreneurship Forum (NHD, 2005). This is a forum designed to create dialogue between entrepreneurs and public authorities. The purpose is to get useful suggestions on the economic policy and the apparatus of means through a direct dialogue with entrepreneurs. The forum is organized as a seminar and they meet once or twice a year, with different topics of focus each time. The two seminars they have had so far covered topics of counselling, network and tax and the last one was on commercialization of research. The former government aimed to continue these seminars due to positive experiences from them, but it remains to be seen whether or not the current, more left-turned government will do so. Another initiative from the Bondevik-government came as a follow-up to the government report “from idea to value” (NHD, 2003). Contact has been made between the Ministry of Trade and Industry and the Confederation of Norwegian Enterprise, the main organization for Norwegian employers, in order to establish opportunities for establishing ways of improving he conditions for co-workers in large companies with a wish to start on their own. The attitude that is found in large corporations to spin-offs is seen as maybe even more important with regard to the rate of entrepreneurship in the country, than single initiatives form the policy makers (NHD, 2005). Several of the cases in this study may be seen as regular spin-offs of larger corporations (e.g. Incatel of Telenor, Opera of Telenor, IRTech of Elkem, Fras of Veritas, Dolphin of Norsk Data). Some of the other case companies have a similar background, but have stayed within the safe folds of a parent company and are thus subsidiaries and not independent new firms (e.g. ColorMatic, NOR-REG Machine, Kay Lindegaard Incinerators). Still, Spillling & Steinsli (2003) found that there are only a few larger manufacturing companies in Oslo and this may be related to less capacity for developing indigenous firms, i.e. as a result of spin-offs from universities or existing firms.

When it comes to the implications for the management of SME's considering expanding internationally, the results of the study suggest that the SMEs which may be recommended to venture abroad at an early stage are the ones with;

- a unique product/or production process

- founders or other key employees with extensive experience and network from previous employment in similar industries, in particular will the ones with strong relations to key persons in large, successful organizations have a large advantage, or the ones with good and well-established relations to certain actors in the industry supporting them with knowledge and insight to areas they themselves are lacking (f.i. research institutions) will be at an advantage compared to those not having such relationships (e.g. they have to start at start-up with establishing such relationships).

- products adapted for a global market – may *need* to venture abroad and an earlier stage in the firm's development, compared to firms with products for which there exists a sufficient home market.

7.4 Implications for Future Research

This study departs from other studies of firm internationalization where the focus is mainly on the increased resource commitments to foreign markets. The case firms in this study mostly use low-commitment modes for their foreign operations. They either export directly to customers or they engage agents and distributors to manage their foreign operations. This might be explained by the fact that many SMEs simply do not have the resources in place to make the investment necessary for more high-commitment modes. There may also be little or no motivation to engage in high-commitment modes, since the niches they aim for are too small to justify the kind of resources needed for internalizing their activities abroad. The entry mode dimension and the possible gradual increase of resource commitment to each market may thus not provide us with very interesting information. The market selection dimension, on the other hand, seems to vary substantially for the different case companies in our study. All but two of the case firms can be categorized as being rapidly globalizing. The market selection dimension and not the entry mode provide us with more interesting information for SMEs that are undergoing internationalization. Further studies should be made to investigate a larger sample of the rapidly globalizing firms, with focus on their market selection strategies. We need to know what factors influence their choice of markets. This knowledge will deepen our understanding of those firms that rapidly undergo internationalization.

Performance was not emphasized in this study. It was assumed that firms internationalize in order to benefit from potential profit opportunities outside of the home market or to resist competitive pressure. The assumption is that factors that influence the firm to internationalize also contribute to its increased profitability. It was assumed that the more international/global a firm is, the better it performs. This assumption may be a bit off the mark, but export sales ratio was the most used indicator of export performance according to Katsiekas, Leonidou and Morgan's (2000) analysis of 100 articles that studied export performance. The non-economic measure most commonly used in the studies is number of export countries. In other words, to measure a firm's export success by measuring its degree of internationalization is quite common. Still, this is not to say this is the correct and only way of doing it, but due to the age of the firms studied here it will have to do for now. The firms in this study are very young and a follow-up study should be made to study survival rates and how widespread de-internationalization is among the firms in the sample. It has been too short a time since establishment for some of the firms for the positive effects of sustained investments in research to be reflected in operational results. It might also be of interest to compare firms that gradually internationalize to firms that rapidly internationalize, in order to find out which ones perform better. A study of that kind would introduce a normative aspect to the pace of internationalization.

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www.superject.no

www.brreg.no (the Brønnøysund Register)

Appendix 1: Interviews in chronological order

Date	Interviewee	Position	Company
10.10.02	Claus Wahl	CEO	Norsk Display
11.10.02	Harald Hendriksen	CEO	Kay Lindeg. Inc
15.10.02	Kåre Løchsen	CEO	Dolphin
21.10.02	Odd R.Vedeld	CEO	Incatel
22.10.02	Christian Jebsen	CFO	Opera Software
22.10.02	Heljar Hovland	CEO	IRTech
29.10.02	Oddbjørn Gjelsnes	CEO (ex-)	Optoflow
01.11.02	Jørgen Ingeberg	CEO	NOR-REG M
06.11.02	Frederick Schaefer	Mrktn Mngr	ColorMatic
07.11.02	Ketil Olving	CEO	ICAS
08.11.02	Sølve Fjerdingstad	CEO	Fras Techn.
11.11.02	Per Stokkan	CEO	Superject

E-mail/Phone contact for follow-up questions:
Claus Wahl in Norsk Display e-mail on 24 of April 2003
Christian Jebsen in Opera Software telephone interview on 23 of April 2003
Jørgen Ingeberg in NOR-REG Machine now technical Director for the German subsidiary e-mail on 23 of April 2003
Asle Fjelldal Support Manager in ColorMatic e-mail on 24 of April 2003
Sølve Fjerdingstad in Fras Technology e-mail on 23 April 2003
Odd Vedeld in Incatel (now Comptel) telephone interview 5 of April 2006 and e-mail reply
Claus Wahl in Norsk Display e-mail on 19 of April 2006
Sølve Fjerdingstad in Fras Technology e-mail on 23 of March 2006
Oddbjørn Gjelsnes in Optoflow (now BioDetect) e-mail on 1 of April 2006

It was not possible to locate and get additional information from all interviewees, but where this was the case, more updated information was sought on the different firms' homepages and from newspaper articles. In addition, the information from the Brønnøysund Register was quite extensive, where it was often elaborated on both change of leadership and ownership and in some cases the reasons for these changes and also if there was a large negative result one year this was also explained. In the case of NOR-REG AS there was also information on the share of export to the different areas of the world.

Bjørnar Snedal in Innovation Norway telephone interview 21 of April 2006
Petter Bakke Innovation Norway e-mail on 24 of April 2006

Appendix 2: Postscript

ColorMatic has continued as before, the employees were reduced to two in 2003 after a large negative result in 2003, the result was modestly positive in 2004.

Dolphin had a large negative result in 2002, but it was greatly reduced in 2003, there were no accounts for 2004, due to the company becoming a wholly-owned subsidiary of Dolphinics in December 2002. The large negative result in 2002 is explained by fluctuating currency rates in particular sinking USD. The negative result in 2003 is explained by costs incurred from tidying up after former managers in the US. The employees increased to seventeen in 2002 and eighteen in 2003.

Fras Technology had a small negative result in 2002 (-10 000 NOK), and it decreased to further to -2.6 mill NOK in 2003, the numbers for 2004 were not available. The number of employees have increased to six in 2003 (from four in 2001).

ICAS has healthy positive results all years even though it became a bit low (0.79 mill vs 2 mill the 3 years before), the employees in Norway are five all years (the number reported in the table for 2002 is including the employees in Prague (100% subsidiary since 1991). A subsidiary in Hannover, Germany was established in 2002 and one in UK in 2003.

Incatel has also got healthy results of 10 mill NOK in 2002, 57 mill NOK in 2003, and 3,4 mill in 2004. In 2003 Incatel was bought up by EDB Business Partner with all its employees (seventy) intact. Six months later EDB put Incatel out for sale since they decided that development and maintenance of networks for telecompanies was not their cup of tea. The autumn of 2005 Incatel was bought by the Finnish company Comptel. The current export share for Incatel is approximately 60%, it has decreased because of large contracts to Telenor. Incatel now has the advantage of 60 sellers from Comptel that are active worldwide and since Incatel's product is complementary to Comptel's product they can sell it to existing customers of Comptel.

IRTech has also got healthy, positive results in all the previous years, the best was in 2003 with 3.7 mill NOK. One more person was employed in 2002.

KLI's result was positive in 2002, the rest of the years it has been slightly negative (-0.5 mill in 2004). KLI employed in 2004 two point five persons.

NOR-REG Machine AS was merged with its parent company NOR-REG AS in January 2002. Sales to different geographical areas (for the parent company NOR-REG AS) are distributed as follows: 37 mill to Norway, 26 mill to the rest of Europe, 19 mill to the rest of the world, 14 mill to Sweden and 9 mill to Denmark. Export share is thus approximately 65%. Due to reduced interest rates in 2003 and reduced value of the Norwegian currency, they expected to experience improved competitiveness. The Iraqi war also influenced in making investors sceptical to make long-term investments.

Norsk Display has in the last couple of years had a modestly, positive result of with 0.26mill NOK in 2004. The workforce was reduced to two in 2003.

Opera Software went from quite large negative result in 2002 (- 14 mill) to 62 mill on the positive side in 2004. They have currently (2004) one hundred and twenty-six employees in the concern.

Optoflow was bought by Biodetect in the first quarter of 2002, from the third quarter and onwards Biodetect has taken care of the marketing and sale part, while Optoflow is now purely a development company. Optoflow received a loan from Biodetect in 2002 to the development for a new product to the defense industry, but it failed in the commercialization phase. They have lost 50% of the stockcapital in 2004 and 2005 there has been a further worsening of the situation, continuing business is dependent upon great improvements or adding of new net capital.

Superject has had a modestly positive result all years except in 2003 (- 0.3 mill). There has been some conflict among the Board of the company and the CEO. In 2003 Superject became the subsidiary of the main shareholder Marcussen Holding AS and in 2004 the CEO was let go and he is now running a lawsuit against the company for unreasonable dismissal. There were five employees in 2003 and four in 2004.

Appendix 3: Interviewguide

Globalisering og Internasjonalisering av Norsk Næringsliv

Faktaopplysninger

Hva er din posisjon i bedriften (tittel)?

Var du med å starte opp bedriften?

Har du høyre utdanning isåfall hvilke (teknisk,pedagogisk, økonomi, juridisk, ledelse, administrasjon)?

Hvor gammel er du (evt. gi kategorier)?

Hvilken bakgrunn har grunnleggeren av bedriften (teknisk, økonomisk, administrativ)?

Hva var omsetningen deres i år 2001?

Er det børsnotert selskap, familieselskap eller annet (har det endret seg – milepæler for bedr)?

Er bedriften en del av et konsern (moderselskap (norsk/utenl), datterselskap)?

Hvor mye eier grunder (i %)?

Del 1
Hvordan startet bedriften opp – hva var ideen bak?

Startet dere eksport før dere hadde salg hjemme?

Fulgte dere kunder ut?

Hvilke land er dere inne i idag ?

Hvilke marked gikk dere inn i først?

Hvilke inngangsstrategi ble brukt i første utenlandske marked (agent, joint venture, distributør, salgskontor)?

Hva påvirket valg av inngangstrategi?

Hvordan ble potensielle partnere identifisert/evaluert?

Hvilke kriterier ble brukt?

Hvilken distribusjonskanal er den mest brukte på de viktigste eksportmarkedene idag?

Hvor stor del (omtrent) eier dere av denne distribusjonskanalen i deres viktigste eksportmarked
(skriv prosent eller 0 hvis de ikke har noe eierskap)? _______%

I hvor mange (evt. hvilke) markeder har dere endret ”strategi” til en annen?
______

Hva har vært hovedårsaken til skiftet?

Hva er eksportandelen ifht total omsetning idag og tre år etter oppstart (i %)?

Hva anser dere som deres viktigste internasjonale marked/område idag ?

Hvor stor % av bedriftens totale salg ”originate” utgår fra det viktigste markedet?

Kjente dere til det viktigste markedet før oppstart?

Hva er ser du som deres viktigste (nye) eksportmarked om tre år fra nå ?

Hvor mange land eksporterer dere til idag? ______

Hvordan går dere fram for å finne nye kunder?

Er internett viktig for dere? På hvilken måte?

Hvordan vil du beskrive den generelle kontakten mellom kunder/leverandører (flest arms'length
eller nære – viktigste nære? er det mange isåfall)?

Hvordan håndterer dere uenigheter?

Er opportunisme et problem?

Del 2
Hvordan oppfatter du konkurransepresset i din industri (sterkt, medium, svakt)?

Hvordan oppfatter du industristrukturen (oligopolistisk vs fragmentert)?

Hvordan oppfatter du handelsbarrierene til ulike marked innen din industri (store hindringer vs. ikke-eksisterende hindringer?

I hvilken grad oppfatter du deres kunder/leverandører som internasjonale (stor grad vs. liten grad)?

Hvordan oppfatter du det internasjonale etterspørselsmønsteret (globalt vs. lokalt)?

Hvorfor gikk dere internasjonalt (på grunn av lite hjemmemarked, hard konkurranse på hjemmemarked, så muligheter i utlandet, lett access, etc)?

Del 3

Har du arbeidet i utlandet tidligere? Hvis ja, hvor og hvor lenge?

Har du studert i utlandet? Hvis ja, hvor og hvor lenge?

Har du vokst opp/bodd i utlandet? Hvis ja, hvor og hvor lenge?

Har du arbeidet i en utenlandsk bedrift?

Har du hatt kontakt med utenlandske markeder før oppstart av denne bedriften, hvis så på hvilken måte?

Hva var tankene ved oppstart - ble det planlagt ved oppstart å "gå internasjonalt" med en gang?

Hvilke språk behersker du?

Del 4

Har du noe nettverk fra å ha studert i utlandet/ bodd i utlandet/ tidligere arbeid i utlandet?

Har dette nettverket på noen måte bidratt til å forenkle internasjonaliseringsprosessen til denne bedriften (mht til hvilket marked dere valgte å gå inn i og hvilken inngangsstrategi dere brukte)?

Introduserte eller opplyste noen av de relasjonene dine deg til/om kunder/partnere/distributører i det utenlandske markedet?

Hvordan vil du beskrive relasjonen din til den personen i dette nettverket (velg en vikrig relasjon i forkant av dette spørsmålet)?

Hvor lenge har du kjent denne personen?

Hvor ofte, i snitt, har dere kontakt (daglig, ukentlig, månedlig)?

Hvilken type kontakt har dere som oftest (per mail, telefon, ansikt til ansikt)?

Tilhører den viktige relasjonen til en bedrift dere er tilknyttet (leverandør, kunde, distributør o.l.) eller er det en rent personlig relasjon?

- Hvis bedrift, hvilke beskrivelse passer best for den bedriften din relasjon er en del av (produsent/fabrikant, distributør/agent/grossist/forhandler, detaljist)?
- Hvilken type interaksjon er der mellom din bedrift og bedrift X – hva blir kjøpt og solgt?

Hva er din personlige rolle i disse handlene?

Hvordan og hvorfor startet denne relasjonen mellom deg og denne personen?

Del 5
Hvor mange ansatte har dere i Norge ______ i utlandet _______?

Hva er utdanningsnivået til de ansatte?

Er det mange ansatte som har internasjonal erfaring?

Gjennomsnittlig alder på de ansatte?

Føler dere at, pga mer begrensede finanser, at dere har færre valgmuligheter når det gjelder å gå inn i nye markeder enn større bedrifter?

Retter dere dere mot små spesialiserte nisjer i markedet?

Del 6
Beskriv produktet deres.

- Er det industrirettet produkt eller konsument rettet?

- Er det et ordinært eller mer spesialisert produkt?

I hvilken grad er det standardisert?

Er det et komplekst produkt?

Må det fornyes ofte (blir det raskt foreldet)?

Hvor sensitiv er etterspørselen etter produktet deres til pris, kvalitet og mote trender?

Hva er prisnivået deres ifht konkurrentene?

Hvordan tror du kundene i deres viktigste eksport markeder vurderer kvaliteten av de produkter dere tilbyr ifht det deres konkurrenter tilbyr?

Sammenlignet med det konkurrenten tilbyr er eksportproduktene deres unike på noe vis når det gjelder design, teknologi, markedsføring eller egenskaper?

Del 7
Hva er deres omtrentlige markedsandel i hovedeksportmarkedet?

I forhold til tidligere forventninger, er du fornøyd med resultatet de siste tre årene når det gjelder:
- markedsandel i dette markedet
- salgsvekst i dette markedet
- lønnsomhet i dette markedet

Hvordan tror du salgsutviklingen for dere har vært på det viktigste eksportmarkedet ifht de største konkurrentene (lavere, høyere, likt)?

Føler dere at dere har fullt ut utnyttet markedspotensialet i det viktigste eksportmarkedet?

Føler dere at eksportarbeidet har vært en suksess?

Hvor mange ansatte var dere
da dere etablerte bedriften:
første året dere eksporterte:

Hva var omsetningen
første driftsåret:
første året dere eksporterte:

Hvor stor var eksportandelen første året dere begynte med eksport: %

Del 8

Hvor viktig er hver relasjon til den nåværende suksessen til bedriften? Til den fremtidige suksessen?

Er dere fornøyd med relasjonene?

Hva vil du si karakteriserer en bra relasjon? (e.g. ofte ansikt til ansikt kommunikasjon, økt salg, konkurransefordel)

Hvor viktig anser du bedriftens lokalisering for beslutningen om å internasjonalisere? I valg av relasjonspartner?

Hvor viktig anser du konkurranse for beslutningen om å internasjonalisere? I valg av relasjonspartner?

Hva anser du som bedriftens styrke/svakhet?

Nøkkelsuksessfaktorer for å lykkes internasjonalt som en SME basert i Norge?

Hva er fellene en bør unngå?

Har dere en plan videre (formell/uformell)?

- vekst (antall ansatte, omsetning, eksportandel)?