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Rapport
Report

Norwegian subsea firms are going international

Experiences with the market entry process in Houston

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Institute for Research in Economics and Business Administration

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Norwegian subsea firms are going international
Experiences with the market entry process in Houston

by

Inger Beate Pettersen, Kjetil Storhaug Njærheim, Anas Chair Yemlahi, Anita E. Tobiassen

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Preface

This report is part of the research project: “Local cluster going international: balancing local and non-local networking?” led by Associate Professor Inger Beate Pettersen at BI, Norwegian Business School (Bergen). The Research Council of Norway and two industry clusters: NCE Subsea[1] and NCE Maritime have financed the project (2009-2012). This report is based on interviews carried out by Kjetil Storhaug Njærheim and Anas Chair Yemlahi, both master students at BI, Norwegian Business School, and involved in the program: Master of Science in International Management. Inger Beate Pettersen, and Anita E. Tobiassen, both associate professors at BI, Norwegian Business School (Bergen)[2] have been responsible for the research project investigating Norwegian firms’ internationalization to Houston (GOM) and for writing the report. The master students Njærheim and Yemlahi have contributed with a descriptive analysis of the interview data.

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We wish to thank all informants in Norway and Houston for sharing valuable knowledge with us. We direct a special thanks to Innovation Norway in Houston who gave useful comments to our interview-guide (Houston), and assisted with practical advice and support during the data-collection in Houston. We also express thanks to Terje Bauge who translated the Norwegian citations and Vivienne B. Knowles who did the copyediting. We are also grateful to the financial contributors to the research project.

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[1] The Norwegian Centres of Expertise Program (NCE) is established to enhance sustainable innovation and internationalization processes in the most dynamic and growth-oriented Norwegian clusters. The program supports long-term development processes in the clusters based on collaboration between industry, R&D and the public sector. Twelve clusters have so far been selected and given status as a NCE project (www.nce.no)

[2] Since August 2012, Inger Beate Pettersen is associate professor at Bergen University College, Centre for Innovation, and since October 2012, Anita E. Tobiassen is associate professor at Oslo and Akershus University College of Applied Sciences.

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1. Introduction

The overall research project centers on Norwegian subsea firms from the subsea cluster in the region of Bergen, with a special interest in small and medium sized enterprises (SMEs). This subsea cluster was approved the NCE status in 2006, and is an international leading center of expertise in operations, maintenance, surveillance, modifications and upgrades of subsea installations (www.innovasjonnorge.no). There are approximately 160 member companies with a total annual turnover of 11.6 billion Norwegian kroner, representing a workforce around 4000 employees (Jakobsen and Fløysand, 2011). These firms deliver high-tech solutions to offshore oil and gas production domestically and internationally. One research objective has been to investigate the internationalization processes of firms (SMEs) from the regional cluster of Bergen. More specifically, this report concentrates on market entry processes of these firms in Houston, USA. The report includes both the perspective of headquarters (in Bergen) and subsidiaries (in Houston). In Houston, we also included Norwegian firms from other regions in Norway, large Norwegian firms, two Norwegian Research Institutes, one American firm and Innovation Norway and the Norwegian Seaman's Church. The report concentrates on managers' perceptions and experiences with the market entry process in Houston.

The report is structured as follows. First, we present internationalization theory with a focus on SMEs and internationalization, the stage model, the born global firm, foreign market learning, the choice of market entry mode and subsidiary staffing strategies. The theories presented serve as an informative background, and are not used explicitly in the analysis. Second, we explain the methodology. Third, we present the empirical findings and elaborate on the pre-entry and market entry process, challenges in the foreign market, lack of pre-entry strategy and plans and the headquarter and subsidiary relationship. We then summarize and discuss the findings. Last we suggest managerial implications.

2. Theory

2.1 SMEs and internationalization

The internationalization of small and medium sized enterprises (SMEs) has captured increased attention (e.g. Knight et al. 2004, Zahra 2005, Rialp et al. 2005, Schulz et al. 2009). Traditionally, SMEs are seen as less competitive in international markets, especially compared to larger multinational companies (MNCs). Limited financial, management and knowledge resources typically represent barriers to SMEs' international expansion. Internationalization in the form of foreign market entry may involve high costs and risk in the startup period, and firms will need financial resources to back up the internationalization strategy. Lack of financial resources therefore can hamper SMEs' ability to both identify and exploit international market opportunities (Lin and Chaney 2007). SMEs also typically suffer from limited managerial resources that result in less time spent on strategy development, planning and administration both pre-entry and post-entry. Pursuing an internationalization strategy demands significant managerial resources, and managerial deficiencies may consequently hinder the realization of such a strategy. Moreover, firms face considerable challenges in foreign markets, because of cultural and geographical distance. In order to overcome these challenges, availability of international experience, cross-cultural skills, as well as access to local market knowledge are seen as critical (Schulz et al. 2009). While large multinational companies can benefit from international experience and competence within their own organizations, including an extensive network globally, SMEs normally rely on local networks with limited access to international competence. Smaller firms may also experience low levels of trust internationally compared to large multinationals with substantial resources and well-known brand names and reputation. Low levels of trust may create problems in forming joint ventures with local partners as a valuable source for tacit knowledge of market opportunities (Ellis 2000). Even though SMEs typically face constraints arising from lack of resources and competencies when expanding internationally, SMEs increasingly exploit global market opportunities (Zhou et al. 2007).

In this report we focus mainly on two theoretical perspectives explaining firms' internationalization: the stage model (e.g. Johanson and Vahlne 1977, 1992) and the theory of born global firms (e.g. Knight and Cavusgil 2004). Swedish researchers developed the stage model in the 1970s and the theory on born global firms grew rapidly during the 90s. The latter theory contributed to revising explanatory factors related to stage models of internationalization.

2.2 The stage model

Johanson and Vahlne (1977) developed a model of the internationalization process of firms (Uppsala model) which emphasizes the gradual acquisition, integration and use of knowledge about foreign markets and operations. The model presumes that firms increase their commitment to foreign markets as internationalization evolves. Lack of knowledge about international operations represents an important barrier to firms' expansion. Firms are assumed to gradually acquire knowledge through own experiences abroad. Furthermore, firms typically tend to follow a successive establishment of international operations with regard to the choice of entry modes and the choice of foreign markets. The psychic distance between the home and the foreign market seems to be decisive with regard to choice of entry modes and choice of markets. Firms usually select entry modes associated with lower risk in the early phase of internationalization, and gradually advance to higher risk entry modes in parallel with knowledge accumulation and experience. Likewise, firms tend to enter foreign markets that are culturally and geographically close in the early phase of internationalization, while progressively moving to more culturally distant countries as knowledge and commitment evolves.

Yet, we assume that specific industry traits and geographical distribution may affect firms' internationalization processes and patterns. Firms operating for instance in the global oil industry generally do not have the option of *"…comfortably choosing to initially enter markets with the least psychological/cultural differences (markets implying low risk) or that are most appropriate in terms of the internal resources of the firm"* (Solberg and Askeland 2006: 13-14). Firms operating in the oil and gas industry may therefore follow an international expansion pattern corresponding to the geographical distribution of oil regions in the world. With regard to investment entry modes, for instance, we would expect firms to select markets according to geographical and cultural distance, but with a specific expansion pattern relevant for Norwegian firms in the oil and gas industry: for example first to UK, then Houston, then Singapore, then Brazil and so on.

2.3 The born global firm

A born global firm refers to: *"business organizations that, from or near their founding, seek superior international business performance from the application of knowledge-based resources to the sale of outputs in multiple countries"* (Knight and Cavusgil 2004: 124). Born globals typically demonstrate accelerated internationalization, referring to both precocity and speed (Gabrielsson, et al. 2008). Several factors explain the international expansion of born global firms: the increasingly global nature of demand in some market segments and the growth of niche markets for SMEs worldwide. Other factors are the fast growth of worldwide communications technology, technological advances in the area of production, transportation and international logistics. Moreover, the augmented importance of global networks and alliances allows SMEs to strengthen their competitive advantage.

The oil industry is a global industry characterized by a high degree of homogeneity across markets and has a high degree of interconnectedness of the competition (Solberg and Askeland 2006). We therefore expect that technologies developed in one oil region could be applicable in oil regions elsewhere. Yet, national market aspects such as socio-economic and institutional traits, specific local industry cultures and practices, and individual companies' purchasing strategies may represent barriers in 'exporting' the technology globally.

The application of technology largely explains young SMEs' international expansion (Schulz et al. 2009). Internationalizing SMEs typically arise from knowledge-intensive industries and compete on quality and value created through innovative technology and product design (Schulz et al. 2009). Due to their small size, their core capabilities have to be specialized and focused with strategic positioning toward global niche markets. Motivations underlying the international expansion of technology oriented SMEs reside in various factors; the need to take advantage of technology and competence developed in home markets, the necessity to finance large R&D expenditures, and the requisite to exploit unique technologies and products globally as product and technological life cycles are shortened (Etemad 2004).

In addition to unique technologies and products, the organizational capabilities and strategic orientations of born globals enhance their competitiveness: global orientation from inception, international experience, strategic use of networks and focused customer orientation (Rialp et al. 2005, Gabrielsson et al. 2008).

2.4 How do managers learn about foreign markets?

When firms enter new markets they typically experience the "liability of foreignness" barrier (Pedersen and Petersen 2004). Little knowledge of foreign markets; business cultures and practices, institutions and regulations enhance the odds that firms encounter difficulties in setting up operations abroad. The acquisition of local-market knowledge is therefore crucial to ensure successful strategy and planning for the market entry. Scholars, however, have different views of managers' market learning processes related to pre-entry and market entry. Scholars discuss to what extent firms are capable of extensive learning pre-entry. Pre-entry learning can include the use of knowledge from operations in similar markets, market research and pre-entry visits in the target country. Furthermore, scholars question whether managers make realistic judgments about how knowledgeable they are about the business environment in the foreign country before market entry.

As mentioned, the stage model suggests that managers gradually increase their knowledge of foreign markets as they proceed in the internationalization process. Furthermore, when managers gain more knowledge of foreign markets they are more liable to commit high resources in the target market. Firms therefore are assumed risk averse, as they tend to acquire market knowledge before they commit substantial resources in these markets. This theory implies that most learning takes place post-entry because of the experiential and context specific character of local-market knowledge. The possibilities of pre-entry learning are therefore presumed limited. Yet, the stage model recognizes some possibility of pre-entry learning in the sense that market knowledge acquired in other foreign (and similar) markets can enhance foreign market familiarity to new markets (a spillover effect). Some stage model scholars have also recognized the access to knowledge through other firms' business networks (e.g. Eriksson et al. 1997).

Other research (Pedersen and Petersen, 2004, Petersen et al. 2008) has shed new light on firms' market learning processes. This research questions the stage model's assumption of *"…the simple, monotonically increasing proportionality between knowledge accumulation and resource commitment"* (Pedersen and Petersen, 2004: 107). For example, firms may learn that the foreign market environment is tougher than they expected pre-entry. The acquisition of local-market knowledge can therefore lead to lower resource commitment and ultimately market exit (e.g. Welch and Wiedersheim-Paul 1980). Erramilli (1991) favors this view and suggests that there is *"…a U-shaped relationship between learning and the inclination of entrant-firm managers to engage in resource-demanding foreign operations modes"* (Pedersen and Petersen, 2004:108). Managers are therefore inclined to commit high resources without the necessary knowledge about foreign markets. This view contrasts with the risk aversion assumption in the stage model, and indicates that firms are liable to take risk. The assumption of firms' risk taking is in accord with the born global theory of firms (e.g. Knight and Cavusgil 2004). In this theory firms are characterized as being proactive, searching for opportunities, and prepared for ad hoc decisions. In accord with this view, firms tend to overestimate their knowledge about the foreign market pre-entry, and hence can be exposed to a shock effect, related to poor performance and unexpected knowledge gaps. Their perceived familiarity with the foreign market may therefore decrease during the first years of market entry (Pedersen and Petersen 2004, Petersen et al. 2008).

The "psychic –distance paradox"

As mentioned in chapter 2.2, firms' psychic distance towards a foreign market is assumed critical in decisions regarding internationalization. Countries of little psychic distance can refer to foreign markets which managers are knowledgeable of and feel familiar with. Neighboring countries and countries with similar language, culture and history are typically countries of little psychic distance. Research, however, demonstrates that managers tend to overestimate these similarities (and underestimate the differences) which eventually lead to poor performance during market entry. When entering countries of high psychic distance firms tend to make thorough plans and undertake extensive market research to prepare the market entry, while they fail to make these efforts in countries that they perceive as having little psychic distance (Pedersen and Petersen, 2004). O'Grady and Lane (1996) refer to this phenomenon as the "psychic –distance paradox".

2.5 The choice of market entry mode

An international market entry mode is an institutional arrangement that makes possible the entry of a company's products, technology, human skills or other resources into a foreign country (Root 1994). It is common to classify entry modes into: export entry modes (e.g. direct exporting, agents), contractual entry modes (e.g. licensing) and investment entry modes (wholly-owned subsidiary, acquisition, and joint venture). A company's choice of its entry mode is often the result of a complex decision-making process with numerous trade-offs among alternative entry modes. And each entry mode has its benefit and cost dimensions in terms of risk, commitment, learning and control. Typically, the choice of entry mode is based on different factors: such as the company's products and technologies, the company's resources and commitment, the target country market and environment, and home country conditions (Root 1994). Firms typically start the internationalization process by choosing low-risk and low-cost entry modes (e.g. export through agents and licensing). Later, with enhanced international experience and knowledge they can choose more risky and challenging entry modes, such as equity investment modes. In a very early internationalization phase, firms can also engage in indirect exporting through for example domestic customers, also referred to as piggybacking.

Piggybacking

Piggybacking is a form of marketing collaboration where firms seek to achieve a goal by allying with a competent partner. A typical example is smaller firms that collaborate with domestic MNCs in exports. Piggybacking can be used to overcome barriers in entering new markets as small firms can compensate for lack of resources and competencies in these relationships (Terpstra and Yu 1990). This mode enables small firms to start exporting with no investments, low startup costs, few risks, and profit on current sales (Root 1994). Yet, this mode restricts firms by not having their own international strategy and they may gain little international experience and knowledge related to foreign markets. Piggybacking is therefore beneficial for some time and in difficult markets, and firms will eventually attempt to pursue an independent internationalization strategy (Terpstra and Yu 1990).

2.5.1 Investment market entry modes

In the following, we elaborate briefly on equity investment modes as these were the most relevant entry modes perceived by the firms in the research. The content below is based on Root's book: *Entry strategies for international markets* (1994).

Investment entry modes have both advantages and disadvantages. When firms decide to invest in a target country they should consider alternative entry modes of investment entry, and systematically assess the political risk[3] and profitability[4] of an investment entry project in the foreign target country.

An investment entry mode in the form of a wholly-owned subsidiary (sole venture) typically involves the transfer of a firm's managerial, technical, marketing and financial assets and skills to a target country under its own control, and thereby enhance the ability to fully exploit its competitive advantages in the target market (Root 1994). Establishing local production can, for instance, reduce the costs of supplying customers in the target market, increase the availability of supply and heighten quality of products (compared to licensing or the use of suppliers). Establishing a wholly-owned subsidiary can also create added marketing

[3] General political stability, governmental policies toward foreign investment, other government policies and legal factors, macroeconomic environment, international payment (Root 1996: 129,130)

[4] Market factors, production/supply factors, labor factors, capital-sourcing factors and tax factors (Root 1996: 137)

advantages as the firm gains more knowledge of local customer needs and preferences. In principle, the firm also controls the international marketing strategy and technological assets in the foreign country through a wholly-owned subsidiary to a greater extent compared to entering through acquisitions and joint ventures (see below).

The disadvantages of investment modes in general and especially for wholly-owned subsidiaries are the substantial need of financial, managerial and other firm resources that eventually lead to higher risk. The eventual success of the investment generally depends on a complex set of factors: political, economic, and socio-cultural and market factors. The need for strategic planning and depth of market information is far greater for investments modes than for less risky modes. Particular disadvantages for wholly-owned subsidiaries are the high startup costs, eventual staffing problems, long payback periods (3-5 years) and the difficulty of disinvestment in case of failure. Even though they are in principle in control of the venture, they lack the benefits of sharing costs and risks, knowledge, organizational assets and networks with a local partner.

Market entry through an acquisition

An investment mode through acquisition is an alternative to a wholly-owned subsidiary. The main motives to acquire a foreign firm are: product diversification, geographical diversification, the acquisition of specific assets (management, technology, distribution channels, workers, and others), the sourcing of raw materials or other products, or financial diversification (Root 1994: 142,143). An acquisition is assumed to have several advantages compared to a wholly-owned subsidiary: a more rapid market introduction in the foreign market due to existing products and markets, a shorter payback period (immediate income), the provision of scarce resources (such as human skills), and possibly new products. Yet, eventual disadvantages exist. First, it is difficult to locate and to evaluate possible acquisition candidates. Relevant evaluation factors could be: size, sales and profit potentials, quality of management, manufacturing, technological sophistication, pricing and financing and strategy fit between the investor firm and the acquisition candidate (Root 1994: 145, 146).

Second, acquisition may be disadvantageous because of governmental policies and industry attitudes, implying that acquisitions make less economic contribution and that displacement of local ownership is unfavorable. Acquisitions may also create problems with the transfer of ownership and control, the risk of staff leaving the acquired company and eventual problems with low fit (e.g. technology, culture) between the investor firm and the acquisition candidate.

Market entry through a joint venture

A joint venture entry refers to when an international firm shares in the ownership of a firm in a target country. However, it has to be noted that when entering developing and communist countries a large number of firms choose joint ventures because of governmental restrictions on wholly-owned subsidiaries. Yet, advantages can also be exploited in these joint ventures. The equity share can vary and joint ventures are classified as majority, minority or 50-50 ventures. Joint ventures can be created from scratch or by acquisition of a partial ownership in an existing local firm (Root 1994). When choosing a joint venture it is critical to find the right partner. Firms should therefore engage in a systematic search and evaluation process to identify and screen potential candidates. The following check-list is recommended for joint venture entry: purpose of joint venture, contributions of each partner, role of host government, ownership shares, capital structure, management, production, finance, marketing and agreement (Root 1994: 150).

There are several advantages to entry with a joint venture. The entrant firm is more rapidly integrated in the target market through the venture partner's organization and networks. The firm gains through the venture partner: access to local capital (and thereby reduces risk), local market knowledge, production and marketing skills, personal contacts with local suppliers and customers, and local reputation. Disadvantages are eventual conflicts of interest with the venture partner, as it is challenging to agree on the allocation of responsibilities in management, technical-assistance, marketing, finance and day-to-day operations. Firms can hinder eventual disagreements in formalized agreements, but mutual trust and understanding are fundamental to succeed with joint ventures.

2.6 Subsidiary staffing strategies

Subsidiary staffing strategy is a principal strategic means for MNCs to share knowledge, to coordinate activities, and to exercise control over their subsidiaries (Gaur et al. 2007). The key strategic issue is whether to use expats (parent country nationals) or locals (host country locals). This choice has opposed implications for control and coordination between a subsidiary and its parent, knowledge management in the subsidiary, organizational development and the realization of local legitimacy (Gaur et al. 2007).

The use of expats can facilitate the transfer of parent-firm knowledge as they embody the knowledge of the parent-firm capabilities, routines, strategic organizational practices, and can bridge the differences between the home and the host country (Gaur et al. 2007). Expats are therefore critical in spreading not only their own technological and managerial skills, but equally in transferring the organizational knowledge of the MNC to the subsidiaries. Expats are also found to be better positioned to enhance the scope and richness of knowledge transfer channels through both formal and informal communication mechanisms (Fang et al. 2010). Yet, the influence of expats in knowledge transfer may diminish with time, as subsidiaries gain experiences with the parent-firm and establish structures and routines to enhance communication (Fang et al. 2010). Expats are however not always advantageous for the subsidiaries as they are less familiar with the new institutional environment and lack local market knowledge. Locals conversely know their institutional environment, possess local market knowledge and are therefore better positioned to adapt parent-firm knowledge to the local market and to customers (Fang et al. 2010).

3. Method

The research uses a qualitative approach with semi-structured in-depth interviews. This design allows collecting rich data; to get insights into managers' perceptions and to get a more thorough understanding of the complex process of internationalization and of market entry (Eisenhardt and Graebner 2007, Easterby-Smith et al. 2008). As mentioned before, we focus on SMEs, and define them according to EU law (European Commission – Enterprise and Industry[5]). *Small* firms have less than 50 employees and *medium-sized* firms have less than 250 employees.

In-depth interviews were conducted with managers at headquarters in Bergen (Norway) during spring 2011 and with managers in subsidiaries in Houston (USA) in February 2012. In total, we conducted interviews with 24 managers from 20 firms and organizations. More specifically, we interviewed managers in 6 headquarters (5 SMEs and 1 large firm), 10 subsidiaries with parent-firms being SMEs, 5 subsidiaries with parent-firms being large, 2 subsidiaries with parent-firms being Research Institutes, 1 American firm and Innovation Norway and The Norwegian Seaman's Church. Twelve of 15 firms originated from the subsea cluster around Bergen. The three other firms came from other parts of Norway.

The report presents both headquarter and subsidiary perspectives on a number of topics. Yet, we have fewer interviews with headquarters than with subsidiaries. Hence, the empirical material on headquarter topics (e.g. pre-entry strategies) is less solid than topics related to subsidiaries (e.g. the market entry process). We enlarged the sample in Houston for several reasons. First, it was interesting to include a variety of firms and organizations to gain a richer and more complete picture of the market entry process in Houston. Second, a number of SMEs from Bergen had limited time experience in Houston, and to include larger firms and other firms from other regions could therefore add perspectives from firms with longer experience. It was also interesting to explore whether large firms had different experiences than smaller firms. Innovation Norway and the Norwegian Seaman's Church provided us with general information on Norwegian firms' experiences in Houston – and served more as key informants. We also treat the informant in the American firm as a key-informant to "represent" American firms' views in Houston[6].

[5] www.ec.europa.eu
[6] This key informant happened to be originally from Norway, but had spent his professional life abroad, and many years in Houston in American firms.

In interviews, we concentrated on four main topics. We asked about the strategy and decision-making process prior to the market entry, and how the company assessed available resources, strategy and plans, knowledge and competencies (headquarters). Second, we focused on the learning process in becoming established in the market, i.e. what kind of challenges they faced and related coping strategies and adjustments. Third, we focused on the relationship between the HQ and the subsidiary with an emphasis on the transfer of knowledge and communication. The three[7] interview guides (Bergen and Houston) are included in appendices (1, 2 and 3). We recorded and transcribed all interviews. All data from the interviews have been treated confidentially. We only refer to informants and firms by numbers in the report, with the exception of Innovation Norway and the Norwegian Seaman's Church. We have translated all citations in Norwegian to English in the report (marked with *translated*). Below, we present in table 1 an overview of all firms, informants and key informants.

Table 1: *An overview of categories of firms, informants and key informants*

Firm 1	SME, headquarter (1) SME, subsidiary (1)	**Firm 11**	Large firm, headquarter (11) Large firm, subsidiary (11)
Firm 2	SME, headquarter (2) SME, subsidiary (2)	**Firm 12**	Large firm, subsidiary (12)
Firm 3	SME headquarter (3) SME, subsidiary (3)	**Firm 13**	Large firm, subsidiary (13)
Firm 4	SME headquarter (4) SME, subsidiary (4)	**Firm 14**	Large firm, subsidiary (14)
Firm 5	SME, headquarter (5)	**Firm 15**	Large firm, subsidiary (15)
Firm 6	SME, subsidiary (6)	**Firm 16 Research Institute**	RI (16)
Firm 7	SME, subsidiary (7)	**Firm 17 Research Institute**	RI (17)
Firm 8	SME, subsidiary (8)	**Firm 18 American firm**	Key informant, Houston
Firm 9	SME, subsidiary (9)	**Organization 19 Innovation Norway**	Key informant, IN
Firm 10	SME, subsidiary (10)	**Church 20 Norwegian Seaman's Church**	Key informant, NSC

[7] We developed two interview-guides for Houston; one for informants and one for key-informants.

Findings – empirical analysis

4. International experience, motives and decisions pre-entry

4.1 International experience pre-entry

The companies had different backgrounds and international experience prior to market entry in Houston. The largest companies had extensive international experience and a high share of net incomes from foreign activities. In these companies, managers responsible for international activities were more experienced with international operations and assignments than managers in the smaller companies. Several of the smaller companies had limited international experience before setting up in Houston, as the following citation illustrates:

"We had no international experience before Houston other than that we had been involved in international projects as individuals…Our company has evolved gradually. Business first, then organization. So our ambition has been to make a profit as we go along. We see different models where large organizations are built in order to 'conquer the world'. I suppose we have a different mentality and culture…." **SME, headquarter (1), Translated**

Yet, also SMEs had experience in selling products or services internationally, but through agents or by being a sub-contractor for a larger multinational company (MNC) located in Norway. One form of a sub-contractor relationship with a domestic customer is a *piggybacking relationship* (in chapter 2.5). Piggybacking enables SMEs to get access to international markets without facing the risk of operations through own investments. Managers in SMEs believed piggybacking relationships were critical to obtain international sales and to carry out international operations. We observed just a few born globals in the sample. Nearly all companies had operations in the Norwegian offshore sector and perceived this as their home market before coming to Houston.

4.2 North Sea experience - an important asset for going international

Several informants claimed that the North Sea was one of the best areas in the global oil industry to develop and implement new technology. Strict Norwegian offshore petroleum regulations and a beneficial taxation system explained the positive climate for the development of advanced technology. They pointed to Statoil[8] and diverse organizations as key drivers in promoting development of technology. Norwegian technology also had to satisfy high requirements because of rough conditions in the North Sea. All these factors had

[8] In reality also Norsk Hydro ASA before it merged with Statoil in 2007 to form StatoilHydro (changed to Statoil in 2009).

contributed to Norway's leading international position today. Also SMEs had benefitted from operating in the North Sea. A good number of them had developed innovative technology, often in close collaboration with large customers (MNCs). This experience led to exports of the technology, either indirectly or directly, and hence gave them some international experience.

4.3 Why go to Houston?

From the discussion with headquarters and subsidiaries, it appeared that a number of factors drive companies' internationalization. Firstly, several managers highlighted the need to expand into new markets. Even though activities and operations in the Norwegian subsea industry were substantial (and are increasing), most companies chose to expand globally to be able to grow and exploit their technology investments. The search for new markets was therefore one key factor.

The main reason for going to Houston was the large and attractive market in Houston and the Gulf of Mexico (GOM). Most managers considered the market potential in Houston (or GOM) as substantial, and especially for some type of technologies. Houston represented for them a market with a great variety in technology demands. The importance Houston holds as the global oil industry capital was another factor for Norwegian companies. Most managers agreed that Houston still was "*the hub of the oil and gas industry – globally*", as the quote below illustrates:

"No matter how hard Stavanger and Aberdeen try they will never equal that. So, a lot of business is routed through Houston, even if it originates – let's say- in Bergen. I don't think you can really be a global player in this industry if you don't have an office here in Houston. You are almost expected to be here…" **SME, subsidiary (6)**

Houston was perceived as the world's leading energy center, characterized by diversified oil and gas industry, and a massive number of organizations specialized in engineering including subsea. The most important argument was that *all* the major operators and decision makers were localized in Houston. Executives in Houston implemented decisions not only with regards to the Gulf of Mexico, but also West Africa, Asia, the North Sea and other areas. One manager stated that the first contract won in Houston was a project back in Bergen. Houston was perceived as the energy city with the world's largest budget spending; not necessarily due to activities in the Gulf of Mexico, but with regard to activities in oil provinces worldwide controlled by companies in Houston. Managers explained that even if firms did not intend to sell products and services in the GOM, Houston was still of great importance due to its global influence.

"I can give a number of examples on strategy and management decisions that are made in Houston. The majors all have headquarters here and the volumes are exceptional. So the premises are laid in Houston for many companies." **Large firm, subsidiary (11), Translated**

Some managers also highlighted the importance of following important customers (MNCs) abroad. They felt obliged to follow customers and to establish in Houston to maintain and develop the customer relationship further. These customers typically wanted SMEs to continue to deliver products and services to them, and follow them as they expanded to new markets. Conversely, the SMEs aimed to increase business in new markets and at the same time strengthen relationship bonds. Some of the companies also developed their technology in close collaboration with companies established in Houston, and hence had to move to carry out the final technology testing close to the customer.

However, with regard to perceiving Houston as the global oil hub, some informants stressed the prospective changes in the global oil industry. They pointed out that Houston's global position could change due to the emerging oil countries' intensifying use of Local Content (e.g. Brazil).

"The way I read it, everything was run by Houston 10 years ago. Now things are developing differently, and Brazil is a good example. With increasing Local Content and maturing of these areas, we must accept that a Houston presence is not enough to do business there. I am not sure that Houston will have the same relevance in the next 10 years as in the 10 years up till now…" **Key informant, Houston, Translated**

Nevertheless, Houston was still an important channel to access information about international projects. Norwegian firms' presence in Houston had increased their knowledge of the global industry, customer needs, market and technology.

4.4 The choice of entry mode

Informants mentioned four different entry modes: agents, joint ventures, acquisitions, and wholly-owned subsidiaries. Nearly[9] all the companies chose to establish a wholly-owned subsidiary, even though managers at HQs admitted this entry mode required substantial financial resources and was more risky. Several reasons can explain Norwegian firms' choice

[9] One large firm in the sample said they entered through an acquisition, but we have little information about the acquisition. Several firms also referred to other larger, Norwegian firms that have entered through acquisitions, with less success. We only have second-hand and superficial information regarding these acquisitions, and cannot elaborate on these.

of entry mode in Houston. One is that companies perceived little psychic distance towards Houston.

"We took a lot more risk in Houston; we chose to establish a company. There were many reasons; we saw it as the right thing to do in the setting there. Things were different for us in Houston. We normally find an experienced partner; make an agreement with somebody local to get rid of all these barriers that give us a hard time: cultural collisions, economic practices etc. In Houston we did he opposite…" **Large firm, headquarter (11), Translated**

The majority of managers either had negative experiences with other modes, or did not even consider them. With respect to using agents, some informants believed that agents could not provide the control you needed to sell advanced technology. To introduce advanced technology in Houston would also require high commitment and a long time perspective, which was difficult to obtain from agents with multiple products to sell. Conversely, joint ventures with a local partner could be the solution for many high-tech firms (Key informant IN). The key informant (IN) argued that a local partner would have an incentive to sell the technology and the firm could simultaneously keep control of the technology within the joint venture. He further argued that the firm could benefit from the local partner's reputation and networks. Despite these advantages, no firms in the sample chose to enter with a joint venture.

The same key informant (IN) argued for the acquisition entry mode. Even though many firms had scarce financial resources to acquire American firms, he believed that the cost difference between a wholly-owned subsidiary on the one hand and acquisition on the other, was not that large – if firms considered the total costs of establishing a subsidiary. Most Norwegian firms invested 3-5 years before making profits in the new market. He claimed that a number of small and medium sized local firms were financially attainable for Norwegian companies. Yet, few firms seemed to consider this alternative pre-entry.

Yet, some of them had seriously considered entering through an acquisition or joint venture, but failed in doing so. Low degree of transparency and little interest from American firms were experienced as major difficulties. A few managers also explained that the Norwegian origin, the small size of their company and lack of financial resources increased the difficulty in acquiring a U.S company:

"We tried to learn whether there were companies in Houston that we might buy instead of establishing a company. But we did not have owners that were able and willing to spend the money back then. We met cold shoulders in Houston; they had no interest in being owned by Norwegians - that was off. So we realized that we just had to get an office and do it ourselves." **SME, headquarter (4), Translated**

We therefore conclude that even though alternative entry modes were possible, the challenges with joint ventures and acquisitions led most entrant firms to establish a wholly-owned subsidiary.

5. Setting up the subsidiary

Most entrant firms experienced great challenges in setting up the subsidiary. Here, we deal with two critical issues: the choice of the subsidiary manager and the size of the subsidiary.

5.1 Choice of subsidiary manager

An important decision was the choice of an expat versus a local as the subsidiary manager. The majority of the subsidiaries in the study chose Norwegian expats as the subsidiary manager. Only 3-4 of 18 Norwegian subsidiaries had a local American manager. Yet, the choice and recruitment of the subsidiary manager was an important and difficult issue. All agreed, however, that it was critical to find the right person (local or expat) for the job and that establishing a subsidiary required special experience, competence and personality.

Some informants insisted on choosing a Norwegian (an expat) who had proved trustworthy and knowledgeable through years in the company prior to the international assignment. The headquarter managers argued that this person would enhance confidence and thereby strengthen the relationship between the two units. Informants also explained that Americans change jobs more frequently than Norwegians, and typically have low loyalty toward the employer. To hire a Norwegian therefore ensured stability.

Informants also believed that Norwegian expats were more knowledgeable of the company's technology, culture and expertise and therefore had a superior ability to transfer parent–firm knowledge. They also had personal networks within the parent-organization that facilitated communication back home. This knowledge, networks and abilities were especially important during the subsidiary startup phase. Later on, when the subsidiary was established and routines and practices were settled, several informants argued for an American manager to develop it further.

Even though Norwegian expats had valuable knowledge and networks, they often lacked local market knowledge and business networks in Houston. Profound local market knowledge and business networks were conversely the advantage of American managers. Therefore, the opposed view was that the subsidiary manager had to be a local (American) because of these managers' local market knowledge and networks. Additionally, a few informants claimed that only an American manager could build a truly local organization. As all subsidiaries recruited both locals and expats – the fundamental question was whether one should ground the organization in an American leader or a Norwegian one.

5.2 Size of the subsidiary

Another important issue was the size of the subsidiary. Several subsidiary managers emphasized the importance of having a "critical mass" of employees. According to the informants, large companies in the USA were often skeptical towards small companies with limited human resources. It therefore seemed important for Norwegian subsidiaries to have a certain "critical mass" of labor to signal that the company was committed and had a long-term purpose in the market. The critical mass did not necessarily mean a large scale of human resources but rather diversity among the employees in the subsidiary: to cover the different operational fields such as management, sales and technology.

"We don't have to build a large organization, but we need somebody here, somebody for the customers to contact. And they ask where engineering is in Houston. When I say that I am it, they wonder: I am the president and will be going. They just shake their heads at that. That is not the way to do things here." **SME, subsidiary (1), Translated**

Critical mass of labor in the subsidiary was also important because employees at HQ were often busy and therefore not always available for the subsidiary. Some subsidiary managers had experienced problems getting feedback from HQ when they urgently needed it. Some informants also argued for the need to have other employees with whom you can discuss technology issues (sparring partners). Both HQ managers and subsidiary managers highlighted the importance of having competent engineers, and engineering facilities in-house. Customers in Houston generally required that subsidiaries had engineers in-house that could handle technology issues. Sometimes customers needed a rapid response time, and this was difficult to achieve with the large time difference between Norway and the USA.

6. Challenges in the foreign market (Houston)

The SMEs met various challenges when establishing in Houston. In this chapter we describe the most important ones: longer startup phase than expected, the local industry culture and technology barrier, the importance of business networks, recruitment and practical challenges.

6.1 Longer startup phase than expected

Most firms experienced challenges in establishing the subsidiary, and found the startup process exhausting and demanding. The managers often pointed to lack of local network and the difficulty in reaching potential customers as key barriers in the startup phase. The startup process normally took 2-3 years with poor results and a daily struggle. In many ways, it appeared that the companies underestimated the challenges of starting up operations in Houston as this HQ manager explains:

"Everybody understands it is very different if you are going to Kazakhstan. If you are going to America, people tend to think it's just like calling a cab; they speak English – so everything should be very similar, but it is not. I believe that must be our next goal – we need to figure out how different things are." **Large firm, headquarter (11), Translated**

The startup phase was especially tough for SMEs, but also larger Norwegian companies had difficulties to establish and succeed in Houston:

"I hesitate to be too categorical, but…one of the reasons I quit was that in no way did I see the company as an international player. It was a Norwegian company based in Norway with Norwegian technology. They tried to expand by acquisitions; after a while the basis of those companies disappeared – and they never succeeded." **Key informant, Houston, Translated**

Also those firms that followed customers to Houston experienced challenges in the startup phase. Following the customer did not reduce risks or challenges in the foreign market. Some managers had trouble getting in contact with the MNC's business unit in Houston, even though the MNC's unit in Norway had encouraged them to establish (in Houston). One manager referred to this problem as *Chinese walls*[10] between business units in MNCs. Several SMEs had serious problems with this, as the MNC was an important reason for establishing in Houston. A manager in HQ revealed this problem early in the pre-entry phase:

"Our client said we needed to follow them internationally. And that meant Houston mainly. Then we asked whether they could guarantee orders if we moved to Houston? No, they did not; we still had to prove our products. It was not automatic. We really had little choice; if we wanted their business, we had to come to Houston. But I do feel they let us down. They really did, at least in the beginning." **SME, headquarter (4), Translated**

[10] Norwegian saying: "vanntette skott"

6.2 Local industry culture and the technology barrier

Interviews with managers revealed that Americans recognized Norwegian advanced technology. Still, many Norwegian companies had difficulties selling their technology, and used extensive time and resources to eventually succeed. Norwegian companies also had to adapt their technology to the local industry culture and mind-set.

"There is recognition that the Norwegians have advanced technology, but there is still a culture that 'we know best'…" **SME, headquarter (4), Translated**

Norwegian companies believed that their products and technologies were advanced, effective, and environmentally friendly and thereby easy to sell. The managers perceived their companies' technology and related competence as their main competitive advantage. Most managers were confident that their technology was unique and *state of the art*. One key informant (Houston) said:

"…it's a bit 'look to Norway'; there seems to be some fascination about what has happened there, particularly that one has managed to develop technology in spite of the high cost ..." **Key informant, Houston, Translated**

On the other hand, it seemed that American companies perceived the Norwegian technology as an unnecessary cost.

"Most people coming over claim to bring new technology. But America is the most conservative market that I know. They don't want new technology – they want something that works." **Key informant, IN, Translated**

Both key informants and informants perceived the American oil industry as conservative; it was less innovative and modern compared to the Norwegian oil industry. Managers pointed to several reasons to explain this. The American oil industry had been conservative since its beginning, and companies tended to use technology that had proven results, and that had been effective in the past. Weak employment laws in the USA reinforced this technology conservatism. Employees could risk losing their jobs if they made "wrong" job related decisions e.g. if they decided to use a technology that did not function and caused extra costs. Job insecurity was therefore one major hindrance to American firms attempting to use new technology.

American project managers preferred to use technology that had been used and proven reliable. And informants claimed that Norwegian technology had to be tested and verified in the Gulf of Mexico. Technology testing and verifying processes in the North Sea were not enough. The verification process was a long process according to the majority of the informants – but necessary in order to get the opportunity to bid on contracts. The key informant (IN) explained that it took time because new technology had to be accepted by a number of actors: oil service companies, engineering companies and oil operators in Houston. It was generally easier to succeed if the technology could contribute to reduce costs and increased extraction, if there was an immediate need (e.g. the Macondo Blowout) and if the local authorities required this type of technology.

It seemed that many Norwegian companies were not aware of this extensive process. Most Norwegian companies believed pre-entry that their proven records in the North Sea would facilitate the American verification process. Yet, Norwegian companies quickly realized that they had to go through a local verification process. Managers described this process as lengthy and costly, and they were not prepared financially.

One key informant (IN) claimed that it was much easier to sell technology to the UK (British North Sea sector). If you had pre-qualified technology from Norway (North Sea), British actors would approve this technology since most requirements and national regulations were similar. The key informant therefore recommended firms to consider this market before Houston (GOM).

Lately, however, managers had observed changes in the American oil industry. The Macondo Blowout in 2010[11] had led to changes in regulations and safety procedures, and the establishment of new organizations[12] that favored advanced and more environmentally friendly technology. With this new outlook in the American oil industry, new opportunities may be created for Norwegian technology (some have already materialized[13]). On the other hand, the Macondo event can also drive local companies to be more cautious and reluctant to try out new technology. Conservatism and the emphasis on proven technology could therefore possibly strengthen (Key informant, IN).

6.3 The importance of business networks

"The Americans only deal with the people they know. That means you have to build networks." **Key Informant, IN, Translated**

[11] Or the Deepwater Horizon oil spill, BP oil disaster, refers to the oil spill in the Gulf of Mexico that flowed unabated for three months in 2010 (from April 20 to July 15 – well officially sealed September 19). It is the largest accidental marine oil spill in the history of the petroleum industry. BP was the operator of the Macondo Prospect (www.wikipedia.org)
[12] Marine Well Containment Company – Aker got the biggest contract (Key informant IN).
[13] Ca. 30 Norwegian companies were directly involved during the Macondo Blowout (Key informant IN).

Nearly all managers emphasized the importance of business networks to succeed in Houston. There seemed to be some differences between Norway and the USA with regard to business networks and their importance. Informants claimed that Americans highly emphasized the personal and social aspects in business networking, and mentioned the importance of golf, sports events, having meals in restaurants, sharing information about the family and social issues. Socializing in informal settings and engaging in soft conversations, was critical before *talking business.*

"Yes, you go out and socialize with them. And for sure…I don't like baseball, but you do it because you would like to learn and then you are really like a child asking: what happens now? And the Americans will like to tell you about their things. And then you have a much more open dialogue with them." **Large firm, subsidiary (13), Translated**

"In our industry golf is it! And Friday afternoon, if you do not have a golf game then; what is wrong with you? You have a customer for four hours; he will tell you more on the golf course than what he can do in the office." **SME, subsidiary (6)**

The personal aspect in business relationships created trust and a more open dialogue. Personalized business relationships facilitated exchange of information on market opportunities, potential customers and competitors, which was crucial to advance in the Houston business world. Not all Norwegian managers were prepared and knowledgeable about these cultural differences pre-entry, but tried their best to cope with this networking challenge. Some informants thought that Americans had an advantage in building networks and in selling the technology. They had profound local market knowledge and knew how to proceed in the business environment. This knowledge enabled them to identify market opportunities and to exploit them. A few informants also believed that locals (Americans) and expats (Norwegians) differed in their sales' and networking focuses. Norwegians had typically a greater focus on technology, while Americans were more focused on networking, sales and marketing.

"The American is a salesman in a whole different way from us Norwegians, for he is not shy at all. We are much more modest. He will just go up and talk to somebody and you will need that when you are over there…." **SME, headquarter (2), Translated**

To hire local managers (Americans) in subsidiaries could therefore reduce the market barrier and speed up the market entry process.

Some Norwegian managers had long experience and extensive local market knowledge. They explained that it took a long time to acquire local market knowledge and that it was gained through experience.

"We learn every day how the market works. I believe I have been here for 22 years now, but every market has its (…) I have been in many markets within oil, gas and shipping; each market has its own model, no doubt there." **Large firm, subsidiary (11), Translated**

These experienced Norwegian managers had a quite rational attitude towards the market entry process and the extended time needed to succeed in the market. They knew it took some years and started by carrying out network activities with potential customers, business partners and others. They were convinced that these activities would eventually lead to sales in the future.

Some Norwegian companies benefitted from networks with larger companies established in Houston, e.g. former business partners and current customers. These networks typically contributed to promoting the Norwegian company, gave access to valuable business partners and to markets. These firms therefore had an easier startup in Houston than firms without local networks. Other Norwegian subsidiaries relied on their American employees' networks, which also facilitated the network building process.

One thing was to build networks, but to maintain them was considered even more important and challenging. Several informants thought it was crucial to continuously be out there paying attention and to participate on diverse arenas. There were several ways to maintain a business relationship. To invite business partners and customers for lunch in restaurants or to events was the most common way. Lunches were seen as informal meetings where people could also discuss business and were therefore very useful. Another way was to invite customers for lunch at the company's facilities. For example, some companies regularly invited customers for breakfast. Other companies arranged receptions and barbeques. One informant said it was crucial to always accept invitations from potential business partners and customers in order to build and maintain business networks.

Entrant firms could also benefit from building networks through Houston based organizations, exhibitions and conferences in the region. A number of exhibitions and conferences related to the oil and gas business were organized in the region, and the largest and most well-known was the OTC (Offshore Technology Conference). Other organizations that arranged conferences, exhibitions and seminars were: the Society of Petroleum Engineers, Innovation Norway, INTSOK (Norwegian Oil and Gas Partners) and the Norwegian American Chamber of Commerce. Branch specific organizations related to e.g. drilling, seismic surveying, geo-physical contractors, marine technology were also highly valued by informants. Participating in these arrangements could contribute to building networks, enhance market knowledge, and promote sales and marketing. Several managers also highlighted the Norwegian Seaman's

Church as an important informal and social setting to build network within the Norwegian business milieu. These networks did not necessarily contribute directly to sales, but could provide companies with market information, networks and the exchange of business experiences in Houston. However, a few managers were skeptical to becoming too involved in the Norwegian business milieu; this might lead to the development of a Norwegian "cluster". For them it was critical to be recognized as an international firm and to be fully integrated in the American business milieu.

6.4 Recruitment challenges

With regard to recruitment and human resource management, Norwegian companies had two main problems. Firstly, companies struggled to convince Norwegian employees to move abroad as expats. Norwegian workers seem to enjoy (too much?) their home country and the economic incentive of going abroad was not sufficiently important. Some informants believed Norway lacked an international, cosmopolitan culture and few Norwegians searched for new adventures. The expats seldom stayed for a long time.

"We see a kind of guest appearance – look at the Norwegians here; maybe 20-25 of us have been here 10 years – not more. And 500 or 1000 people come by every year." **Key informant, Houston, Translated**

Managers who had worked as expats for some time recognized the challenges and hard times, but also valued the new experiences, new friends and learning. Norwegian SMEs (companies) could perhaps highlight more the challenges and learning in foreign assignments, and better prepare the expats for the new journey. Larger firms often had expat programs, while SMEs seldom prepared their expats through special courses or programs (Key informant, NSC).

To function as an expat, however, special qualities are needed – skills, knowledge and specific personality traits (Key informant, IN).This key informant believed that the choice of expats in many firms seemed rather random. He explained that the chosen expat could be skilled and knowledgeable, but not necessarily the right person for this particular challenge. The same key informant had observed that successful Norwegian based firms generally had managers who were sociable, jovial, nice and positive – a prerequisite to succeed with networking. Social capabilities and personality traits therefore seemed to matter in addition to other capabilities. To overcome the cultural differences between Norway and Houston it was beneficial to have a flexible mind-set. Norwegian expats had to integrate in the local community, respect the culture and accept the *American way*, despite unfavorable aspects in the American society and in Houston. More, managers needed to be patient, persistent and hard working to succeed in building networks.

"I understand now after more than a year that they are a different race; those who can come abroad and face an uphill struggle month after month and still smile, play golf and have a good time. You need to tackle a lot of punishment. It is not easy; everything is not rosy over here." **Key informant IN referring to an expat's experience, Translated**

Other informants also supported these observations regarding challenges and adequate qualities for expats.

Both managers and key informants (IN and NSC) pointed to family challenges in the expat assignment. Expats with families had additional challenges with their partners (most often female companion) and children. Most women in Norway have their own careers and work identity. It may be problematic for some to become traditional housewives in Houston. The working hours were longer than in Norway and it was difficult to achieve the same status equality ("likestilling"). The children also had to integrate and thrive in the American school system and adapt to a new environment. If the wife and children had problems – the expat became less effective at work, and the sojourn in Houston would be short. Both IN and the Norwegian Seaman's Church were concerned about these issues and had started several initiatives to improve the situation for the whole family. One key informant (IN) also emphasized the need to take care of expats when they returned from international assignments. Many expats felt that their competence was not valued back home and that the experience did not advance their carrier, rather the opposite.

The second challenge was the recruitment of American employees. Many managers from HQs and subsidiaries pointed out the problem of finding the right local candidates. Managers used different recruitment approaches: internal resources, formal and informal networks, headhunting agencies, recruitment agencies and others.

"What proved a challenge for me was to search out people I could trust. You are new here, you are not in your own back yard…So you must try to find somebody that you can, and you might have to trust. So you must be careful who you choose. If you start out wrong, you may quickly get in trouble." **Large firm, subsidiary (15), Translated**

Due to the high mobility of employees in American business, it was hard for Norwegians to really understand the CV of the candidates. Americans worked hard to get a job and typically put great effort in making an impressive CV. However, the information provided in the CV might not be valuable for the employer:

"An American will always try to have a very good CV. The CV is unique for their advancement. I have seen CVs that – they are only 30, but on paper they have a hundred years' experience." **Large firm, subsidiary (13), Translated**

American managers also agreed that finding the right people is challenging in Houston. SMEs in general had greater difficulties than larger firms, as experienced workers were usually more interested in working in larger MNCs. Most managers therefore perceived the recruitment process as a struggle.

6.5 Practical challenges

In addition to the larger market challenges in the startup process, a good number of firms also struggled with more practical challenges related to differences in the finance, banking and insurance systems, and difficulties with the immigration policies. More specifically these challenges could relate to troubles in obtaining bank credit for the company and getting a credit card, and problems with insurance and visa applications. It seemed that several of the Norwegian companies had overlooked these practical barriers pre-entry and therefore had to use a lot of effort to deal with these practicalities post-entry. Both key informants and experienced managers advised that firms should prepare for these practicalities pre-entry to avoid wasting time and resources in the market entry phase. Information about how to deal with these practical challenges could be obtained from diverse organizations: Innovation Norway, Royal Norwegian Consulate General, The Norwegian American Chamber of Commerce in Houston, and by contacting other Norwegian subsidiaries in Houston. There are also relevant web-sites where expats in the USA exchange information and experiences, e.g. ISRID Expats Houston and Expat Arrivals.

7. Lack of pre-entry strategy and plans

As mentioned, many firms experienced difficulties with the market establishment in Houston. Some of these difficulties could have been reduced if the entrant firms had been better prepared. Yet, our research show that even though entrant firms had clear motives for market entry, they were not well translated into strategies and detailed plans. A good number of managers from headquarters and subsidiaries stated that few plans were written in advance. Without a well-grounded strategy and plan, many firms did not know where to direct their resources and what performance goals to expect. In most firms, a small group of managers typically carried out the pre-entry strategy process in close relation with the board of directors. It seemed that the strategy process, the market analysis and the decision-making were performed quite rapidly. SMEs in particular explained this by the few decision makers in the firm, the close relationship with the board of directors and low emphasis on plans and strategic processes within SMEs.

"Things happen very quickly in a company like that. That naturally carries advantages as well as disadvantages. We don't have very clear long-term plans; it is more ad hoc. We sometimes do things that were not well enough thought through, but we avoid those endless discussions. You make a decision and then carry it out." **SME, headquarter (5), Translated**

The majority of managers seemed confident to carry out market entry processes without clear strategies and detailed plans. In a way, the managers did not know how the process could have been executed differently. In retrospective, they had experienced a trial and error period. Some managers explained that they didn't need to carry out extensive strategy processes and planning to enter Houston. Houston was perceived to be not too different from Norway (low psychic distance), and the differences could be handled. A few also meant the process of market entry in Houston was equal to establishing a subsidiary in Norway. Yet, managers who perceived small differences pre-entry typically experienced greater cultural differences post-entry. And these cultural differences typically related to the local industry culture, the emphasis on business networking, and general socio-cultural issues (discussed in chapter 6).

It should be noted that particularly managers with international experience were more liable to carry out strategy processes and make plans prior to the establishment in Houston. Also some key informants stressed the importance of carrying out strategy processes and making plans. The most common argument for having thorough strategies and plans before market entry was the cost of failures post-entry. There were substantial costs related to the establishment and the operations of a subsidiary. An expat may cost the company annually 2.5 – 3.5 million NOK (Key informant IN). Internationally experienced managers argued that time and cost of establishment was frequently miscalculated. Companies often did not have a clear perception of the time required for the foreign subsidiary to operate with profits. Another concern was that Norwegian HQ managers underestimated the difficulty in selling Norwegian technology in Houston. This misperception therefore led to less planning and analysis before market entry. Even though the firms' technology was well established and had a high reputation in Norway, most firms struggled to sell the technology in Houston.

Our findings therefore show that Norwegian managers typically underestimated the need for strategy and planning and the time needed to succeed in Houston. They initially had a short-term view of their market entry process, and some firms thought they could make profits after only six months, due to their unique technology and competitive advantages (Key informant IN). However, our research demonstrates that high-tech companies needed about 3-5 years of investment and effort; to achieve adequate performance. This was true for both SMEs and larger companies. The difference was that larger firms had the necessary financial resources to support the subsidiary in the initial phase, while SMEs had difficulties in bearing the costs. We also observed a difference between internationally experienced managers and less experienced ones with respect to performance goals and the time perspective in the new market. Experienced managers knew that it would take time to make a profit, and that sufficient funding (from HQ) would be necessary.

"When we entered, it was to take the market in the Gulf of Mexico…we think long-term all the time. Many of the projects that we work with may take 4 years to reach a decision, sometimes 5…Many companies say: Ok, 2 years – nothing has happened we pack up and go because this is costing us. Yes, it costs a lot of money, but you need to take the long-term view – because it takes 2 years before you begin to see that you build the relationships, the network with customers and all that." **Large firm, subsidiary (13), Translated**

8. The Headquarter - Subsidiary relationship

This chapter describes various issues related to the headquarter-subsidiary relationship: commitment and support from HQ, communication, division of labor, transfer of technological knowledge and organizational values and practices.

8.1 Commitment and support from HQ

As mentioned, it took time to establish a subsidiary and a lot of challenges had to be overcome. It was considered crucial for the subsidiary to receive support and commitment from the Headquarter at home. HQ managers acknowledged that they occasionally failed to support the subsidiary sufficiently.

“We take part and we are committed, but at the same time we have to admit that we haven’t managed to follow up well enough.” **SME, headquarter (1), Translated**

The financial crisis was one major reason for this. Economic problems at home reduced the attention and support toward the subsidiary. The long and difficult startup process in Houston and the difficulty in selling the technology also led to less commitment. The Macondo Blowout postponed commercial projects in Houston and aggravated the situation.

"Really what was difficult was that it takes longer than I thought to build this. Don’t think we can make a profit for the first three – four years (…) Then you need to convince the board to keep it going." **SME, headquarter (4), Translated**

Managers in subsidiaries had different views regarding commitment and support from HQ. Several were satisfied with the technological support. The subsidiaries needed substantial technological support in the early phases of establishment. The majority of the subsidiaries had only one or two employees in this period. Additional support from HQ was therefore crucial.

"Yes, we had that. As I said, we started with the X technology. We had good support from Bergen on this; so as we marketed this technology, we promised that operations would be with experienced personnel from Norway. So, yes, we had that." **Large firm, subsidiary (15), Translated**

A few subsidiary managers emphasized that they had total commitment and support from HQ. Managers underscored that the commitment and support from HQ contributed to overcoming the initial market entry barriers. Other subsidiary managers felt that they were continuously judged, and felt isolated and less valued in the MNC.

“A nice thing would be that they saw the value and that we were working like an organization, instead of us having to prove our value all the time.” **Research Institute, subsidiary (16)**

Some headquarters were eager to control the financial status of the subsidiaries. Informants in Houston (employed in the subsidiary) acknowledged that the establishment of the subsidiary was more costly than expected, and that the parent-firm sometimes expressed uncertainty with regard to the project.

The subsidiaries emphasized the importance of financial support and strategic commitment in order to succeed in the foreign market. This support strengthened the affiliation with the entire MNC and towards the HQ. Subsidiary managers also highlighted the importance of visits from HQ managers in order to feel as part of the company. These visits typically enhanced the motivation and commitment among employees in the subsidiary and signaled the importance of the business unit. It was also emphasized that subsidiary employees should be included in HQ activities to strengthen affiliation with the whole company, for instance by a stay in Norway for some weeks or longer.

Most HQs agreed with this and emphasized the need to create solidarity between units in the MNC. Managers at the HQ also underscored other factors that could increase commitment towards the subsidiary: more exchange of information, updates on management meetings at the HQ, frequent visits to the subsidiary and additional meetings across business units in the MNC. Meetings contributed to creating satisfied employees that felt valued within the MNC.

8.2 Communication between HQ and the subsidiary

Communication was crucial to enhance collaboration and hence commitment between HQs and the subsidiaries. Collaboration between business units required communication mechanisms for the exchange of knowledge, information and ideas, and the companies used different structures and procedures to ensure communication flows. Still some companies needed to improve these mechanisms. Companies with international experience typically recognized pre-entry the need for various mechanisms to ensure knowledge flows. Less experienced companies needed time to recognize the importance of such mechanisms to enhance communication. Several managers experienced for instance that communication flows had been more difficult than expected during the establishment of the subsidiary.

"Not in principle, but in practice – time difference, cultural differences again – response time. So this dialogue, communication, is not always easy." **SME, headquarter (2), Translated**

Norwegian HQ and the subsidiaries emphasized the importance of daily communication. Daily communication addressed immediate problems, updates, new advancements, and flow of ideas. Additionally it was important to be aware of the distance and the time difference.

“It is very important for us to communicate well with Norway – and we are on the ball every day from 06.30 – 07.00 in the morning – time is then 13.30 – 14.00, so we have 2 - 3 hours before they go home.” **Large firm, subsidiary (13), Translated**

Up-to-date technology was important to ensure steady and reliable communication between the HQ and subsidiaries. Several managers emphasized videoconferences as an effective way of communication. Employees from different business units cooperated better when they knew (and could see) the people on the other side. This was especially important in the communication between Norwegians and Americans. However, it seemed that daily communication was mainly at the management level. Other employees working with technology development and production were typically not included. Several managers therefore argued that it was important to create structures and procedures to include employees from different departments to enhance collaboration.

Informants and key informants argued that a well-established reporting system could contribute to increased collaboration as it facilitated the exchange of ideas, knowledge and information and thereby created better solutions for customers. Subsidiaries may need access to critical information at HQ and vice versa in order to accomplish projects.

“Well, we had a file-structure on our server; so I give access to projects for the people at home – those who work on my project. They handle some purchasing, some engineering and some fabrication. Then they have access to my files and I have access to theirs.” **SME, subsidiary (1), Translated**

Reporting systems had to be accessible from all business units in the MNC. This made it easier to learn from each other and draw parallels from other projects. If a problem occurred in Houston, it could be resolved at HQ or in other subsidiaries. Even though these systems could be costly – they were worth the cost.

On a regular basis, several HQ and subsidiary managers underscored the importance of face-to-face meetings. Technology could not completely replace face-to-face interaction. Face-to-face meetings also created personal relationships that facilitated collaboration. MNCs should therefore arrange meetings periodically where all business units could participate. Managers also emphasized that the use of various mechanisms in combination maximized the benefits.

8.3 Division of labor in production and engineering

The Norwegian companies in our study in Houston were mainly high-tech firms with R&D, engineering and production departments in Norway. Several of the companies planned pre-entry to establish production facilities in the US market in order to lower production costs. Yet, most companies changed their initial plan and continued to develop and produce in

Norway. Few of the subsidiaries had established close relationships with suppliers in Houston. The interviewed managers mentioned several reasons for this.

In Norway, the parent company typically had collaborative, long-term relationships with regional suppliers, which facilitated product adaptations, ensured quality, reduced delivery time and production costs. HQ also generally had larger orders (to suppliers) than the subsidiary in Houston – which also lowered production costs. The regional suppliers in Norway were also familiar with the parent-firm technology and could easily make necessary changes in new deliveries. This compared to suppliers in Houston who were not familiar with the technology, and had to use extensive time to carry out productions.

"You have a vendor in Norway, a machine shop, that has been doing that for 10 years or 15 years (…) you have such a good relationship with that if you tell them on the phone (…) move it over 2 mm to the left, they know what you are talking about. You don't need the drawing; you don't need to go through a process of qualifying it and testing it and all that." **SME, subsidiary (6)**

Subsidiary managers also emphasized the difference in efficiency in production. Norwegian engineers were more efficient. This was mainly due to their previous experience with the technology. Both HQ and subsidiary managers also pointed to general differences in production.

"The USA is extremely inefficient and it takes extremely long to get things done. It is quite costly. We often see that parts, and engineering - machining is cheaper in Norway than in the USA. It is also more precise, quicker and better documented." **Large firm, HQ (11), Translated**

Managers were also concerned about using US suppliers due to the long delivery time. The extended time to deliver had led to missed opportunities and dissatisfied customers. Subsidiary managers had experienced shorter delivery time when using Norwegian suppliers, even allowing for transport time by sea.

"I can get these products here, but lead time is terribly long and very expensive. So then I shop in Norway; have it sent to Bergen and shipped over here." **SME, subsidiary (1), Translated**

8.4 Transfer of technological knowledge between HQ and subsidiary

Technological knowledge refers to the ability to support product-related activities, such as R&D, production processes, special tools and machinery and proprietary know-how (Fang et al. 2010). Typically, the subsidiaries relied heavily on technological knowledge developed in Norway. Transfer of this kind of knowledge was significant according to the majority of managers at both the HQ and the subsidiaries. Transfer was done through training of subsidiary employees in Norway or Houston and through different forms of communication. On the other hand, managers in the subsidiaries in particular were conscious of the market differences and the need to adapt technology and products to market needs in Houston.

"Then lots of ideas come up, which come from the meetings with our clients here which have different types of problems and your ideas about solving them back home. And we have to bring them back home." **Research Institute, subsidiary (16)**

This exchange of technological knowledge (in both directions) contributed to a better and common understanding in HQ and subsidiaries and was deemed necessary to achieve market success in Houston. As mentioned before, even well-established technology from Norway had to be adapted, tested and verified to fit the GOM market. Subsidiary managers with experience based knowledge of operations in GOM, and with close contact with customers had the ability to suggest adaptations of the Norwegian technology to local market needs.

8.5 Transfer of organizational values and practices from HQ to subsidiary

Several of the Norwegian managers emphasized the importance of transferring the organizational culture, values and practices from HQ in Norway to the subsidiary in Houston. One of the main reasons for recruiting Norwegian expats to run the subsidiary was their ability to understand the organizational culture in Norway and hence to implement it in the subsidiary (discussed in chapter 5.1). Some companies sent American employees to Norway to learn the organizational culture and practices. However, the same managers also acknowledged the difficulty in transferring these values because of the large socio-cultural differences between the two countries. Even though they wanted to transfer these values in the early phase of establishment, several had to "give up" after some while, and chose to adapt to American values and practices. This happened as Norwegian managers learned more about the American society. This new knowledge changed their initial perceptions and they gradually favored a more locally adapted approach, as the citation below illustrates.

"An open mind is important for understanding their mindset. Don't focus on how we do it in Norway; don't say: We have done it like this in Norway for many years. We must try to listen to them, maybe strike compromises and tell them that this needs to be used and that is all – maybe not say so much about Norway – then we may try and adjust a little to how they want it. Then we find a middle road. But don't bag them with something called Norway. They don't like that." **SME, subsidiary (1), Translated**

Organizational values and practices that were difficult to transfer related to human resource management, recruitment practices, job values and practices, leadership and communication.

9. Support from Innovation Norway and INTSOK

In the startup phase, several Norwegian companies turned to organizations such as INTSOK and Innovation Norway for advice and support. Some managers emphasized that Norwegian companies were fortunate because of this valuable support, and Innovation Norway was considered particularly important. Innovation Norway acted as a *door opener* that provided market knowledge and offered advice in the startup process. Some HQ managers claimed that Innovation Norway had increased their understanding of critical elements in the internationalization process. Some of the managers also referred to the IFU[14] contract that is provided by Innovation Norway. This contract facilitated their first operations with an international partner and was vital for the internationalization process.

Innovation Norway (IN) welcomes Norwegian companies to discuss plans and objectives with them and claims that most companies would benefit from cooperating with them (Key informant IN). IN can be especially helpful in the early phase of market entry (or pre-entry) as they can assist firms in doing market analyses, search for partners and potential customers, to build networks and generally to prepare for market entry with lesser costs. Norway House[15] has a dozen incubator offices available for small and medium-sized Norwegian companies who want to establish in the area. By this co-location Innovation Norway seeks to promote cooperation among entrant firms and claims that too many firms carry out the market entry process alone.

[14] The IFU arrangement is a strategic grants program aimed at commercial and state business. The objective is to contribute to the development of new products and solutions that lead to international market success. In 2012, Innovation Norway has invested over 300 million NOK, in new industrial and government research and development contracts (IFU / PRD) (www.innovasjonnorge.no)

[15] Which is a new building housing several Norwegian organizations in Houston: Innovation Norway, INTSOK, Norwegian American Chamber of Commerce (www.Norway.org.)

10. Summary of findings and discussion

This report has focused on Norwegian SMEs and their market entry process in Houston. We have also included the perception and experience of larger Norwegian firms, one American firm and other relevant organizations in Houston. The rich data in the form of interviews with informants from a large number of firms reflects a diversity of perceptions and experiences. In this report we have selected some topics and present general perceptions and experiences. Below, we summarize the most important findings.

Firms underestimated differences between Norway and Houston

Our findings reveal that most Norwegian firms underestimated the differences between Norway and Houston. The firms perceived little psychic distance towards Houston, and this perception may have influenced their lack of strategy and planning before market entry. The firms thought they had sufficient local market knowledge pre-entry to handle the market entry process. Once established in the market they experienced larger differences in society and industry than expected, and some managers were exposed to a "shock effect". The main differences were related to the local industry culture and the technology barrier, the importance of "personalized" business networks, and socio-cultural issues in general. It seemed that the firms were not prepared for encountering these differences, and they therefore experienced extra challenges during the market entry process.

The US oil and gas industry was more conservative and less favorable to Norwegian technology than expected. Hence, Norwegian firms had to work hard to sell the technology, even though most firms had well-established technologies in the North Sea. The process of selling, and also testing and verifying was lengthy and costly, and unexpected. The Macondo Blowout in 2010 may however lead to better opportunities for Norwegian technology.

Norwegian firms also pointed to the emphasis on "personalized" business relationships, and the need to engage in informal social settings (e.g. golf, lunches) to establish and maintain business relationships. Networking was high priority and required time, energy and focus. These networks gave access to critical market information on customers, competitors and new market opportunities. Norwegian expats therefore needed networking capabilities to succeed in the Houston business world.

The choice of market entry mode

To sell advanced technology in Houston required a long-term perspective and high commitment. It was therefore unrealistic to use agents. Most Norwegian firms chose to establish wholly-owned subsidiaries. In general, the choice of entry mode in the form of a wholly-owned subsidiary was risky and costly, especially for smaller firms with little international experience and scarce financial resources. Some Norwegian firms had tried other modes of entry but failed.

The subsidiary – headquarter relationship

With regard to headquarter - subsidiary relationship the firms had different experiences. Yet, most headquarters tried to adapt and improve as they learned more about the subsidiaries' business environment. In the early phase of market entry, the subsidiary depended largely on the commitment and resources from headquarter. It was critical to have the attention from headquarter especially during the first years of "exploring" and "struggling" in the foreign market. Nearly all subsidiaries had Norwegian expats as the head manager, and the use of expats facilitated communication with headquarters and the transfer of parent-firm knowledge. Conversely, American locals as head managers provided the subsidiary with local-market knowledge and business networks. And there were no clear-cut answers to the choice between expats and locals.

Most Norwegian subsidiaries in the sample had been established in Houston less than 10 years. As yet, these organizations are small in terms of employees and in-house activities. Technology development, engineering and production were mainly carried out in Norway. The subsidiaries had to a lesser extent established well-functioning relations to suppliers in Houston, and they claimed that Norwegian suppliers were more efficient, less costly, and delivered higher quality than suppliers in Houston. The main explanation for this was that local suppliers were not familiar with the technology and production, and it would take time to train and familiarize local suppliers. In the future however, Norwegian subsidiaries will perhaps seek more cooperation with local businesses to integrate further in the local industry and to exploit the benefits of working with local partners.

10.1 Discussion

In the following we discuss the findings and relate them to theory. Other research (Pedersen and Petersen 2004, Petersen et al 2008) has shown that firms tend to underestimate challenges in foreign markets, and that managers typically overestimate their local market knowledge pre-entry. This is particularly true for culturally adjacent countries (e.g. neighboring countries) towards which managers perceive little psychic distance. But, Norway and the USA are not neighbors, and substantial research in cross-cultural business, political science and sociology have demonstrated large differences between the two countries (e.g. Hofstede 1980, Anders and Heien 2001, Olsen and Kalleberg 2004). Nevertheless, it seemed that Norwegian managers felt some affiliation and closeness towards the USA, and hence perceived little psychic distance. A number of factors can explain this. The common history through the Norwegian immigration to the USA, the cooperation and solidarity during the Second World War and the Marshall help in the years after, membership in NATO, cultural influences through products, music and cinema, familiarity with English as foreign language, and other.

Another factor is the global character of the oil and gas industry (Solberg and Askeland 2006). The competition is global and the technological solutions are potentially similar across oil fields. Norwegian technology is sold and implemented worldwide and high reputation in one oil province typically enhances sales in other oil provinces. Yet, Norwegian firms met a specific industry culture and business practices in Houston. This demonstrates that even global industries have local specificities entrant firms need to overcome. As mentioned in chapter 2.2, firms operating in the oil and gas industry are obliged to expand to a limited number of oil and gas hubs worldwide, and are inclined to follow an industry specific stage model. This implies that firms quite rapidly expand to geographically and culturally more remote countries than in other industries. And firms may not be prepared for this.

On the other hand, managers may be willing to take risk in international expansion, and hence devote less time to prepare; gather information, make plans etc. Pre-entry unpreparedness may also reflect the subordinate role of market knowledge in industries where competition is strong, technology focus is high and where the need to follow customers abroad is critical (Pedersen and Petersen 2004).

It has to be noted that several of the firms in the research had their market entry process at the same time as the financial crisis and the Macondo Blowout, which added extra problems. Yet, the firms in our sample have proved committed to their international strategies. This indicates that Norwegian SMEs have attractive products and technology to offer, and are competent in acquiring local-market knowledge and learning in new markets. And, given the recent developments in deep water and ultra-deep water in GOM (www.rpsea.org), this area may be an attractive province for Norwegian technology in the future.

11. Managerial implications

One aim of this research project is to provide actionable knowledge to Norwegian firms aiming for internationalization to Houston. Based on our findings, we propose actionable knowledge and practices on the following areas: pre-entry strategy and planning, choice of market entry mode, choice of subsidiary manager, expat conditions, business networking and support from headquarters, size of subsidiary and transfer of organizational culture and values.

Improve pre-entry strategy and planning

To carry out a strategy process and making plans pre-entry can reduce failures and costs post-entry. A thorough strategy process can also clarify if Houston and GOM is an attractive market for the firm. It is therefore critical for firms to carry out a strategy process that could include: an analysis of internal resources (technology, finance, human, etc.), market analysis (e.g. relevant projects[16]), potential customers and competitors.

Draw on external advice

It can be wise for a number of firms to use Innovation Norway and INTSOK in the pre-entry and market entry phase to facilitate the market establishment. It can also be useful to consult firms and managers with experience from Houston (GOM). Decision-making processes in firms may for instance be strengthened by using external advice. To reduce costs and share knowledge and networks, firms can benefit from collaboration with other entrant firms.

Prepare for market differences

With regard to foreign market entry it is important to acknowledge and prepare for relevant country and market differences; related to the local industry and customers, business practices, practical issues, regulatory barriers and socio-cultural differences and so on. The more firms can plan and anticipate possible problems pre-entry; the better. Practical problems related to the banking and financial systems etc., should be prepared for pre-entry.

[16]INTSOK produce market reports worldwide which are free to INTSOK members.

Don't underestimate the startup phase

Generally it takes from 3-5 years to "sell" a new technology in Houston and to make a subsidiary profitable. This is also true for firms with well-established technologies in the North Sea. Norwegian firms need to build relationships and get approval from a large number of actors in Houston and test and verify technologies locally. This takes time. Firms therefore have to prepare for this, financially and organizationally.

Choice of market entry mode

When entering a foreign market, it is wise to consider alternative market entry modes. All market entry modes possess advantages and disadvantages, and firms need to evaluate and compare the various modes: wholly-owned subsidiaries, joint ventures and acquisitions. Although market entry in the form of a wholly-owned subsidiary provides a number of advantages; e.g. high control and learning, it also has disadvantages; e.g. high risk and costs. Joint ventures and acquisitions require substantial planning and partner search pre-entry, but may provide critical assets, such as managerial resources, market knowledge and business networks. To enter through these other modes could also lead to a more rapid market introduction.

The subsidiary manager – a Norwegian expat or an American local?

There is no clear-cut answer to the choice between an expats and a local. Norwegian expats have some specific advantages (knowledge of the parent firm and networks back home) whereas American locals provide other advantages (local-market knowledge and business networks). Firms therefore have to decide what is most important: knowledge of the technology, transfer of organizational values, or knowledge of market opportunities in Houston and access to business networks in Houston. These decisions can then help firms to define the most critical competencies and resources a head manager should possess.

Finding the right person

When recruiting and expat or a local – firms should assess the various abilities to be sure the person is right for the job. If the firm sells advanced technology there might be a need for technological competence. Yet, there is also a need for social capabilities to build relationships and commercial talent to sell the technology. It is therefore desirable to balance both concerns in one person. The qualities of being flexible in a new culture, to be patient and persistent are also valuable. Yet, no person can possibly possess all the above mentioned qualities. The most important is therefore to systematically consider potential candidates in the recruitment process. With regard to subsidiary staffing and organization building, it is critical to create competent teams with people who complement each other's' skills.

Improve conditions for expats

Firms should prepare employees for the international journey, for example through "expat programs". Families of the expats should also participate in these "programs" – since family issues are critical for thriving in the foreign country. Innovation Norway and the Norwegian Seaman's Church also offer programs and activities in Houston for the whole family – which firms can benefit from. Norwegian businesses must also be aware of problems when expats return home after the international assignment, and should recognize expats' gained experience and value it in the organization.

Focus on building and maintaining business networks

Firms are advised to recognize the importance of building and maintaining business networks and use time and energy for network activities. The social and personal aspect in business networks in Houston is great, and business people are expected to engage in diverse social activities. Informal, social activities are critical to gain important knowledge of customers and market prospects and to build relationships. Yet, it takes time to build a business network, and to gain extensive market knowledge. It is therefore wise to employ locals (Americans) or experienced Norwegian expats to speed up the networking and market learning process. Firms should also prioritize the maintenance of business networks, by regularly inviting customers and other business contacts for informal lunches, barbeques and other activities. It is also recommended to build networks through conferences, technical seminars and branch organizations. Firms can also benefit from arrangements in the Norwegian Seaman's Church, to get useful information and networks within the Norwegian business milieu.

Support from headquarters

Headquarters in Norway have to be aware of startup challenges and back up the subsidiary and its employees. They should provide commitment and support (financially, organizationally and morally) as it enhances the subsidiary's chances of success in the foreign market. We recommend that headquarters organize common meetings across business units, make frequent visits to the subsidiary, exchange information and communicate with the subsidiary on a regularly basis. It is also important to engage in effective communication to facilitate knowledge transfer both ways. To support the subsidiaries with technological knowledge and assistance is critical. Firms are recommended to invest resources in up-to-date communication technology, for instance in videoconferencing technology and reporting systems for projects. In addition, to provide efficient communication as this will give a feeling of belonging to the same company.

Size of the subsidiary

Subsidiaries should also possess a critical mass of employees, and this relates mainly to having a diversified staff including both managerial and technical resources. This is essential to obtain credibility and trust from local business actors.

Organizational culture and values

Firms should be aware of difficulties in transferring values from a Norwegian to an American context – because these contexts differ greatly. It is therefore wise to carefully assess what kind of organizational culture, values and practices the firm can and should transfer – and conversely the need for cultural adaptions to the American context. This relates mainly to human resource management, recruitment practices, job values, leadership and communication. Firms that emphasize the need of transferring Norwegian organizational values could benefit from having a Norwegian expat as the head manager. Yet, transfer of organizational values to a different cultural context does not happen naturally – and organizational building requires planning and resources.

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Appendix 1: Interview-guide Bergen

Part 1: Background information (informant)

- Position in the firm, formal education, prior job experience, international experience

Firm and internationalization process

- History of the firm, turnover, number of employees
- The internationalization process, motives, choice of market (customer driven, proactive vs reactive, strategic or emergent
- Importance of networks in the internationalization process

Part 2: Internationalization process and strategies – use of networks

- Acquisition of market knowledge – type of knowledge, which channels; through the organization, networks, or other
- Choice of market entry? Critical factors underlying the choice of market entry (organizational resources, customers etc.)
- Establishment in the market – describe the process – use of internal/external resources
- The importance of Norwegian customers for internationalization? (reputation, piggybacking, referrals, the subsea cluster)
- The importance of international customers for internationalization?
- Barriers in the internationalization process (financial, organizational resources, lack of networks cultural distance, lack of commitment etc.)
- If barriers; how are these managed – overcome (use of networks?)
- Have the firm experienced success in internationalization?

Part 3: Local and global networks – information flow and learning, dilemma

- What networks have been most important for the firms' development, knowledge, market knowledge and other? Changes over time – with the process of internationalization.
- The importance to develop relations within the cluster?
- Challenges to knowledge transfer and sharing between headquarters in Norway and subsidiaries

Appendix 2: Interview guide– Houston (Informants)

A. Background information (informant)

1. Education, previous job experience, networks, selection/recruitment process

2. Subsidiary organization

- Employees and functions (building the organization, recruitment and start-up process)

3. Headquarter (HQ) and subsidiary relations and practices

- Decision-making strategy and practices in the multinational company?

- Degree of control – autonomy to what degree? (strategic/tactical)

B. The multinational company's headquarter (HQ) and subsidiary relations – knowledge transfer and knowledge application

4. Types of knowledge transfer from HQ to the subsidiary?

5. Types of knowledge transfer from subsidiary to HQ?

6. How has knowledge been transferred to the subsidiary and vice versa?
What kind of mechanisms are being used, and what kind of structures enhances the transfer

7. How has the subsidiary applied and eventually adapted parent firm knowledge in Houston?

8. How will you describe relations between HQ and the subsidiary?

C. Linkages with local businesses/ organizations in Houston

9. How are the subsidiary's relations with local firms, institutions in Houston (e.g. suppliers, R&D)

10. How are these relationships contributing to the subsidiary and the firm as a whole?

11. Does the subsidiary have contact (irregular or regular) with other 'Norwegian' subsidiaries in Houston?

D. Challenges for small- and medium sized firms in Houston – retrospective thoughts

12. What are the main challenges being a small- and medium sized multinational firm in Houston?

13. Have you experienced cultural differences between Norway and USA?

14. If you think retrospectively about this subsidiary's evolvement – what has been important/challenging in the various phases

15. How would you evaluate the subsidiary's performance today?

16. Based on your experience in establishing/running this subsidiary – in retrospect - would you have done things differently?

17. What have been the main lessons learnt and knowledge attained from being the general manager of this subsidiary?

E. Business Development/Growth

18. Is there a need for new/improved mechanisms to strengthen future HQ-Subsidiary relations? If so, what steps do you have in mind?

19. Have you used any external consultants in the process of establishing the US subsidiary (Innovation Norway, INTSOK or other local consultants)?

20. Have you contemplated changing the structure of the subsidiary company, in the form of a joint venture or partnerships with other US companies?

21. Would the entrant firms benefit from cooperating more with other "Norwegian" companies?

22. The choice of expats versus a local as the head manager.

23. How important is the US market compared to rest of the world?

Appendix 3: Interview guide Houston (Key informants)

1. Information about the facilitator organization

- Numbers of employees, different roles and functions

- What kind of services does the organization provide to Norwegian companies coming to Houston?
- Are Norwegian firms aware of the services that you provide?

Do Norwegian companies demand these types of services?

- What are Norwegian companies' primary motives? (market opportunities, establish production facilities, establish a subsidiary, searching for partners (financial investors, business, R&D?, others)
- What kind of services do they need – to accomplish their goals?

- What are the most important benefits for the companies using your services?

2. Norwegian subsidiaries

- What are the general concerns of Norwegian companies in the pre-entry phase?

- SMEs and preparations before the market entry, market establishment (plans and strategies, motives).
- Do the companies lack critical resources in the market entry process?

- Do the companies experience any cultural, political or other barriers when entering Houston?

- What are the main challenges for SMEs operating in Houston - in the subsidiary development phase and later in the growth phase – different challenges?

- How do the companies cope with these challenges?

- The companies can choose among different operating modes such as using agents, JV, WH, acquisition etc. Are there specific factors in the US (and Houston, Oil industry) that affect the choice of entry mode?

- How important are the US market for the Norwegian firms, compared to the rest of the world?

3. Relationship between HQ and subsidiary

- What is your impression of the relationship between Norwegian headquarters and subsidiaries in Houston?

- What are the most important types of knowledge transfer between the subsidiary and the head quarter?

- Use of expats or locals varies among companies. What is your opinion concerning these alternatives? What benefits and/or disadvantages exist with expats versus locals and eventually a combination?

- Does HQ take advantage of the experience and market knowledge locals possess?

- Is there a need for improved mechanisms to strengthen future HQ-Subsidiary relations?

- How would you evaluate Norwegian subsidiaries performance in Houston?

4. Norwegian subsidiaries and contact with local firms in Houston

- Do Norwegian subsidiaries establish relations with local firms and other institutions in Houston?

- Is there frequent contact between Norwegian firms/subsidiaries in Houston (positive synergies, helping each other, information flow, business cooperation)?

5. Summary – closing questions

- How do US firms perceive the Norwegian oil cluster, and Norwegian firms and subsidiaries?

- What kind of recommendations would you give to companies that consider entering the US market today? Examples of ‘best practices’

This report investigates Norwegian subsea firms' market entry process in Houston. The report focuses on SMEs from the subsea cluster in the region of Bergen. The research includes both headquarter and subsidiary perspectives. In Houston, we enlarged the sample to also include large Norwegian firms, Innovation Norway, and other. The report concentrates on managers' perceptions and experiences with the market entry process. Our findings reveal that most Norwegian firms underestimated the differences between Norway and Houston. The main differences were related to the local industry culture and the technology barrier, the importance of business networks, and socio-cultural issues in general.

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