

High tech and low tech Born globals
Are they any different?

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Abstract

This paper discusses differences and similarities between two classes of Born Global firms: high technology and low technology. It reveals that – based on research of four different Norwegian case companies, two in each category - global orientation and proactive attitudes of the founders are equally important drivers for both classes of firms. But the differences are just as important: the nature of the products and the needs that they address warrant different approaches to marketing concerning planning and information gathering, customer relations and entry modes. The limitations of case studies warrant follow up studies in order to test the propositions flowing from the discussion. We also believe that the study should be followed up in other countries so as to explore possible differences due to cultural or other (for instance country size) backgrounds.

Introduction

Although most descriptions of Born Globals include some reference to high tech firms (Cavusgil and Knight 1996), also firms in more conventional technology oriented industries have been observed in this class of firms (McAuley 1999, Servais and Rasmussen 2000, Shrader et al 2000, Moen 2002). The emergence of Born Globals has spurred a host of articles that describe the drivers of these firms and the mechanisms of their development. But none – to our knowledge - has so far investigated the possible differences between high and low tech Born Globals. The present paper aims to fill this gap in the literature. More specifically, the paper endeavours to give answers to the following questions: what are their drivers, how are they triggered, what are their marketing and internationalisation strategies? Through the analysis of four Norwegian companies we develop a number of propositions pertaining to these issues.

This paper is structured as follows: First we discuss the terms high technology and low technology and identify salient features of each class of firm. We then describe relevant issues pertaining to Born Globals internationalisation process and marketing strategies. After a brief presentation of the research methodology, we analyse the four firms, before we develop our propositions.

Low tech and high tech industries

In order to fruitfully discuss these issues it is necessary to make a distinction between the two classes of firms: high tech and low tech. There is no general agreement on how to define high tech industries (Wong 1990). Wong (1990) suggests that the lack of standard definition may hinge on the very nature of the industry itself, with changing characteristics, influenced by market forces, public policy or technology itself. However hi tech industries may be regarded as the archetypal sector where one would characteristically identify Born Globals: The cutting edge feature of high technology and the resulting needs for research and development (R&D) in these firms mandate a strategy of rapid expansion in order to lower per unit costs and to pre-empt competitive entry. Because of the strong focus on intellectual capital including scientists, engineers and technicians, these companies frequently introduce

innovations to the market, often in directions that are hard to predict. High technology may be seen in industry sectors that at the outset may be classified as traditional, such as for instance oil and gas exploration, aluminium, shipping, fishing, farming or banking industries. However the innovations address “old” needs in new and more economic ways using – well, yes: high technology in for instance ICT or biotechnology. High technology firms may also invent brand new products such as the mobile phone or the internet. In principle also these products or services address an old need, that of communication

Another feature of high-tech industries is the dynamism that partly may be ascribed to the globalization trends (Saarenketo et al 2004). The short product life cycles that epitomize R&D intensive industries place a tremendous pressure on Born Globals to internationalize in order to survive, grow and succeed (Coviello and Munro 1995, Oakley 1996). Also the introduction of new solutions to old problems may eventually lead to a redefinition of the industry structure globally, and as such redefine the major players in the industry. One may assume that entry barriers in IO terms (Porter 1980) are low, since newly started firms are able to enter the market. However, the investments in R&D and market development preclude others to join the bandwagon in the immediate short term. Also the concept of entry barrier takes on a different meaning in this context as many entrepreneurial start-up firms have another rationale than incumbent firms. Barriers perceived as being high of incumbent firms are by entrepreneurs perceived as low or even non-existing, since they have a diametrically different starting point (no existing organizational structures).

Turning now to low tech industries these are commonly based on an established and mature technology that can be purchased through well-known market channels (Haahti 1998). The competitive advantage of firms in this industry is often derived from efficient and low cost operations, meticulous logistics systems and less use of R&D resources to maintain their competitiveness. On the other hand, given the convergence of market conditions and the relatively easy access to markets through internet and low cost transport, low technology start-up firms may equally thrive in global markets. One big difference might occur in this context: incumbent large scale players in the industry have erected structural barriers to entry – such as

economies of scale or brand image. Cases in point may be food and soft drinks. Given the lack of innovation in the industry, it may therefore be more difficult for new entrants to break into the realms of existing players.

Figure 1 summarises the main differences between high technology and low technology industries:

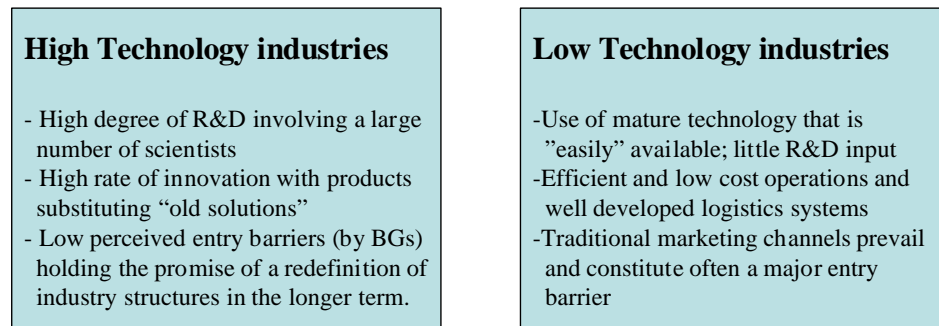


Figure 1: Differences between high technology and low technology

Born Globals strategies

The question then arises how these differences influence the development of international involvement of firms in either category of Born Global firms. In order to investigate this issue the following model will be explored – see figure 2. The model is inspired by Madsen and Servais (1997) and indicates that industry appurtenance will have an impact on each of the factors under study.

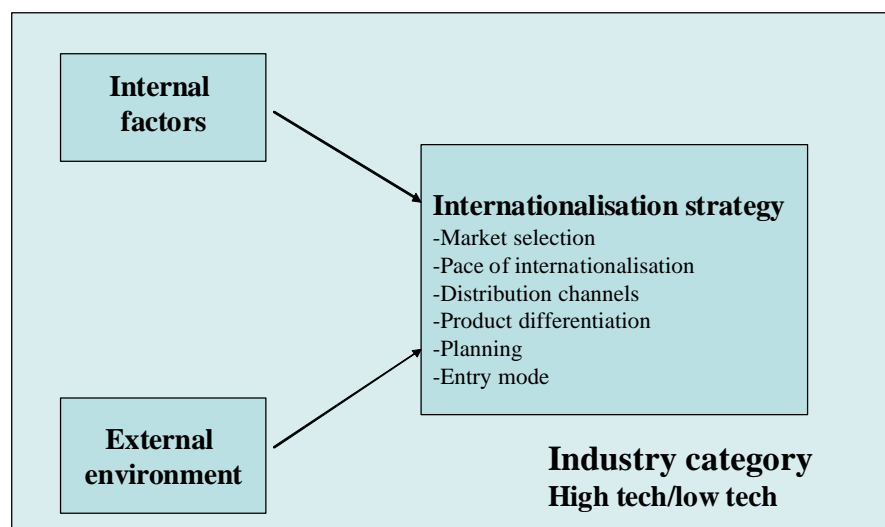


Figure 2: Conceptual model

Internal factors

Numerous studies have found a positive relationship between the entrepreneur's international attitude, orientation, experience and network, and international development (Andersson, 2000; Ibeh & Young, 2001; Johnson, 2002; Nummela et al., 2002; Preece et al., 1999). Consequently, many firms initiate early foreign expansion because of the expectations, beliefs and highly positive attitudes towards international markets of their founders or managers. Such abilities and awareness towards internationalisation present the company with a proactive nature, and an orientation to growth and development in the international arena (Burt, 1992). There is also evidence to suggest that the founders of small entrepreneurial firms are fast learners and often possess the ability to quickly adapt to rapidly changing market environments.

A Global Orientation – Oviatt & McDougall (1994) states that a global vision dating from the firm's inception probably is the most important characteristic associated with Born Global entrepreneurs, accordingly, the entrepreneur's vision dominates before rational calculations. The concept of global orientation refers to the entrepreneur's positive attitude towards international affairs, and also to his/hers ability to adjust to different environments and cultures (van Bulck, 1979). Global orientation is demonstrated through the entrepreneur's commitments to international markets, international vision and proactiveness, and also more generally to customer orientation, responsiveness, and marketing competence (Knight 1997; Moen 2002; Moen & Servais 2002). According to Knight (1997), Born Globals seem to be more globally oriented than others.

International work experience is frequently portrayed as a significant influence on Born Globals internationalisation (McDougall et al. 2003:62). Castren (2004) argues that the success of a Born Global company is likely to be closely related to the international experience of key individuals in the top management of the new venture. Prior international experience can facilitate for quicker problem solving and opportunity identification, enhanced market knowledge and network building, all of which encourages internationalisation (McDougall et al., 2003). On the other hand,

studies in Norway suggest that this is not always the case; in fact in six out of seven hi technology firms the founders did not display any previous international experience (Skaar and Martinsen 2006).

Industry Experience – Prior research has shown that the entrepreneur's alertness to new business opportunities may be influenced by previous industry experience because experience provides a framework for processing information (Casson, 1982; Ronstadt, 1988).

Prior start-up Experience – According to Lamont (1971) entrepreneurs learn and profit from prior start-up experience. The author found that entrepreneurs with prior experience from venture creation tended to achieve better results than entrepreneurs with no such experience. Hence, the more venture creation experience, the more top management will be prepared to recognize and tackle the additional risk and complexities of foreign market expansion (Cooper 1970).

Innovativeness - Born Global firms are often able to achieve high value creation through product differentiation, leading-edge technology products, technological innovativeness, and quality leadership (Rialp et al., 2005). Firms achieve market differentiation through possessing, for example, a unique advantage compared to others, and through continuous innovation and R&D (McDougall et al., 2003). Moreover, both product quality and uniqueness have been found to be positively related to internationalisation (Lecraw, 1989). Most research on Born Globals appears to be in agreement that these firms gain competitive advantage by differentiating themselves from competitors through introducing innovative products. Furthermore, studies of successful Born Global companies have found that such firms can be characterised by an organisational culture that is proactive, risk taking and innovative (Freeman et al. 2006). Proactivity reflects the firm's tendency to take initiatives, anticipate and pursue new opportunities, and participate in foreign markets. Simply put, the firm is proactively pursuing market opportunities rather than only reacting to moves by competitors (Miller 1993). Innovativeness reflects an organisation's capacity and ability to generate new ideas, products and services that the firm can capitalise on in the global market. Ray (1989) asserts that Born Globals achieve competitive advantage by either reconfiguring products or redefining

markets, and that technology and proprietary advantage were their core competitive advantage.

External factors

The founding process of Born Global companies can be seen as an interaction between the founders and the environment, and can be interpreted from two different angles: does the founder wish to be international, or is he/she forced to be international either through the means of a small home market or by a highly specialised product (Rasmussen et al., 2001). Firms generally expand their activities across national borders when the possibility of achieving the company's objectives is either diminishing at home and/or there are great opportunities abroad (Tayeb, 1992). According to Bloodgood et al. (1996) Born Globals seek an international presence for two reasons: (1) industry conditions that may require an international presence for the company to be competitive, and (2) a venture may seek a global presence to capitalise on its unique set of resources. These conditions must be present for rapid internationalisation to be viable (Karlsen 2007). However, the market situation both at home and in exporting markets may influence export behaviour and performance, as described by Aaby and Slater (1989). The expectation is that an unfavourable home market situation might stimulate the firm's interest in exporting and, additionally, high growth rates in export markets might enhance the export interest of the firm (Moen, 2002). Moen (2002) discovered in a study of Norwegian Born Globals that many of these firms perceived the export markets as being more attractive than the home market. The reason was that these firms did not have a salient market position at home. Market conditions are for that matter important when investigating and comparing Born Globals. According to Luostarinen (1994), the smaller and more open the home country is the stronger the push forces on domestic companies to enter foreign markets. Accordingly, the bigger and more open a target country is the stronger the pull forces on the foreign firm to enter the country. In their choice of international market selection, Born Globals frequently ignore psychically close markets, and confidently target customers in any country, ignoring psychic proximity. This type of behaviour may be particular among firms operating in small and open economies, such as Norway (the setting of the present study) where domestic demand is limited. Hence, such firms look outside of the domestic market for opportunities for growth and development.

Marketing and internationalisation strategy

Bradley (1995) identified the process of internationalisation as having two main strategic dimensions, namely, international market selection and choice of foreign

entry/operation mode. Country selection, concerns the decision of where or with whom the firm want to operate, whereas foreign entry mode concerns under what conditions the firm want to penetrate and operate in the new market of selection.

The market strategy construct in the conceptual research model is the ‘glue’ in our model, and it brings the internal business environment of the Born Global firm together with the external environmental forces. Born Globals strategies and objectives for entering new and foreign markets may differ widely. Due to their young age at the time of internationalisation, Born Global firms tend to lack fixed routines to select markets or any fixed view on how to enter them. The networks that they are involved in vary most likely greatly and planning activities are deemed to be scarce. They may therefore select each market and each entry strategy individually, in an attempt to seek opportunities based on what we may term “structured coincidences” (Solberg 2007), indicating that the development of each firm’s strategy is rather a result of the network they happen to belong to, rather than as a result of a planned approach. To establish options for the firms’ future internationalisation, Born Globals tend to enter into several markets using a variety of entry modes (Sharma and Blomstermo 2003). When it comes to selecting clients, Born Globals show great willingness to adapt and to recognise the needs of each individual buyer or local distributor channel. Thus, they adapt their foreign entry mode to the needs of the individual market and client (Ibid).

Methodology

Our problem definition addresses the question of “how” and “why” there are significant deviations or similarities between the triggering factors that initiate the early and rapid foreign expansion of Born Global firms across high- and low-technology sectors in a small and open economy. By examining *how* and *why* these companies have internationalised, we hope to capture the underlying factors influencing their decisions to expand abroad at or near inception. In addition, we do not require any control over behavioural events. Hence, in order to gain a thorough understanding within in our selected area of research, case studies are a particularly appropriate research method for our study (Eisenhardt1989).

Eisenhardt (1989) argues that by employing a multiple case study approach, researchers are encouraged to study patterns that are common to cases and theories, and to avoid chance associations (Sperling, 2006). A multiple-case study design is warranted as we want to detect any differences or similarities among high and low tech companies. According to Eisenhardt (1989), the case study approach focuses on the understanding of the dynamics presented within single settings. Our setting is the Born Global firm in its establishment phase. Moreover, Eisenhardt (1989) argues that there is no ideal numbers of cases in the multiple cases approach, but recommends between four and ten cases. We have chosen to include four cases in our study, as less would not produce convincing and grounded findings, and a cross-case comparison between the high- and low-companies would not be possible (Eisenhardt, 1989). Additionally, case studies are a very demanding exercise, and time constraints limit the number of cases to include in our study.

The potential case companies were selected based on the logic of theoretical sampling, which is recommended when using grounded theory (Charmaz, 1998). A theoretical sampling procedure dictates the researcher to choose participants who have experienced or are experiencing the phenomenon under study (Yin, 2003). The founder(s) or top management of the companies has thus been chosen as our interviewees since they clearly are the most knowledgeable sources of information about the venture creation process.

Four Norwegian Born Global companies were selected, two firms from the low tech industry, *VOSS Water of Norway* and *Moods of Norway*, and two companies from the high tech industry, *Colibria* and *eZ Systems*. As there are no directories or public available resources to identify Born Global companies (McDougall et al., 1994) extensive time was used to identify and examine the companies to include in our study. Hence, to select each single case we used different databases such as Kompass and Atekst, the Internet Search Engine Google. Additionally, since a precise and universally accepted set of definitional criteria for a firm to be classified as a Born Global company does not exist (Johnson, 2004:145). The companies were selected based on the following criteria;

- The companies have to be SMEs with global or wide international activity. The size of small and medium sized enterprises (SMEs) was in this study defined in accordance with EU's standardisation of having less than 250 employees. A minimum export ratio/sales turnover was not specified in order to obtain a range of firms exhibiting various degrees of internationalisation (Karlsen 2007).
- Stand-alone units as opposed to subsidiaries or off-springs of large domestic or international companies. This preference was due to the expectation that sub-units of larger firms have greater access to resources (Harveston, 2000).
- Started international activities within 3 years of their establishment according to the commonly accepted definition of Born Globals.
- They have to be recently established firms in order to ensure that the details surrounding the founding of the firm was still fresh in memory.
- The preferred respondents for our interviews were the founder(s) of the companies, however, if this was not possible the respondent needed to have in-depth knowledge about the company's start-up phase.

The case descriptions are mainly the result of primary data collection through in-depth interviews, supplemented with secondary data such as company websites, news articles and press releases. The interviewees are founder(s) of each respective company, with the exception of Voss where the interviewee was the Chairman of the Board brought in later in the process. Table 1 shows the main features of the four firms: products, year of foundation and of first exports, total sales, exports, main markets. The companies may be regarded as small except for Voss of Norway, which has reached a certain size over its first eight years.

Table 1: Key features of the sample firms

<i>Firm</i>	<i>Products</i>	<i>Founded</i>	<i>Export since</i>	<i>Sales* 2006</i>	<i>Exports* 2006</i>	<i>Main markets</i>
eZ System	Content management software, open source	1999	2000	11,5		Can, France Germany, Denmark, Ukraine
Colibira	Instant mobile messaging solutions	2000	2000	32,5		Philippines, UK, Spain, Malasia, Singapore
Voss of Norway	Bottled water	1998	2001	208,2		45 countries all over the world US office
Moods of Norway	Fashion clothing and accessories	2002	2003	10,4		Europe, Japan, USA

Results

This section discusses the findings based on the four cases relative to the research questions. It further intends to highlight the commonalities and/or differences that have triggered the early and rapid internationalisation of high and low technology Born Global companies. The section follows the logic of the conceptual research framework in figure 2.

The founder(s) and organisational capability

International entrepreneurship theory emphasises the importance of the entrepreneurs' influence on the internationalisation of firms, their nature being more innovative, opportunity seeking, than otherwise observed and the firm being heavily influenced by its founder(s) in its early international activities (Brush 1995). These propositions are consistent with the findings of our study. All the founders were extremely passionate about and had a strong belief in their products. The founding of the companies was built on a clear idea or vision which have been fundamental in the companies' further development and internationalisation. The founders' primary objective for all four case companies has been internationalisation near or at inception, highlighting the prominent role of the entrepreneurs in facilitating an early and rapid foreign expansion. Hence, the international orientation and outlook of the founder(s) prior to the foundation of the companies was found to be a leading factor for both the low and high tech companies' internationalisation. Additionally, the

nature of their products and the limited home markets strongly encouraged and motivated the founders to expand abroad close to inception. The entrepreneurs of the case companies also exhibited a high level of ambition, and were driven by a desire to be self-employed and build a business on their own. Boal & Hooijberg (2001) suggest that in an environment that grows increasingly complex, the creation and maintenance of absorptive and adaptive capacity are important characteristics of the leaders of organisations. In brief, absorptive capacity refers to the ability of the management to learn, whereas adaptive capacity refers to the ability of management to change. Hence, leaders need to recognize adaptive emergent changes, make them more salient, and reframe them (Weick & Quinn, 1999). All the founders demonstrated a strong alertness to the identification of specific international market opportunities and pursued these with great dedication. They were able to exploit these opportunities by introducing innovative and creative product offerings that were distinctively different from their competitors. All entrepreneurs had a positive attitude towards risk, and used this as a means of learning and development of both the personal and the organisational level. In addition, they had some prior international experience, although rather from studies and travelling abroad than from work. This finding is corroborated by Bloodgood et al. (1996:6) who argue that since the international experience of a firm is confined within its individuals, new firms established by these individuals may be able to capitalise on their experience and expand internationally. However, only one of the founders had previous start-up experience, and few exhibited industry experience (although the founders of eZ Systems had computer engineering background), challenging past research findings stating that this is an influential aspect of early and rapid expansion abroad. Moreover, the founders did not emphasise the importance of industrial networks in their early internationalisation, rather, social networks played a more prominent role.

Table 2: Founders' attitudes and experience

<i>Firm</i>	<i>Global vision</i>	<i>Passion/ dedication</i>	<i>Risk attitude</i>	<i>International experience</i>	<i>Start-up experience</i>	<i>Industry experience</i>	<i>Industry network</i>
eZ Systems	Yes	Yes	Proactive	Some	No	No, but prod background	No
Colibira	Yes	Yes	Proactive	Some	No	Yes	Some
Voss of Norway	Yes	Yes	Proactive	Some	Yes	No	No
Moods of Norway	Yes	Yes	Proactive	Some	No	No	No

Born Globals firms normally lack substantial financial and human resources as well as property, plant, equipment and other physical assets characteristic of large multinationals (Knight et al). This is consistent with our findings: both the high and low tech companies have leveraged these shortcomings with a collection of other more fundamental intangible resources that have facilitated their early and rapid internationalisation. These capabilities have been derived from the knowledge, innovativeness, skills and experiences that reside in the managers and employees that work in these firms. Moreover, in line with the Born Global literature (Freeman et al., 2006), the internal organisational environment of our case study firms can be characterised by proactiveness, risk taking and innovativeness. A common trait among the selected organisations is that they can be perceived as highly dynamic and flat structures without any deeply rooted routines. Their flexible construction has left much room for creative and innovative thinking amongst employees, facilitating an organisational environment that can easily adapt to a rapidly changing market conditions. The organisations strive for out-of-the-box thinking, and search for new opportunities by pursuing continuous improvement and change. However, as the organisations have progressed, more routines and structures have been implemented in order to facilitate a more controlled growth and development of the organisations. Both the high and low technology companies emphasised from the start open, continuous learning and information sharing across all lines of the organisation.

In the early establishment phase, the various organisations had a strong focus on recruiting the right people that shared the same motivation as the founders, and that fitted well into the organisational context. Employees that were recruited needed to

be highly talented and possess complementary skills that would benefit the further growth of the companies. In addition, all the companies tried to recruit employees with valuable network connections which could open doors in their respective industries. Furthermore, since most of the entrepreneurs in the case study firms lacked industry and prior start-up experience, they were concerned with recruiting experienced employees who had knowledge about the industry in general and about international activities.

Product and market Characteristics

Previous literature have stated that Born Global firms often are able to achieve high value creation through product differentiation, leading-edge technology products, technological innovativeness, and quality leadership (Rialp et al., 2005). Firms achieve market differentiation through possessing, for example, a unique advantage compared to others, and through continuous innovation and R&D (McDougall et al., 2003). A common pattern among all four case companies, irrespective of their product offering, is their strong focus on product differentiation through high quality and uniqueness.

Turning now to the high technology firms, eZ Systems has from inception tried to build a strong product by offering a high quality software solution and additional services at a low cost. It is open source software, sold to both to “the man in the street” and large multinationals, where the income is based on licences, support and service to enjoy extended protection. Colibria develops mobile applications such as mobile Instant Messaging, Friends Finder and mobile community solutions. It delivers the infrastructure for launching instant messaging and associated multimedia services as well as advanced IMS based messaging and presence services. Colibria has strived to obtain a ‘forerunner’ status in their industry by building a strong image based on a unique technology. Both high technology companies offer products and services that are targeted for a wide spectrum of users and customers, made possible by the international nature of the needs addressed and, hence, making foreign distribution less complicated.

For the two low tech firms, Voss of Norway and Moods of Norway, product design and company image have been essential for a successful foreign market expansion.

Their respective industries can be characterised as traditional, and are dominated by large and established players which make penetration by newcomers exceedingly difficult. The two companies have altered already existing traditional products, adding value through distinct quality and design. Voss for example has introduced a bottle designed as a cylinder, containing spring water from “the purest Norwegian glaciers” utterly distinguishing themselves from more established brands (Evian, Perrier, San Pellegrino etc). They brought in a former designer at Calvin Klein to help them develop the bottle. Moods of Norway link for their part elements of Norwegian nature, motives and stories from Norwegian history to the design of their garments, portraying an “archetypal image” of Norway. Thus focus has been on differentiation from major competitors through creative and distinctive product attributes. The two companies have strengthened their visibility and built brand image through events and arrangements that attract attention in the world press.

These findings are consistent with the work of Bloodgood et al. (1996), stating that ventures were significantly more internationalised if they were seeking a competitive advantage through product differentiation. Additionally, ventures internationalise earlier in order to exploit a distinct competence or feature. Interestingly, we found that only the low technology companies operate within a niche market segment. The high technology companies offer products and services that are targeted for a wider spectrum of users and customers. In comparison, the low technology firms aim to sell their products to a specific segment of the market.

Previous research suggests that Born Global firms are typically launched into an international market by a world leading innovation (Chetty & Campbell-Hunt, 2003). In addition, the international nature of high technology product is widely applicable worldwide, making foreign expansion and distribution less complicated. However, our findings suggest that Born Global companies do not have to offer technology intensive products or make large investments in leading edge technologies in order to internationalise near or close to inception. The two low technology case companies have utilised and altered a traditional product through unique design and quality, compared to the high technology companies that have developed new and radical technology innovations.

Networks

An underlying argument of network theory is that the internationalisation process of a firm is not solely driven by a specific competitive advantage, but is heavily influenced by the network relationships surrounding the firm. Market exchange is thus seen as the result of interactions between discreet exchange relationships among market actors (Tikkanen, 1998). Our investigations have revealed that the existence of a formal or pre-existing business network was not as important as expected in relation to the firms' internationalisation, and had little influence on the founding process and initial internationalisation. Colibria was the only company that exhibited some degree of pre-existing network relations in the industry through the founders' prior employers. However, all the four case companies utilised to some degree personal and social networks at establishment. Hence, the use of networks has functioned as a facilitating factor for internationalisation rather than as a triggering force, and the companies have quickly built relevant international network connections. These networks have been a valuable source of market information and knowledge that would have taken the firms a long time to acquire and at great cost. Hence, these networks have consequently acted as bridging mechanisms facilitating rapid internationalisation.

However, a distinctive difference can be drawn between the low and high tech companies, where eZ Systems and Colibria rather quickly started to build and rely heavily on global industrial networks which included partners, customers and competitors. This provided them with an essential competitive advantage in the respective global markets. Additionally, the high tech companies have had a higher degree of collaboration or partnerships with larger companies due to the abilities of combining technological products to each other in an easy and cost conscious way. Furthermore, the cooperation with partners has initiated further internationalisation as the firms were able to follow them into new markets and be introduced to new network connections. The partners have functioned as door openers to new market opportunities and made it possible to get access to leading customers. Also, through partner networks the firms have managed to increase their visibility and credibility which has further facilitated a rapid expansion abroad.

In the low-tech sector industrial network relations have been less profound in the start-up phase, and mostly occurred through personal contacts and agents/distributors. For these companies it has been of significant importance to get hold of the 'right' people in terms of agents and distributors that are able to introduce their products to the preferred customer segment. To illustrate this valuable door opener, Voss of Norway managed early to establish a relationship with SWS, one of the leading wine and liquor distributors in the US, providing access to many of the high-end hotels and restaurants. Also, Moods of Norway has from inception developed close relationships with a group of Scandinavian designers, where experiences, information and knowledge are freely shared within the network. These brands' prior international expansion has functioned as a benchmark in the company's early foreign expansion. These industry connections have also given referrals to quality agents, which again give spur to opportunities abroad.

The maintenance of relations have moreover been an important factor of networking for all the firms, where management and other employees have actively leveraged their own social and business contact networks to gain knowledge of and accelerated access to international markets corroborating the findings of Solberg (2006). In the early recruiting process, employees with relevant industry experience and networks have been hired. Additionally, strong ties such as family or close friends have been of significant importance in the establishment period for the all the companies. Furthermore, with the aid of these ties the firms became connected to meaningful and influential networks that eventually had the ability to alleviate and contribute to the internationalisation process. Another commonality between the companies, have been their strong participation and involvement in international trade fairs in their early internationalisation. These events have functioned as a means of demonstrating their products, and to develop and extend their relations on a personal level, representing an invaluable source for getting in touch with potential partners, clients, distributors and agents.

Initial Market Strategy

All the firms planned their foreign market expansion prior to their establishment. In fact, the foreign expansion was a part of the firms' business idea prior to the founding of the companies. This was mostly due to the nature of their products and

the limited home market of Norway. With little potential sales volumes in their domestic market, they all sought the global arena as their market. Moreover, Colibria wanted to become the market leader and forerunner within their industry, whereas eZ Systems and Voss of Norway also shared the ambition to become a market leader within their respective markets. All the four case study companies internationalised shortly after inception and had a rapid foreign expansion. Markets were selected by the companies according to growth opportunities and sizable sales volumes. Additionally, the companies did not, in the beginning, expand into markets that were psychically close, but moved into what can be perceived as more distant markets. The two low technology companies conducted more extensive market research prior to entering the potential markets. For example, Voss of Norway had a two year planning period before its first foreign sale in the US. Further foreign market entries were based on extensive and focused research of the potential market opportunities. Due to the targeted niche segments, the low technology companies were dependent on good predictions concerning the possible high-end consumption in the selected markets. In comparison the high technology firms had to some degree a more random approach to market selection in the early start-up. The wide global applicability and demand for their products made them access numerous countries at the same time and selected markets were opportunities occurred.

Another commonality between the case companies is their initial use of low commitment entry modes. This finding is in line with the resource-based argument, stating that high commitment modes require significant set-up costs which may represent capital investments beyond the financial ability of the small, newly established companies (Pedersen & Petersen, 1998). Madsen et al. (2000) argue that Born Global firms often make extensive use of low commitment modes. The low technology firms used indirect exporting when establishing their presence abroad. Both Voss of Norway and Moods of Norway have since their beginning been dependent on agents and distributors in the host markets. However, both firms highlight the importance of being present in the market with representatives to follow-up on customers. The high technology firms have a somewhat dissimilar approach to entry mode; eZ Systems used the internet as their sales and distribution channel in the beginning and have since progressed to open foreign sales and support offices in multiple countries. Colibria used mostly direct sales in the start-up phase;

however, they have later progressed to sell their products through partners and subsidiaries abroad. Nonetheless, all the four companies highlighted the importance of personal selling and follow-up in the early start-up in order maintain a close contact with their customers and to build long term relationships.

Table 3: Summary of Initial Market Strategy.

<i>Firm</i>	<i>Motivation for foreign expansion</i>	<i>Initial Market selection</i>	<i>Entry mode</i>
eZ System	Small domestic market Global product Tech pioneer Market leader	Random Multiple countries Size more important than psychic distance	Direct sales Partners Subsidiaries
Colibira	Small domestic market Global product Tech pioneer Market leader	Random Multiple countries Size more important than psychic distance	Direct sales Partners Subsidiaries
Voss of Norway	Small domestic market Global product Unique design	Planned Multiple countries, but US focus Size more important than psychic distance	Indirect exports Distributors Agents Subsidiaries
Moods of Norway	Small domestic market Global product	Planned Multiple countries Size more important than psychic distance	Indirect exports Distributors Agents

Discussion and propositions

Comparing now the two categories of Born Globals, we identify both similarities and differences. The major similar characteristics deal with the background of the firms, and their founders concerning their attitudes and their experience. One difference in this context is possibly the technology/industry background of the founders being more conspicuous in the high-tech than in the low-tech sector. Also all four companies are characterised by a flexible, non-hierarchical and open-minded organisation, allowing free flow of information about markets and technology/design development. Also they share their dedication to developing social networks that assist them in connecting to business opportunities.

Concerning the differences, the two groups of companies differ on two accounts: products and marketing strategy/process. Figure 3 below summarises the main differences in this context.

Hi tech	Low tech
<i>State of the art innovations</i>	<i>Differentiated design</i>
Competitors="old" systems	Competitors=equivalent substitutes
Based on previous industry experience	No previous industry experience
Addressing global needs in specific segments	Addressing luxury needs
B2B and B2C	B2C
Random entry in multiple markets	More planned entry in multiple markets
Targetting selected key industry players	Using traditional channels
Direct sales → sales subsidiaries, internet	Distributors and agents, sales subsidiaries

Figure 3: Differences between high tech and low tech firms

The consequences for marketing strategy may be substantial. The high tech firms address what we may term "new needs" in a highly developed technological atmosphere, competing with "older solutions". Given the fact that they operate in a highly technological environment, their audience is constantly hunting for better, more rational solutions and more cost beneficial products and services. There is so to speak a surge in the market for new items, and these firms offer precisely that. Also their audience is normally easily reached on the Internet and is therefore readily accessed by this class of firms. As one manager expressed it: "Internet is our home market". Their approach to marketing is therefore often more random in the sense that they respond to queries wherever they might occur. The needs are not yet properly defined, and the uses will often develop as the products/services are being sold. One other feature is that they link with a selected number of large key customers, both representing a substantial sales outlet, but also helping them as a reference in their further market development. The market entry therefore may not be easy to plan: it all hinges on the extent to which the firm is able to attract a key customer; whoever bites on the hook the first – wherever he might be located - will represent the first sale. Depending on network relations and the response in individual markets, they will build a more committed presence in selected markets setting up subsidiaries to monitor the market development. The proprietary nature of the technology may force them to relatively rapidly establish hierarchical control of their operations (Buckley and Casson 1976)

The low tech firms on the other hand address established needs in very traditional markets, selling through conventional distribution channels. The market is already crowded with incumbent and - in particular in the Voss case - large international players, with established brands. They address needs that do not represent any technological “breakthrough” or innovation properly speaking; rather the need of the customers is to “stand out of the crowd”, needs that may be termed luxury, warranting a higher price for the products. The subsequent marketing may therefore need a more planned approach, targeting special niches using special channels to reach these niches. That requires market intelligence – either through market research or through well informed network sources.

Based on the above discussion we posit a number of propositions concerning the two categories of Born Globals:

P1

Born Globals are found in both high and low technology sectors of the economy.

P2a

Irrespective of sector, global orientation and ambition, capabilities and passion for the products are essential in facilitating the development of rapid and early internationalisation.

P2b

Irrespective of sector, distinctive product features facilitate development of rapid and early internationalisation.

P3a

Irrespective of sector, previous international or entrepreneurship experience is not necessary to initiate early and rapid internationalisation.

P3b

Industry experience is more prevalent in the high tech sector than in the low tech sector.

P4

Irrespective of sector, initial network relations are not necessary to initiate early and rapid internationalisation. Subsequent development of networks are however critical.

P5

High tech firms have a lower propensity to plan their international venture than low tech firms.

P6a

Low tech firms tend to enter international markets through established marketing channels; high tech firms tend to use direct sales and the internet in their early stages of international involvement.

P6b

High tech firms will more rapidly than low tech firms engage in hierarchical operation modes (such as sales and support subsidiaries).

Conclusions

This paper has discussed differences and similarities between two classes of Born Global firms: high technology and low technology, presenting findings from four different Norwegian case companies, two in each category. Our results give support to the general conclusions by others (Oviatt & McDougall 1994; Knight 1997; Moen 2002; Moen & Servais 2002) concerning global orientation and proactive attitudes of the founders. But the differences are equally important: the nature of the products and the needs that they address warrant different approaches to marketing concerning among other issues planning and information gathering, customer relations and entry modes. The very uncertain prospects in Born Global ventures make any plan a bet, but as we have seen, even more so in the high-tech industry. We believe it is important to understand such differences because oftentimes advice given to one Born Global may be misguidedly given to another though they operate in radically different environments. The present research has of course the limitations of case studies, and there is need to follow up this study by surveys in order to test the

propositions flowing from the discussion. We also believe that the study should be followed up in other countries so as to explore possible differences due to cultural or other (for instance country size) backgrounds.

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