

Master Thesis
International Management

"How does high-tech SMEs from the subsea cluster perceive and deal with the market entry process, and how do they manage to overcome the challenges of internationalization?"

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1. Introduction

This master thesis is based on the topics and knowledge acquired through our participation in the *Master of Science in International Management* program at BI. In the two-year program we have studied internationalization processes, firm specific critical capabilities, preconditions for foreign activities and external factors related to international establishments and operations. This thesis has been a great challenge where we have included topics from a variety of subjects and prior cases.

The internationalization of a firm is far from a straight-forward process. Conditions and variables are interconnected and related to numerous contingencies. The objective of this thesis is to explain the internationalization process of small high tech companies within the subsea oil and gas business in the region of Bergen, in the west-coast of Norway. This thesis is related to a research project financed by the Norwegian Research Council, the NCE Subsea cluster-Hordaland, and the NCE Maritime at Møre¹. The project “*A local cluster going international: balancing local and none-local networking?*” is led by associate professor Inger Beate Pettersen. The research focuses on cluster internationalization with a focus on small high- tech companies’ internationalization process. We were allowed to align the focus to what was beneficial for our formal thesis requirements. By this, the focus of the research was to investigate Norwegian small and medium sized (SMEs) firms that establish operations in Houston. Some of the firms were rather young when they started their internationalization process. Also most firms did not have prior international experience before the establishment in Houston. The managers’ perception of their firm’s motive, strategy and objective are thoroughly examined in this research.

Clearly, all related decisions and variables from internationalization are not possible to include in one thesis. The research is therefore narrowed into the firms’ specific decisions and perceptions from the pre-entry process and the strategy making process of market entry. More, the thesis includes external

¹ The Maritime cluster is included in the same overall research project, yet not a part of this thesis.

market, culture and industry factors that influence the firm and its decisions. These factors may represent barriers for the firm as they differ from the home country and therefore may be challenging to understand and react upon. Technology and industry culture barriers are given special attention. Discussions of the strategic choices of subsidiary staffing with regards to expats or locals are carefully examined. The management choice of establishment modes and the related experiences was also important to the research. More, the literature emphasizes the importance of networks in internationalization. Therefore an objective was to investigate how the Norwegian firms relate to network building and if they hold networks of important value. The research is based on a vast existing literature. As the firms in this research are fairly small and high-tech companies, literature and previous research related to the internationalization path for these are given special attention. The literature is used to describe the situation valid for these firms.

The research is based on interviews with a total of 17 managers from various firms. Additionally 8 more interviews were performed with representatives from larger companies and two facilitators in Houston to give a more general perception on various topics in the research. The interviews were performed in Bergen and during a two-week fieldwork in Houston, U.S. As the thesis only discusses internationalization toward Houston, it was of great value to visit the subsidiaries and meet the subsidiary managers in person. This experience gave us a better understanding of the industry specifics of Houston and how they differed from Norway. We have summarized our most important findings in the paragraph of the conclusion and discussion.

1.1 Acknowledgements

In addition to being the research project manager, Inger Beate Pettersen has also been our mentor throughout the project. She has provided us with valuable knowledge, shared her experiences with us and has been a great instructor. In the activities of interviews, analysis and problem definition, she has been highly involved and shown great interest for the project and our progress. We are most grateful for the valuable advices and support we received during this period.

We would like to thank all the managers and key informants that voluntary participated in this research. The managers had a high workload, yet prioritized to meet with us. A special thanks to the managers we met with in Houston, which invited us to dinner, gave us contacts to other firms and spent much more time with us than what we asked for. Also Innovation Norway gave our project valuable attention, in which they gave us access to a wider population in Houston and replied with valuable feedback on our interview guide. They allowed us to use their offices in Houston and were pleased to help us with information and practical issues. It was a great pleasure to experience the support from the people at Innovation Norway. We are both impressed and truly grateful for the experience all facilitators and managers facilitated to us!

2. Literature review

2.1 Introduction

The literature distinguishes the internationalization process regarding to whether the firm is a small or a larger organization, hence *small and medium sized enterprise (SME) or multinational enterprise (MNE)*. The SME is defined as a firm with 500 or fewer employees (Cavusgil, 2008). Certainly, this is an American perspective, where companies in general are larger than in Norway. The population of this research is high tech companies in the region of Bergen. In this cluster, most large company holds a few hundred employees. The SMEs of this research typically hold some 10-80 employees. However, the competitive advantages of an SME are typically their innovative and adaptive capabilities (Cavusgil, 2008). They often target market niches that MNE's perceive too small to focus on. Mostly they adapt their products and marketing to special customer needs. SMEs are usually more flexible and faster to respond to local market needs than MNEs (Cavusgil, 2008). On the other hand, they are often constrained by limited resources that prevent them from international expansion (Bilkey & Tesar, 1977). That is why they leverage the service and the expertise of intermediaries and facilitators to succeed abroad (Chetty & Campbell, 2003).

In this research the internationalization process will be based upon two main theoretical perspectives. The *stage model*² of Johanson and Valhne (1977) emphasizes the need for gradual learning, learning by doing and the integration of knowledge. The Swedish researchers developed the theory throughout the 1970s. We also use the theory of born globals (e.g. Freeman, Edwards, & Schroder, 2006, Freeman, Edwards, & Schroder, 2006, Rennie, 1993) to explain SMEs internationalization. The theory developed throughout the 1990s and is still growing as a research field. Researchers as Knight and Cavusgil (2004) explain the internationalization process for firms that internationalize with fairly few resources and minor previous international experience. This theory contributed to revise explanatory factors related to stage models of internationalization

² Also referred to as Uppsala Model

(Gabrielsson, Kirpalani, Dimitratos, Solberg, & Zuccella, 2008) and therefore reasonable to include in this chapter.

2.2 The stage model

The Uppsala model explains the internationalization process of firms from the perspective of information and knowledge acquisition - and integration. The researchers Johanson and Vahlne (1977) based their model on firms' need for gradual acquisition and integration of knowledge of foreign markets and how this knowledge facilitated their foreign operations. In the internationalization process of SMEs, they face great challenges due to lack of foreign market knowledge. This situation leads to high uncertainty and therefore also as an obstacle to the firms' international progression. The use of incremental learning means that previous foreign operations will give the firm access to the market knowledge needed (Johanson & Vahlne, 1977). That is why the model emphasizes the need for the internationalization process to begin in close markets that holds more similarities to the market of the firms' origin. The market distance is referred to as *psychic distance*. This is used as a concept to explain the barriers of a foreign market. Johanson and Vahlne (1977) defined the psychic distance as "*sum of the factors preventing the flow from and to the market*". Examples of factors related to psychic distance are differences in language, education, business practices, culture and industrial development. In other words, the firms will start internationalizing in geographically close countries through incremental learning and then start to internationalize into markets further away. Incremental learning is defined as gradually learning through "learning by doing", where you enter similar countries and then use the acquired knowledge to move to more distant markets (Johanson & Vahlne 1977).

The underlying presumption of the model is that firms select entry modes in the early phase of internationalization that usually are associated with a lower risk. A firm is assumed to acquire knowledge through its own foreign experiences and also increase its commitment to the foreign market as the internationalization process evolves. The lack of knowledge is a great barrier for the development of the firm's foreign operations. As the market knowledge and experience increases, firms usually advance to operation modes with more risk. The Swedish

researchers argue that with regard to the choice of entry modes and the choice of foreign market, the firms follow a successive establishment of international operations. Also, the choice of markets and the choice of entry modes seem to be based upon the psychological distance between the foreign market and the home market (Johanson & Vahlne, 1977). By this, the firm tends to select markets that have a high degree of cultural proximity and geographical closeness in the early internationalization. The firm will enter more distant markets when the commitment toward the present international operations, the experience and the knowledge evolves.

2.2.1 Culture and internationalization

The culture and the concepts of *psychic distance* may be challenging to comprehend. With less prior knowledge of foreign culture and its implications, managers are endangered to base decisions without being able to process the consequences cultural differences may bring. By failing to comprehend with these differences, the business plan and the international establishment would be based on wrong inputs which, probably, in turn results in an underestimate of the challenges ahead (Ghemawat, 2001). Cultural differences and the impacts are investigated in the literature to an almost unlimited extent. A great number of researchers have in years made great efforts to grasp the concept of culture and developed conceptual models for managerial purposes. Ghemawat (2001) developed the *Cage framework* which is meant as a managerial tool for managers to assess the impact of distance in the various industries. By this framework, four dimensions are included; cultural, administrative, geographic and economic distance. By these dimensions the author argues that the tool would assist managers in understanding the distance to foreign markets and the related implications. This framework is only a small contribution of the theory related to cultural challenges.

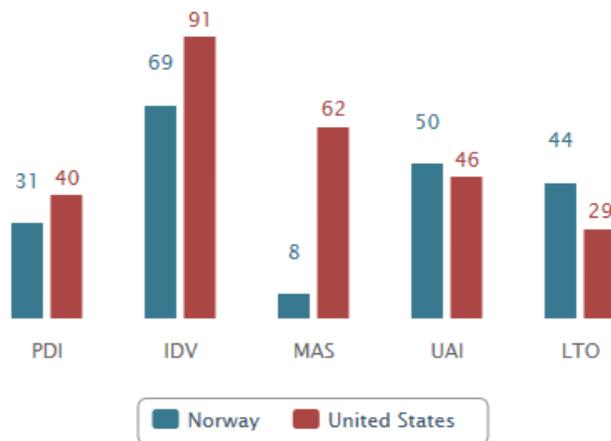
Gert Hofstede performed a six years study within IBM which resulted in the publishing of *Cultures Consequences* by 1980. This research has had great implications for the research of culture as it introduced five explanatory dimensions of culture. The general idea was that culture should not be defined, yet rather measured to each other. Meaning that Hofstede designed dimensions to

make different cultures comparable to each other. In that way managers would see *how* cultures differed. In this way managers are able to understand the *differences* of foreign cultures compared to its native culture. There exists a great number of definitions of culture, yet the definition applied in the work of Hofstede is as follows: “*Culture consists in patterned ways of thinking, feeling and reacting, acquired and transmitted mainly by symbols, constituting the distinctive achievements of human groups, including their embodiments in artifacts; the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values.*” (Hofstede, 2001: 119) This definition was used as a base to develop the five dimensions. All dimensions provide a score from 0 to 100 to explain all the variables in all the countries included in the research. Although the country scores were originally produced in the early 1970s, Hofstede’s cultural dimensions have been replicated in numerous studies and have proved that country ranking from the initial data-set is still valid (Marieke & Hofstede, 2010).

The first dimension, *power distance*, refers to the extent to which less powerful members of a society accept and expect that power is distributed unequally (Marieke & Hofstede, 2010). The next dimension *individualism versus collectivism* refers to the extent to which persons are focusing on their own and their family’s needs, or whether they focus on the needs of the larger “we”. In a typical individualistic culture people will act as if their personal values are valid for the entire world (Marieke & Hofstede, 2010). The dimension *masculinity versus femininity* refers to if people focuses on achievements and success (Masculinity) or if the quality of life is more important (Femininity). The next dimension, uncertainty avoidance, is related to “*the extent to which people feel threatened by uncertainty and ambiguity and try to avoid these situations*” (Marieke & Hofstede, 2010). The score of this dimension will define to which degree one needs rules, formality and structure to life. The final dimension, *long versus short-term orientation* is related to whether the society holds strong beliefs in traditions and stability (short-term) or if the society cares for status-based relationship, investment for the future and the way we are perceived.

Every country has its score on all of these dimensions. By comparing different countries, one gets an impression of what cultural aspect that differs and how

foreign cultures fluctuates towards the managers own culture home³. This tool is argued to be an efficient method in comprehending the psychic distance and the differences between the various nationalities and cultural aspects. However, researchers emphasizes that such dimensions never will be able to distinguish the regional differences whitin a nationality, or the disparity of the various citizens of a country. As presented in the following graph, Norway and US has some differences on the various dimensions. The following information is sourced in the webpage, referred to under the modell.



Model: *Country Culture*, Geert Hofstede

<http://geert-hofstede.com/norway.html>

From the source one can find that the differences are at the most for the dimensions *individualism* and *masculinity*. Americans would care highly for themselves and have less of “we”. They would not be shy about approaching strangers. In Norway the “self” is also important, yet there are more clear lines between business and private life. The differences in this dimension is not as great as in the *masculinity*; In this dimension the U.S scores 62 which describes a masculine society were “the winner takes it all”. Monetary rewards, promotions and success will lead to higher status. This is important for americans who “live to work”. On the contrary, Norway scores 8 and is referred to as the second most feminine society, after Sweden. To be better than others is not rewarded. Caring

³ The application of Hofstede’s research are available at the world wide web. Managers may plot the country of interest and get the comparison by the nations of interest.

At <http://geert-hofstede.com/norway.html> one could check the difference between Norway and the U.S.

for soft values and the environment is important. More, “work to live” with incentives such as free time and flexibility is favored. Clearly this is in great contradiction to the U.S culture. Still, national culture will not include regional variances and specific organizational cultures. Never the less, the findings of Hofstede illustrate the significant differences between the Norwegian and the U.S culture.

2.2.2 Managers’ perceptions of own market knowledge

Scholars emphasize that entrant firms lack knowledge about the foreign market, and that the knowledge only can be acquired by incremental learning (Bilkey & Tesar, 1977; Cavusgil, 1984; Forsgren & Johanson, 1992; Johanson and Vahlne 1977; Johanson & Wiedersheim, 1975). Yet, managers tend to overestimate their perceived familiarity with local markets when entering a new market (Pedersen & Pedersen, 2004). Pedersen and Petersen (2004) reveal that managers rely too much on the information they get through networks, and that managers overestimate their knowledge of foreign markets before entering. In other words managers tend to believe to have a certain level knowledge about the foreign market previous to establishment. However, after establishment the managers realize that the perceived level of knowledge was insufficient. Managers recognize a lack of knowledge and experience a shock effect during the first years of market entry, (the first 8 eight years in the specific study). In other words; the manager will acknowledge the lack of local market knowledge only after establishment. In the specific study (Pedersen & Pedersen, 2004), firms gained the market-knowledge which they thought they had in the beginning, first after 14 years of experience in one specific market. In the study, the shock effect was valid for tacit knowledge. The effect was at the largest in close distant markets and lower in high distant markets (Pedersen and Pedersen 2004).

2.2.3 Recent internationalization studies

Previous internationalization literature have focused primarily on firms gaining knowledge from the home market and then expanded internationally through incremental learning (Johanson & Vahlne, 1977, Johanson & Vahlne, 1990). Firms challenging the traditional internationalization literature have since the '90ties increased. Forsgreen (2002) argues in his article that the concept of learning in the Uppsala Model is too narrow, which in turn limits the models ability to explain and predict the internationalization behavior precisely. Research has shown that it is possible to have a successful internationalization strategy based on skills and resources of other organizations (Hara & Kanai, 1994, Coviello & Munro, 1997).

Forsgreen (2002) argues in his review of the Uppsala model of internationalization that learning can be acquired through other means than only through learning by doing. The concept of experiential learning is resource and time demanding and requires competence, which may be missing in a firm in the beginning of the internationalization process. Three types of learning get attention; learning through imitation, acquisition and proactive market research (Forsgreen 2002). The first opportunity is to imitate other companies, where the firms still have a level of uncertainty and decide to follow or copy the actions of other firms. Another opportunity is to increase the speed in the internationalization process by acquiring local companies or personnel that already possess the necessary market knowledge. This point is the opposite of the Uppsala model that emphasizes the importance of incremental learning. The third option is market research through networks, alliances or surveys. This market research could provide the firm with general information, which also could be useful to get insight in the market (Forsgreen 2002).

2.2.4 Internationalization in the oil industry

The process of internationalization and the access to knowledge may differ across industries. The firms' internationalization process may be affected by industry specifics and the geographical locations of the business. The firms in this research operate in the oil industry, which holds some specific characteristics. The activities in this global industry are limited to some specific locations, and the industry has a high degree of interconnections. These traits, amongst other, may limit firms to 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 & Akesland, 2006) The geographical distribution of the world's oil regions may therefore affect the firms' expansion pattern in the internationalization process and its target markets. The firms are therefore expected to choose a geographical pattern of internationalization that differs somewhat from the stage model, where firms can begin in markets of low psychic distance in the early phase of internationalization (e.g. in neighboring countries). Norwegian firms in the oil industry will typically first expand to Aberdeen – which is culturally close, and then they will go on to other international hubs for the global oil and gas industry: Houston, Singapore, Rio de Janeiro and Angola, hence gradually choose markets with higher psychic distance. To operate in a global industry with limited locations and markets that are culturally close, may therefore represent a challenge for Norwegian firms from the oil and gas industry.

2.3 The born global theory

“There seems to be a need for models that can capture the early phase of internationalization better than the received models” (Johanson & Vahlne, 2003).

This observation has been emphasized due to the global competition and accelerating technological development which force firms to internationalize more rapidly than some decades ago. Johanson and Vahlne (2003) put forward the argument that the concept of “learning by doing” cannot be replaced by market information and surveys. While other researchers argue that firms are able to overcome the psychic distance by gaining direct experiential knowledge of foreign markets (Arenius, 2005, Coviello & Munro, 1997) In other words, researchers emphasize the need for a model that captures a broader perspective of the internationalization process.

A born global firm refers to a: *“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 & Cavusgil, 2004: 124) Born globals typically demonstrate accelerated internationalization, referring to both precocity and speed (Gabrielsson et. al, 2008) With limited resources and lack of knowledge, these firms internationalized rapidly from inception. The liberalization of the economy and the increased globalization should be considered as the driver for the emergence of born global firms (Tamar, 2004). The phenomenon of born globals cannot be explained by the Uppsala model and indicates a clear gap within the previous fields of research.

In 1993, McKinsey defined these types of firms as born globals, working with an Australian study. These firms exported, on average, only two years after their foundation and achieved 76 percent of their total sales through exports (Rennie, 1993). These firms did not follow the traditional internationalizing strategies, where the primary focus of their activities remained at the home market, but rather started to internationalize from inception. This study’s definition excludes firms that started to export later than two years. Yet, the same firms may experience the same internationalization process as a born global. Hence the definition by

Gabrielsen et al. (2008) should be considered more appropriate as the latter define a born global firm as one having products with global market potential. The firm can combine this potential with an entrepreneurial capability to seek methods of accelerated internationalization. This definition is relevant as it grasps the concept of born global precisely, without being highly technical as e.g. McKinsey's proposed definition.

There exist a number of explanatory factors to the born globals pattern of international expansion. The globalization of markets with its homogenization of demands and the increasing opportunities for niche markets is one of the most overlying reasons. Also are the continuously advances of technology both within production, communication and logistics. Likewise, it has been argued that the importance of global networks and alliances have enabled SMEs to reach for competitive advantages. This is explained by Solberg and Askeland (2006). They found the global oil industry to be characterized by a high degree of homogenization across markets. Therefore the industry holds a competition with a high degree of interconnectedness. By this, one could expect that technologies and competence developed in one region would be applied in regions anywhere else. Yet, one should expect some geological, environmental, political and socio-cultural factors to have some implications for the variations in demands. Also, specific local industry culture, purchasing strategies, institutional traits and socio-economic factors may affect the transfer of supply (technology) (Solberg & Akesland, 2006)

2.3.1 High tech SMEs and internationalization

In a study of the internationalization process of high tech SMEs, Schulz et. al (2009) found some important explanatory factors. Firstly, Schulz found that the application of technology often was a driver for international expansion in the young SME. These firms often competed on qualities created through innovation, typically within industries defined as knowledge-intensive. The strategic positioning was toward global niche markets, where the SME could leverage its small size through core capabilities of specialization and dynamic technology focus (Schulz, Borghoff, & Kraus, 2009). The opportunity to exploit technology and competence internationally was one of the underlying motivations for

international expansion. Mostly technology development and R&D were performed in the home market and then exported. However, some SMEs face the need of international establishment to certain markets in order to finance or accommodate larger R&D projects. Various foreign markets often hold differentiated specific know-how and demands within the same industry (Etemad, 2004). This situation is found to be an important reason for the necessity of internationalization for several high-tech SMEs. Gabrielsson et al. (2008) also found that the SME should possess a unique technology, hold a high degree of specialized competences and know-how and have superior design, product or services. However, it is also a necessity that the market perceive these qualities as substantial *value adding* for the industry (Schulz, Borghoff, & Kraus, 2009). A born global should also hold some organizational qualifications in order to enable their competitiveness. Solid market commitment, a proactive management, flexibility, strong customer orientation, strong use of personal and business networks and a global market vision from inception- are all highlighted as important credentials (Rialp, Rialp, & Knight, 2005).

2.4 SMEs and internationalization

The study of SMEs internationalization process has reached increased consideration in the last decade (e.g. Knight et al. 2004; Zahra 2005; Rialp et al. 2005; Schulz et al. 2009). Traditionally, multinational companies (MNEs) were seen more competitive in international markets, while SMEs suffered from restraints in resources such as human capital, finance, market knowledge and management experiences. These constraints are still perceived to create barriers for an SME in their process of internationalization. In the literature, researchers still study how decisions are made within SMEs and how the decision process of an SME is executed and what it is based upon.

The typical limitations an SME face in the process of internationalization, as already presented is based on the limited managerial resources. This often results in less focus planning, analysis and strategy development. Lin and Chaney (2007) argue that the high risk and costs of international establishments may function as a great challenge for SMEs to overcome. The limitations of the SME may hinder

the firm to reveal present opportunities in foreign markets. Marketing and strategic objectives may require substantial resources and commitment to be realizable. Arenius (2005) found that high tech SMEs often based their market selection by industry trends, sectorial targeting or domestic client followership (referred to as piggy backing). This may be grounded in the firms limitations toward strategy development and implimentation.

2.5 The choice of market entry mode

2.5.1 Introduction

The selection process of a foreign market is defined as the time from considering internationalizing to actually selecting a foreign market. This includes the reason to internationalize and why selecting that specific market. The speed of market penetration is defined by Arenius (2005) as “*the time needed from market entry until the generation of sales income from that market*”. In the term of psychic distance, a move to a market far-out will require more time to penetrate the market than more close markets. Managers with international experience will decrease the time needed in market penetration and help the firm to overcome their lack of knowledge through their network (Arenius, 2005; Crick & Spence 2005). This is also confirmed by Crick and Spence (2005) as they emphasize that firm’s internationalization in an early phase need a recruitment of an executive with the required international experience. The need for previous managerial experiences in foreign establishments will be discussed more thoroughly in a later paragraph.

2.5.2 The modes

The foreign entry mode is often classified into a low- risk group and a high risk group (Burgel & Murray, 2000). Operation mode is the same as entry mode, yet the entry mode is limited toward the initial mode chosen when the establishment was performed. It is correct to refer to *Operation Mode* when the discussion is related to the foreign market mode, also after the early establishment phase is performed. Often firms may choose to change from one mode to another. It is not unusual that a firm may change its mode after some experience and when

knowledge is acquired. By low risk, operation modes such as agents, contractual entry arrangements, franchise, and other intermediaries' arrangement are included. High risk modes, referred to as investment operation modes, are usually based on wholly-owned subsidiaries, acquisitions, and joint ventures. This mode is previously referred to as foreign direct investment (FDI). In-between these modes are client followership. The firm holds the investment risk, yet a close customer reduces the perceived risk in foreign market. Client followership (piggybacking), as an entry mode, is presented as a form of marketing collaboration where firms seek to achieve a goal by allying with partners that complement their strengths and weaknesses (Terpstra & Chwo-Ming , 1990). This mode consists of both a carrier and a rider, where the carrier markets the rider's products (Terpstra & Chwo-Ming , 1990). The SME are in most cases the rider, while the larger MNE normally is perceived as the carrier. Client followership may reduce the risk of an SMEs internationalization process. A company's choice of its entry mode is often the result of a complex decision process with numerous trade-offs among alternative entry modes. And each entry mode has its benefit/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)

There are two main motives underlying the entry to a foreign market (Tseng 2007). First, there is an asset-seeking motive where a firm seeks country specific advantages such as technological, market or natural resources. The second refers to firms' motive to exploit specific advantages in a foreign market. These advantages can be either technological capabilities, marketing capabilities and firm size. These underlying motives are expected to affect the choice of entry mode. When the motive is asset seeking, firms should consider a joint venture with a local partner. This because local partners generally provide resources that otherwise would be costly or prohibited to reproduce or transfer outside of the firm that controls the resource (Tseng, 2007). For instance, firms can rapidly gain local market knowledge and business networks through a joint venture with a local partner. Especially local market knowledge is perceived to be gained rapidly in a joint venture with a local partner. Also, if the firm-specific assets are difficult

to redeploy overseas, then the joint venture should be considered as the most appropriate mode of operation.

Conversely, when firms possess unique know-how or unique technology not to be leaked to other partners, they should consider a wholly owned subsidiary. This is the most efficient mode to exploit competitive advantages without the risk of diluting their know-how.

A different, resource based view of the firm considers the effect of the domestic environment. Due to limited resources, the entry mode decision should be perceived as a trade-off between focus in home market and foreign market (Rasheed, 2005). An equity mode of foreign operations, such as wholly owned subsidiary, would require substantial financial and human resources. By this, the transfer of resources and focus to the foreign market would decrease the emphasis of activities and development in the domestic market. Rasheed (2005) finds that the environmental factors and development from both home market and foreign market should be taken into consideration in the decision of the entry mode strategy. The results implies that SMEs can experience a higher market performance through exporting (non-equity mode) if the domestic industrial growth are to be high. Yet, in the later years, SMEs have in general increased their effort in exploiting international markets and the international opportunities, even with the typical constraints of competencies and resources (Zhou, Wu, & Lou, 2007) Some of the explanation may be found in the way firms today interconnect and access pools of knowledge.

2.5.3 Entry mode decision of high-tech SMEs

A survey of UK high-tech companies revealed that the entry mode decision of young, resource-constrained firm is a trade-off between the resources available and the support requirements of the customers (Burgel & Murray, 2000). The firms often use direct export or intermediaries as their operational mode, as these are not resource intensive. One important factor in the choice of entry mode was found to be the level of customization required. In case of high customization, the firm often found intermediaries to be of less value. Product complexity and need for customer interaction could also affect the choice between direct and indirect

export. While direct export let the firm control their know-how and operations, they still suffer of being alone. With use of intermediaries or allying with a partner, the born global gain access to a well-established network and the experience of the partner.

The survey of Burgel and Murray (2000) found the entry decision to be a function of firm-specific, product specific, and target country specific factors. With regards to target country, it is found that most born globals enter countries with high psychic distance. This entry decision is not in accordance with the Uppsala model, because it implies that other factors must be regarded as more important for the firm, than psychic distance. In fact, the survey found that strategic exploitation is of greater importance in the entry decision (Burgel & Murray, 2000). Further, the strategic exploitation and the country specifics is found to be more important, in the entry mode decision, than psychic distance. In other words, the exploitation of the commercial value in the technological competency is of high importance to ensure their survival. These factors are of importance when revealing the reason why high-tech firms do not follow the Uppsala model.

As aforementioned, SMEs suffer from constraints in management, knowledge, networks and other resources in their internationalization –and market entry process. While multinational enterprises benefit from an extensive internal and external international network. SMEs normally rely on local networks with limited access to international competence (Agndal, Chetty , & Wilson, 2008). Smaller firms may also suffer of low levels of trust internationally compared to multinationals with large resources and well-known brand names and reputation. Low levels of trust may create problems in forming joint ventures with local partners, being a valuable source for tacit knowledge of market opportunities (Ellis, 2000).

2.6 The network perspective in internationalization

“The old models of incremental learning are no longer valid” - Johanson and Vahlne (2003).

The Uppsala Model predicts that firms start to internationalize according to psychic distance (Johanson and Vahlne, 1977, 1990). Firms that do not follow the traditional path when internationalizing, illustrate a new trend. The dynamic environment has forced companies to be more innovative, due to the increased competition to survive. Still, many firms successfully penetrate markets rapidly and manage to overcome the psychic distance. Arenius (2005), support that firms are able to overcome psychic distance by gaining direct experiential knowledge through their networks. Axelsson and Easton (1992) define a network as *“sets of two or more connected exchange relationships”*. While business networks are defined as sets of interconnected business relationships, in which each exchange relation is between firms conceptualized as collective actors (Anderson et al., 1994; Johanson and Vahlne, 2003).

A great variety of firms internationalize based on unpredicted opportunities that arises from their network. Firms are dependent on relationships that develop gradually through interaction between each other, which in turn will lead to higher commitment to the relationship (Johanson and Vahlne 2003; Anderson & Weitz, 1992, Blankenburg et al. 1999). Internationalization is according to the process view a process of increasing commitments to foreign operations. The greater, the more specific, and the more integrated with other firm activities in those market are, the stronger is the firm's dependence on them (Johanson and Vahlne 2003). This is emphasized by Johanson and Vahlne (2003) when they state that the earlier experience and commitments will influence where the first market entry will occur. The impact of relationship and commitment will be investigated to reveal their importance on Norwegian subsea companies decision processes.

2.6.1 The importance of networks in internationalization

The use and importance of networks, in the internationalization process of the SME has been highlighted by a great number of recent studies. These studies have pointed to the use of various networks to enhance the competitive advantages of the firm and to overcome the typical constraints of SMEs. Rialp (2005) emphasizes the importance of understanding the internationalization process of an SME to be able to understand the value of network theory approaches. Furthermore he argues that these networks often are required prior to the internationalization process. These networks will be an important channel for the firm to access valuable resources, experiences, knowledge and competences. As a direct result, the firms' international strategies, the capabilities, the market knowledge and risk perception will be affected by the transfer of knowledge through the network. Knight and Cavusgil (2004) found result that supported this observation and added the argument that access to networks would shorten the time required for learning and accelerate the speed of search for market knowledge. Others also argued that the strategic capacity of the SME is an interaction between the firms' managerial resources and the *network resources*. Likewise, the resources in the network will be a core driver for the firms' competitive position in foreign markets (Schulz, Borghoff, & Kraus, 2009). The network should therefore be perceived as a social capital that enables growth and development for resource-constraint SMEs. Networks will provide a pool of contacts and also lead to access to knowledge related to market know-how, distribution channels, financing, culture and more. (Coviello, 2006) This is in compliance with Johanson and Valhne (1992) that found the network to work as a bridge into foreign markets, from the relationship with customers and suppliers for high tech firms.

2.6.2 Network learning

There are three types of business network learning (Johanson and Valhne 2003; Pahlberg, 2001). The first type of learning is partner specific, which is an outcome of interaction between firms. Where the firms learn about each other, such as how the partner adapts to different circumstances or the roles of different individuals. This type of learning will contribute to higher commitment to the relationship.

Furthermore, the second type of learning is when companies learn from a relationship that can be transferred to and used in other relationships. Examples of this could be information on how to create new connections, and how to develop different relationship. The third type of learning is to know how to coordinate activities through interaction. This could concern e.g. supplier relationships, issues such as on time deliveries and activity specific know-how. Additionally a fourth type ascends, where firms learn to build new business networks and connect them to each other (Johanson and Valhne, 2003). Network and relationship creation is time and resource demanding, and therefore the internationalization will be based on the managers existing network. Johanson and Valhne (2003) confirms this when they state that the earlier experience and commitments will influence where the first market entry will occur.

2.7 Access to and transfer of market knowledge

A major concern in the internationalization process is the access to market knowledge. Market knowledge is usually divided into *explicit* and *tacit*. Explicit knowledge is regarded as demographic data, macroeconomic statistics and other identifiable market measures. Tacit knowledge on the other hand is the opposite of explicit knowledge. This knowledge is more *hidden* and more experientially-based knowledge, useful to navigate the intricacies of different cultures, political regimes and socioeconomic systems (Eriksson, Johanson, Majkgard, & Sharma, 1997). Explicit forms of market knowledge that do exist might be of questionable quality or might be expired due to political or economic changes. The acquisition of the explicit market knowledge can therefore evolve into a lengthy and difficult process. However, tacit knowledge tends to be even more difficult to acquire (Johanson & Vahlne, 1977).

Even though the acquisition of the various kinds of market knowledge is considerably difficult, another perspective of importance is the transfer of knowledge within the organization. Organizational learning about a new host country is not a smooth and seamless process. It appears to be a complex process that varies significantly among firms, due to variations in internal flows of local market knowledge (Lord & Ranft, 2000). Moreover, tacit knowledge seems to be acquired through personal experiences and therefore difficult to separate from

individuals who possess it (Polanyi, 1962). To ensure transfer of tacit knowledge throughout the organization, strong ties and involvement from the headquarter (HQ) may function as a safeguard to obtain the information flow. By this, the HQ can involve in subsidiary decisions and assist the strategy development. Without HQ involvement in the subsidiary strategy development, the transfer of knowledge would be limited and the tacit knowledge only to be held by a few individuals. Another key ingredient of the organizational structure is the involvement of executive managers. A reward or incentive system can increase managers' active engagement in divisional strategy formulation and implementation (Lord & Ranft, 2000). Managers do often have accumulated host country knowledge through past experiences. A cross-unit incentive system will increase the probability that managers share their knowledge to other divisions (Lord & Ranft, 2000). Last, rotation of managers and the transfer to different locations could lead to more internal share of knowledge.

In the perspective of management capabilities, the discussion is centralized toward a local manager or an expatriate. Hiring local managers is an effective method of acquiring both tacit and explicit local knowledge (Mitra & Golder, 2002). The necessary familiarity with the local market and business leads to a higher emphasis of hiring local managers. On the contrary, use of local managers will limit the *management development* and the *organizational development* (Harzing, 2001). In other words, managers from the home country will not gain the necessarily international experience if local managers are employed at the sub. Further, the creation or improvement of communication channels between the HQ and sub will suffer of less verbal communication (Harzing, 2001). Scholars argue that use of local managers or home-country (expatriate) is a trade-off between acquisitions of local market knowledge and the development of the organization as a whole. These findings illustrate that organizational structure is decisive for the internal transfer of knowledge. The relationship between the sub and the HQ affects the level of knowledge transfer. Appropriate use of executive managers and subsidiary managers can facilitate a higher level of internal transfer of knowledge. Use of local managers in subsidiaries should be perceived as an efficient method of acquiring both tacit and explicit local knowledge, while the organizational development would be limited without use of home-country managers.

2.7.1 Managerial competences in a subsidiary

Previous international experiences by managers are emphasized by scholars as an issue with great implications in market penetration. Managers with experience can provide a company with networks, the necessary experience to contemplate among opportunities and the experience to decide upon future prospects. Arenius (2005) stress the importance of a manager with international experience as they can “...take advantage of their international experience and target distant markets immediately”. The importance of managers or founders network is also emphasized by Lechner & Dowling, (2003) where they emphasizes managers network as the most important to overcome the liability of newness. In the internationalization processes, there are certain events that cannot be planned, and where it is more important to be able to adapt and act dynamically. The importance of the managers that has the experience and contacts from a network should not been underestimated (Crick & Spence, 2005) Furthermore, using existing network in the early phase of internationalization may decrease the psychic distance. Managerial resources with international experience can contribute to enable firms to prepare for international development and target growth markets (Crick and Spence 2005). In other words managers with international experience will be better able to identify and exploit overseas opportunities. These factors will facilitate the firm’s opportunity to recognize the dynamics of changing environmental conditions through their network (Crick and Spence 2005).

2.7.2 Social Capital and management control

SMEs in the early stage of the internationalization process often lack resources (Chetty & Campbell, 2003) They need to be innovative in the internationalization process and focus on their existing relationship with other firms to identify and exploit specific business opportunities (Agndal et al., 2008). Another way to internationalize when the resources are limited is to rely on founders and managerial experience. Research literature emphasizes the importance of experience in the management when internationalizing. Networks and social capital are especially important to small firms and startups because these firms

often suffer from the liability of newness (Han, 2006). At the same time Han (2006) argues that this is valid even if the SME is a born global or if it takes incremental steps toward internationalization (Stage Model). The social capital is stated to derive from individual persons or the organization as an entity. The social capital may be acquired from external sources or internal sources, as the transfer of knowledge is key.

To narrow the discussion to the social capital to the individuals within the company, the individuals can contribute with experiences or knowledge that may be of great value to the organization. This experience could be international working experience, experience in living abroad and other international experience, which in turn will decrease the perceived psychic distance (Arenius, 2005). This indicates that network, or so called Social Capital, is more important than what the traditional literature predicted. Social Capital is defined by Nahapiet & Ghoshal, (1998) as *“the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit [...] social capital comprises both the network and the assets that may mobilized through the network”*. In other words, Social Capital is a firm’s network of relationship and the resources that can be acquired from the network, and consider both actual and potential network (Agndal, Chetty , & Wilson, 2008)

2.7.3 External effects on knowledge transfer

Gaur et al. (2007) emphasizes that the transfer of knowledge and information through relationships may be affected by the different environments that occurs between the home market and the host market. Gaur elaborates that these differences typically are based in culture, political and regulative inequalities. It is less use for a valuable transfer of information and knowledge through a connection, if the receiver is less capable of interpreting the information at hand. More, as business networks may function differently in the home market compared to the host market, thus lead to procedures in the network approach that decreases the perceived value of the network. Again, psychic distance serve as a useful indicator for the efficiency of the network connections. Particularly the

institutional⁴ differences are stated to have significant impact of the success of knowledge transfer within the network. The more similar the host market is in comparison with the home market, the higher the value of the information received from the network. By this, the value of the knowledge transfer relies on the ability of communication between the sender and the receiver. A manager in the home market, the receiver, will depend on its ability to interpret the knowledge transfer from e.g. a subsidiary manager. Thus subsidiary staffing strategy is a principal strategic means for SMEs with international units to share knowledge, to coordinate activities, and to exercise control over their subsidiaries (Gaur et al 2007). The choice of subsidiary staffing is then the key strategic issue. The management normally chooses between expatriates⁵ or locals⁶ to staff the subsidiary. The implications of this strategic choice affect the control and coordination role between headquarter and the subsidiary together with the configuration of the relationship (Gaur et al. 2007).

2.7.4 Subsidiary staffing

The strategic choice of subsidiary staffing is related to a number of trade-offs. The transfer of routines, organizational practices, technology know-how, and institutional culture will be most efficient through the use of expatriate. Thus the expatriate functions as a bridge for headquarters to spread its organizational knowledge to the subsidiary, together with the technological know-how and the managerial skills and standards. More, the expatriates would increase the efficiency of the communication channel between headquarter and the subsidiary, both with regards to formal and informal communications mechanisms (Fang, Makino, & Beamish, 2010). However, Fang et al. (2010) emphasizes that as the subsidiary evolves and gains experiences, the value and influences of the expatriate in the knowledge transfer, may diminish with time. The routines and structure will evolve and result in a sustainable relationship with the subsidiary regardless to whether the subsidiary staff, or manager, is an expat or a local. The strategic issue

⁴ Institutional distance refers to differences in the regulative, normative and the cultural-cognitive aspects of the institutional environment. The regulative aspects include e.g. the intellectual property regime in a country, the judicial system for law enforcement, and the system of government. (Gaur et al. (2007)

⁵ Parent country nationals that resides in the foreign market

⁶ Host country nationality

should be related to what kind of control and knowledge that is required in the subsidiary. If the SME requires marketing know-how, institutional knowledge or acknowledge the lack of local market knowledge- then the expatriate would be of less value. In those circumstances, a local would hold knowledge related to the local market and would swiftly be able to share the required knowledge within the organization (Fang, Makino, & Beamish, 2010). If the organization holds a desire for such information, then a local would be of more value than an expatriate. Often a newly established subsidiary would need to develop ties to the local industry and the variety of potential customers, shortly after inception. This trade-off would require careful attention prior to establishment and would be a significant variable in the success of the subsidiary. The key variable is the identification of which knowledge that is most vital for the realization of the subsidiary operations.

2.7.5 Types of knowledge

This research will base the knowledge into three categories. The identification and processing of these types of knowledge are important for the ability to analyze and define the subsidiary requirements and its need for resources. Gaur et al. (2007) refers to *strategic organizational values and practices, technological knowledge* and *informal knowledge*. The first type of knowledge is regarded to the formal and informal structure and standards of the firm. Company culture, employee behavior and organizational routines would typically be included in this type of knowledge. Some firms may leverage this type of knowledge as a competitive advantage. The *technological knowledge* is related to the firm's qualifications toward product development, R&D, specialized operational knowledge, processes and proprietary know-how (Fang, Makino, & Beamish, 2010). A high-tech company would often focus its marketing activities and its resources towards the emphasis to this category of knowledge. The third group of knowledge is related to the firm's capability to analyze, understand and penetrate the market. The ability to build brands, develop marketing strategies and distribute products and services are also a vital element of the marketing knowledge (Fang, Makino, & Beamish, 2010). In the internationalization process of a SME, the firm would probably require all types of knowledge. However, some types of knowledge are more critical than others in regards to industry specific demands. Also the type of services or

products provided by the firm would affect the types of knowledge needed. The types of knowledge required will affect the strategic subsidiary staffing, which again affect the social capital the firm holds. The social capital will affect the subsidiary's ability to acquire the requested resources, linkages and knowledge required for successful foreign operations. The faster and more economically the newly established subsidiary achieve competitiveness by acquiring resources and turning them into firm specific capabilities, the better (Han, 2006).

Summary

In this research we propose that the SME will be affected by the decisions performed prior, during and post establishment. The various literatures presented are expected to be relevant for the discussion of the various SMEs in the sample and the explanation for their choices. The presented literature is somewhat interdependent and is not introduced as a perception of how the firms operate or implement decisions. However, it is expected that the literature presented provides a fair introduction and discussion to the topics related to the challenges in the internationalization processes of an SME.

3 Methodology and Data Collection

The examination of the firms and their internationalization process has been performed by the use of a case study method. This experimental methodology enabled us to develop a thoroughly understanding of the internationalization process of the participating SME's. We are not able to generalize our findings due to the fact that only 7 firms (SMEs) were investigated, basically from one geographically cluster. However, in most of these companies interviews was conducted both with decision makers at headquarters in Norway and with subsidiary managers in Houston. Moreover, the population was expanded to include two facilitators in Houston, four larger Norwegian companies as key informants and one American company as key informant. This approach increased the perspective and enabled a better understanding of the internationalization process towards the U.S market.

The research instrument in use was in-depth interviews with managers of SMEs, in Bergen and in Houston⁷. The central idea of such studies is to look at cases in order to develop theory inductively (Eisenhardt and Graebner, 2007). In terms of the underlying philosophy of this method, there exist differences among academics regarding the right way to perform case studies. For our study, the *constructionist research design* is deemed appropriate, as it assumes that «*there is no absolute truth, and the job of the researcher should be to establish how various claims for trust and reality become constructed in everyday life*» (Easterby-Smith et al, 2008: 48). To collect the data, a qualitative method was applied through in-depth interviews, meaning that the data collected is mainly in the form of words (Easterby-Smith et al, 2008).

The main purpose of the interviews was to get a thorough understanding of the managers' (both in HQ' and subsidiaries) view on the situation in their own companies, the perceptions they had about the process of internationalization, and how they explained their own decisions. Unlikely this would not be achievable to reveal by having a fixed questionnaire, yet certain aspects and topics was included

⁷ Two semi-structured interview guides are included in appendix

throughout the interviews in order to get sufficient knowledge about the research topics. This resulted in the use of a semi-structured guide, with a topic guide for the interviewers to use in order to ensure that all topics were covered. The language to be used in the interviews is Norwegian in Bergen and English in Houston. Yet, most research objects in Houston were Norwegian and were allowed to speak their native language. All data and citations are kept in its original language, thus eliminating the risk of translation errors. All interviews was recorded and transcribed with permission from the research object in accordance with research ethics. The data is stored anonymous only with description of some key variables and features.

3.1 The research questions

This research includes a great variation of topics covered by various fields of the present literature available. The interview guide is based from the existing literature covering numerous themes within the field of internationalization. This broad theoretical perspective may contribute to gather richer data than if the perspective was narrower. The overlying research question is formulated as follows:

How does high-tech SMEs from the subsea cluster perceive and deal with the market entry process, and how do they manage to overcome the challenges of internationalization?

To specify, this research question is also divided into three underlying, more narrowed questions.

- 1) *How does high-tech SMEs from the subsea cluster perceive and deal with the market entry process challenges towards establishment in Houston?*
- 2) *How important are networks in overcoming the barriers of internationalization, and how do SMEs utilize the network effects and benefits?*
- 3) *What managerial competencies and social capital is necessary to exploit a successful structure of a subsidiary?*

This research will elucidate on different perspectives of the different topics, yet does not aim to draw any conclusions. The key informants and facilitators are used to comment on the perspective of the SMEs. The following table illustrate the numbers that refers to facilitators and key informants.

3.2 Population and sample

The original population of this research was small and medium sized firms (SMEs) from the NCE Subsea cluster in Bergen, all with a core focus on subsea oil and gas activities. In a number of companies we interviewed representatives from both headquarter and subsidiary. This was done in separate interviews. However, to broaden the perspective three more groups have been added to the sample. Firstly, facilitators as The Norwegian Seamen's Church and Innovation Norway are interviewed in Houston. Their perspective gave general inputs towards the perception of the Norwegian companies' market entry challenges. We also included a group of larger Norwegian companies to broaden the perspective of market entry processes in Houston. Some of these firms also had longer experience in Houston, and had reached a stage of higher performance than the SMEs in the sample. More, it was interesting to examine whether larger firms had other experiences than smaller firms. These firms did also have Norwegian representatives and only the subsidiary was interviewed. The firms were selected on the base of being in the same industry with more or less the same type of services or products. All firms included can be defined as *high-technology* oriented firms with a specialization towards the demand within the oil and gas industry. All companies also originated from Norway.

The last group only includes one object. This group is perceived as American companies. The respondent in this group was a Norwegian which had lived and worked in America the last 12 years. The last 8 years he has been the CEO of a wholly owned American company. The perspective of this group enabled the research to confront the perspective of foreigners with a (virtually) native perspective.

The following table is an overview of the companies and key informants included in this research. All informants are given a source to track throughout the text. The information given in the table is limited as an effort to process all participants anonymously. The different informants are referred to by the *number* from the table, when citations from managers are used in the paper. This gives the reader indication to which type of firm that the manager is situated in.

| Org: | Office | Number: | Place of interview: |
|----------------------|---------------|----------------|----------------------------|
| Key Informant | HQ | 1.a | Norway, Bergen |
| Key Informant | Sub | 1.b | Norway, Bergen |
| Key Informant | Sub | 1.b.2 | America, Houston |
| Key Informant | American HQ | 10.k | America, Houston |
| SME | Sub | 11.b | America, Houston |
| Facilitator | Facilitator | 12.k | America, Houston |
| SME | Sub | 13.b | America, Houston |
| SME | Sub | 14.b | America, Houston |
| SME | HQ | 2.a | Norway, Bergen |
| SME | Sub | 2.b | America, Houston |
| SME | HQ | 3.a | Norway, Bergen |
| SME | Sub | 3.b | America, Houston |
| SME | HQ | 4.a | America, Houston |
| SME | HQ | 5.a | Norway, Bergen |
| SME | HQ | 6.a | Norway, Bergen |
| SME | HQ | 7.a | Norway, Bergen |
| Key Informant | Sub | 8.b | America, Houston |
| SME | Sub | 9.b | America, Houston |
| Key Informant | Sub | 15.b | America, Houston |
| SME | Sub | 16.b | America, Houston |
| SME | Sub | 17.b | America, Houston |
| Key Informant | Sub | 18.b | America, Houston |
| SME | Sub | 19.b | America, Houston |
| Facilitator | Facilitator | 20.b | America, Houston |

| | | | |
|----------------------|-----|------|------------------|
| Key Informant | Sub | 21.b | America, Houston |
|----------------------|-----|------|------------------|

The Norwegian headquarters were interviewed during summer of 2011. Most of these interviews were performed together with our mentor. She has a wide experience by the use of in depth, semi structured interviews and secured the methodology and efficiency of the interviews. The subsidiaries and key informants in Houston were interviewed during winter 2012, without our mentor. Citations are kept in the original language of the informants/key informants. Some external and internal factors may vary during these points of time and may be a limitation of the research. Also the financial crisis of 2008/2009 may also have its implications of the firms' experiences related to performance and degree of success in Houston.

4. Analysis of empirical findings

4.1 The firms' international experience, assets and networks pre-entry

This research includes interviews with both managers at headquarters in Norway and managers from the subsidiaries in Houston. The companies that we interviewed had differing backgrounds and international experience prior to their entry into the Houston oil industry. The largest companies had extensive international experience, which contributed to a high share of net incomes from foreign activities. In those larger companies, most managers had more international experience as expats or as managers of foreign operations, than from the smaller ones. Overall, these larger companies performed better and had a more long-term strategy, due to financial strengths and access to more resources. Most of the smaller companies had limited or minimal international experience prior to their establishment in Houston. On the other hand, some managers in these companies had international experience from prior job positions in other companies. This managerial competence made it possible for organizations to overcome the cultural differences that exist between Norwegian and American businesses (in accord with Agndal et.al. 2008).

Some companies have had extensive experiences selling products and services internationally, although this was through agents or by being a sub-contractor for an MNC localized in Norway. This relationship is defined as *piggybacking*⁸ and illustrates a mode where larger companies *pull* small and medium sized enterprises (SME) towards international operations. Managers from SMEs perceived these relationships with experienced MNCs critical to obtain international sales and activities. The piggybacking relationships were a mode to start up international activities with less risk and commitment.

⁸ *Piggybacking*: A form of marketing collaboration where firms seek to achieve a goal by allying with partners that complement their strengths and weaknesses. Piggybacking consists of both a carrier and a rider, where the carrier markets the rider's products (Terpstra & Chwo-Ming, 1990)

Technology – an important asset

Our informants perceived their own organizations as well developed and technologically advanced within their field. Nearly all companies were running operations in the Norwegian offshore sector and perceived this as their home market, prior to their establishment in Houston. Several informants argued that the North Sea was one of the best areas in the global oil industry to develop and implement new technology. They pointed to the advances of Statoil and the Norwegian government, which enables companies to receive subsidies and other financial support and tax benefits, as the key drivers to facilitate development of high technology. All informants perceived their companies' technology and associated competence as their main competitive advantage. Most seemed confident that their technology was unique and *state of the art*. One Norwegian manager in an American company shared this perception:

«... det er litt look to Norway, man er nok litt fascinert på det som har skjedd i Norge og man er nok mest fasinert av at Norge har klart å utvikle en teknologi til tross for de høye kostnader...»

- CEO, American Company (ref: 10.k)

Here the Norwegian managers we interviewed explain the well-developed technology within the oil industry itself and how the Norwegian government facilitates the testing and generation of new technologies. Strict regulations and a beneficial taxation system are highlighted as reasons to why Norwegian companies are leaders in R&D and actual deployment of new technologies worldwide.

«På grunn av skattesystemet til oljeselskapene dekker staten 78 % av kostnadene, bedriftene betaler kun 22 % av kostnadene selv. Norge har vært og vi håper at det skal fortsette å være lukrativt å utvikle og teste ut teknologi på norsk sektor»

- Norwegian HQ manager (Ref: 3.a)

Even though most of the companies we observed benefited from this technological advantage, some of them suffered from the lack of international experience and a substantial business network. Many of the firms had some international experience from other markets, but these experiences were not easily

transferrable to Houston, due to distance and cultural differences. The same goes for international networks; most companies had to build new networks in Houston in order to market and distribute their new technologies.

The smaller companies, especially, suffered from limited financial and managerial resources to initiate their internationalization process. Lately, researchers have observed this tendency of rapid internationalization even for small firms. On a general basis, increased global competition and accelerating technological development cause this new tendency (Johanson & Valhne, 2003). The following citation illustrates a typical situation for SMEs that internationalize:

“Vi hadde ikke noen annen internasjonal erfaring før Houston annet enn at som enkeltpersoner så har vi vært involvert i internasjonale prosjekter....Vi er jo et selskap som har bygd stein på stein. Business først, så bygger vi organisasjonen etterpå. Sånn at vi har på mange måter hatt en ambisjon om at vi tjener penger mens vi går. Vi ser forskjellige modeller der de bygger opp svære organisasjoner og skal ut å vinne verden. Vi kommer nok fra en litt annen mentalitet og kultur....Og vi har nok blitt belastet mer enn vi burde...“

- Norwegian HQ Manager (Ref: 2.a)

4.2 Pre-entry strategy and process

This chapter identifies the pre-entry strategy and processes prior to the entry and establishment in Houston. The objective is to clarify the reasons why internationalization towards Houston is of such importance for these Norwegian high-tech companies. Moreover, this chapter will discuss the plans and processes that accompanied these pre-entry practices.

4.2.1 Motives for international expansion

Firms' operating in the oil industry is limited to geographical exposure to other oil markets because of the scarcity of oil hot spots in the world. Thus lays a psychic distance problem for firms operating in Norway to enter markets around the world, to Houston and to other international oil hubs. This leads to an expansion plan according to the geographical distribution of oil regions around the world (cf. 2.3.4). The firms in our sample emphasized product specific, target country specific and global niche markets as important motives for internationalization. Hence they had less regard to high psychic distance implications, which is in accord with Burgel and Murray (2000). More, strategic exploitation and country specifics was regarded as more important to the firms than psychic distance, which is a strategy contrary to the Uppsala model.

We gathered from our discussion from sources at headquarters and subsidiaries, that the companies' internationalization process is driven by two main factors/motives. Firstly, several managers highlight the need to expand into new markets (*the push factor*). Even though activities and operations in the Norwegian subsea industry are substantial, most companies chose to expand globally to be able to grow and exploit their technological investments. Search of new markets and market shares are therefore one of two key motives. The second motive is the large and attractive market in Houston and the Gulf of Mexico (GOM) (*the pull factor*). Most managers consider the market potential in Houston (or GOM) as larger compared to the Norwegian Continental Shelf (NCS), especially for some type of technologies. Some companies with special technologies searched for a market with different market needs than found in Norway. A few companies even stated that they had to be present in Houston in order to execute crucial R&D practices. The Norwegian industry was said not to

hold enough demand for specific products or technologies. Houston represents a market with greater variety in technological demands, and the number of important decision makers in the oil industry is substantial. The argument of Houston being a hub within the oil and gas industry was also frequently addressed as an important motive to why one should be present. Burgel and Murray (2000) state that firms with high technological competencies exploit their commercial value as more important than the psychic distance, which explains why most of the Norwegian subsea firms do not follow the Uppsala model for internationalization.

Why Houston is important

“Houston is still considered as the hub of the oil and gas industry - globally. 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. “

- American Subsidiary Manager (Ref: 9.b)

Most managers agreed that Houston is the world’s leading energy center for oil and gas production. Houston is characterized by a diversified oil and gas industry, with a massive number of organizations, especially within engineering and the larger MNCs in the subsea field. Most important is the argument that *all* the major operators and decision makers are localized in Houston. Executives in Houston implement decisions not only with regards to the Gulf of Mexico, but also towards Africa, Asia, and the North Sea sectors. One manager stated that his first contract won in Houston was a project back in Bergen. For global MNCs, most of the contracts and projects are distributed, signed and controlled from offices in Houston. The city is 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 you do not intend to sell products and services in the GOM, Houston is still of great importance due to the global interference exercised from Houston.

“Jeg kan gi deg en rekke eksempler på strategier og toppbestemmelsene som gjøres ut fra Houston. Her har du alle hovedkvarterer til alle hovedselskaper og volumene er jo enestående stor. Så premissene legges av mange selskaper her i Houston.”

- Norwegian Subsidiary Manager (Ref: 1.b)

However, some key informants stressed the importance to consider future changes in the oil industry. They pointed out that Houston’s global position could change due to the emerging oil countries intensifying use of local content. The emergence of Brazil as an important oil hub is argued to have great effect of the formation of the oil industry.

“Slik jeg oppfatter det var alt innom Houston for 10 år siden. Nå utvikler ting seg annerledes og Brasil er et godt eksempel på det. Med økende krav til Local Content og økende modning av disse miljøer, er det bare å innse at det ikke lenger hjelper å være i Houston om man vil inn i de områdene. Jeg er ikke sikker på om Houston vil ha samme relevans de neste 10 år, som det Houston har hatt de siste 10 år...»

- CEO, American Company (ref: 10.k)

Whatever future change, Houston is still an important channel to access information about international projects. As noted by a few managers, Norwegian firms’ presence in Houston has increased their knowledge of the global industry, customer needs, market and technology. On the other hand, some of the managers stressed the risk of perceiving Houston as important due to lower cost of production and employees. Even though labor and production could be available at a lower price, the efficiency and quality were considered equivalently lower. Most companies therefore continued to develop technology and to carry out production in the Bergen region for delivery to Houston (GOM).

Due to the recent safety regulations and standards following the oil spill in the Gulf, new technologies and products are needed. If Norwegian firms source manufacturing in the United States they can take advantage of economies of scale and lower deployment times, with the transfer of tacit and explicit knowledge for

production being simplified with the subsidiary in Houston. This will enable Norwegian technology to be put to use, proven effective, and thus gaining market share. But several managers emphasized that without full investment in the American market, both on the business side and manufacturing, Norwegian firms will not possess the capacity that American firms can find confidence investing in.

4.2.2 Lack of pre-entry plans and strategy

“Vi hadde tro på at markedet der borte hadde behov for den teknologien som vi representerer. Så har veien videre vært smertefull, vi har lært mye på den, det har kostet oss mye, men vi er der fortsatt“

- Norwegian Head Quarter Manager (Ref: 2.a)

Many companies suffered from great challenges in the early phase of assimilation in Houston. Organizational motives were clear, but not well translated into plans and strategies. Managers from the subsidiary and headquarters mostly stated that few plans were written in advance. Typically, a limited number of managers carried out the pre-entry strategy process in close relation with the board of directors. This accord with Crick & Jones (2000) who revealed that many firms make their market-selection decision based on the previous international experience of the managers involved. The same authors found that the firms often lack sufficient financial funds, knowledge about the foreign market, and international networks. As a result firms typically rely on their existing relationship with other firms to identify and exploit specific business opportunities (Agndal, Chetty, & Wilson, 2008).

Among the firms it seems as the strategy process, the market analysis and the decision-making process were performed in a rather quick manner. Informants especially in SMEs explained this by the limited number of decision makers in the firm, the close relationship with the board of directors and the lesser emphasis on plans and strategic processes within SMEs.

“Ting skjer veldig fort i et slikt selskap...Det er det både fordeler og ulemper med selvfølgelig. Vi har ikke særlig klare langsiktige planer på det, det blir litt sånn ad hoc-planer. Av og til gjør man ting som ikke er godt nok overveid, men av og til slipper man de lange diskusjonene som drar ut. Man tar en avgjørelse og så får man den gjennomført.»

- Norwegian Head Quarter Manager (Ref: 7.a)

A majority of managers seemed confident to carry out market entry processes without detailed plans or clear strategies. Managers stated not to know how the process could have been executed differently. They agreed that they had to “*learn as they walk*” and they were often willing to perform a trial period of 3-5 years. A mentality of “*trial and error*” appeared to be usual as they were acclimated with taking high risks. A few managers with international experience also pointed to experience with establishments in e.g. Brazil (high psychic distance) to explain that there was less need to make plans and carry out market analysis when entering Houston (low psychic distance). This perception of low psychic distance with regard to Houston may be one of the reasons why Norwegian firms have experienced stagnant returns in the U.S. in the first years of market entry. The firms (SMEs) used less time to make strategies and plans to enter Houston because they perceived this market as less complicated on many aspects. The majority of the managers in our sample underestimated the socio-cultural conditions in terms of the business environment. A few of the managers even perceived the process of market entry in Houston equal to establishing a subsidiary in Norway. This finding is consistent with Pedersen & Petersen (2004) who found that managers tend to believe they have knowledge about the foreign market prior to entry, whereas they realize their lack of knowledge and post entry and experience a *shock effect* during the first years after the establishment. This effect is not examined in our research, yet several managers in the sample argued that they perceived the cultural distance to the U.S market to be closer prior to entry, than post entry. Thus our findings accord with previous research revealing that the shock effect- is the largest in close distant markets and lower in high distant markets. Norwegian managers in the study stated that they had low-psychic distance toward the U.S. This may lead to a scenario where managers

underestimate the challenges and inequalities in the establishment process into the U.S market.

Other informants, however, stressed the importance of making plans and carrying out a strategic process. The most used argument for having thorough plans and strategies before market entry is the costs of making mistakes post entry. Researchers such as Forsgreen (2002) suggest that plan and strategy may be developed from either imitation or by acquiring other companies or hiring local managers. By imitation, the firm still has a level of uncertainty and decides to follow or copy the actions of other firms. The second suggestion is to increase the speed in the internationalization by acquiring local companies or personnel that possesses the necessary market knowledge. These approaches may be of value as there are substantial costs related to the establishment and the operations of a subsidiary, even in the early phase. An expat could potentially cost the company 2,5 – 3,5 million NOK annually⁹. The cost of not being able to reach efficiency and progress shortly after start up, are considered significant. Experienced managers argue that the early phase of establishment often is strongly miscalculated because the proper measures in addressing cultural differences in the workplace are often overlooked. Companies often do not have the patience or the proper perception of the time required in establishing, adapting and functioning in a foreign society.

One concern is that Norwegian HQ managers normally underestimate the difficulties to sell Norwegian technology in Houston. Even though the firm's technology is well established and holds a high reputation in Norway, most firms struggled to sell the technology in Houston. This misperception therefore led to less planning and analysis before market entry. For smaller high-tech firms, Knight & Cavusgil (1996) found that networks, often acquired pre-internationalization could interfere with the firms capabilities to formulate international strategies and plans. These findings could fit data from our study, as managers stated their international network was of limited scale, prior to entry. On the contrary, it should be noted that a few companies did in fact conduct planning and strategy processes prior to expansion. The research displays that managers with extensive international experience were more likely to carry out plans and

⁹ Stated by Key Informant, Houston (Ref: 12.k)

strategy processes prior to their establishment in Houston. However, few subsidiary managers were included in the strategy process pre-entry. The few subsidiary managers that were included in this process often contributed with perspectives that changed the initial strategy. It appears that the effects of including the subsidiary managers in the process pre-entry are important and valuable.

4.3 Market entry strategy and process

This chapter will discuss the focus on the plans of the early phase of establishment. At this point of time, a strategic entry decision has been made. The discussion will be related to the first steps and processes towards establishing the subsidiary. Moreover, the chapter will explain the market entry mode, the startup process, the choice of expats versus local's managers, and the recruitment process of human capital.

4.3.1 Choice of market entry mode

Informants mentioned four different entry modes to enter the Houston market: agents, joint ventures, acquisitions, and wholly owned subsidiaries. Virtually all the companies chose to establish their own wholly owned subsidiary. This finding accord with Burgel & Murray (2000), who claim that product complexity and the need for customer interaction often affect the choice of entry modes.

Even though these companies varied with respects to their previous international experience, there was less variation regarding the chosen entry mode. None of the companies in our sample chose to enter Houston through low risk modes in the market entry. Low risk modes are typically licensing, franchising and use of agents (Gatignon, 1986). Most companies chose high-risk modes through Foreign Direct Investment (FDI). The term FDI refers to the process in which an organization invests in a business unit outside of their home country or as *cross-border expenditures to acquire or expand corporate control of productive assets* (Froot, 1993). Different modes of FDI are wholly owned subsidiaries, joint ventures and acquisitions.

Different market entry modes

The majority of managers either had a negative experience with trying to use other modes of entry, or did not even consider them. With respect to using agents, some informants meant this could be costly, due to high provisions. Others claimed that agents would give low priority to long-term sales projects such as sales of high technology from Norway that required high commitment. This research finding is supported by previous research (Cavusgil, 2008) claiming that products that require a longer period for implementation are likely to suffer from less focus of the agent. By this, the company risks the agents focus on the sales of products that result in the most imminent returns. That is also partially the explanation to why the Norwegian SMEs utilized agents less.

Some companies had tried to enter through acquisitions or by joint ventures. Still they ended up with their own subsidiary. Difficulties to find potential partners and a low degree of transparency were major reasons for not choosing these modes. A few managers also explained that due to the size of their own company and lack of financial resources, they faced great difficulties in acquiring a U.S. company.

«Vi prøvde å høre om det var virksomheter i Houston som passet for oss å kjøpe istedenfor å etablere oss. Men vi hadde ikke på det tidspunkt noen eiere som hadde veldig store ønsker og vilje til å bruke veldig mye penger på det. I Houston ble vi bare møtt med kalde skuldre, de var ikke interessert i å bli eid av noen norske, det var helt ute. Så derfor fant vi ut at vi må bare få oss et lokalt og gjøre det selv.»

- Norwegian Head Quarter Manager (Ref: 4.a)

Product complexity

Managers emphasized that direct export through wholly owned subsidiaries were resource demanding and recognized that without allying with a partner, the firm will not gain any access to networks or experiences working through a partner. Yet the firms had the control over their know-how and operations. The managers at HQ that we interviewed agreed that this mode of operation had a high degree of risk, required more commitment, and involved using substantial financial resources. Yet, the choice of this mode of entry was easier to choose in Houston

than in other foreign markets. There were several reasons that explained this shared view. One reason highlighted is that companies perceived the cultural distance between Norway and Houston to be minor and therefore manageable.

«I Houston tok vi mye mer risiko og valgte å etablere oss sjøl i eget selskap. Det er mange grunner til det, men det var nok riktig å gjøre i den settingen der borte. Det var annerledes for oss i Houston. Vi pleier å finne oss en tung partner, også gå inn på en avtale under vingene til noen som er lokal, som tar vekk disse grensene vi sliter med som kultur kollisjoner, økonomisk praksis, også videre også videre. I Houston så gjorde vi det motsatte...»

- Norwegian Head Quarter Manager (Ref:1.a)

At present, all companies had an operational wholly owned subsidiary. We noticed that several companies lacked experience in the start-up phase of this high-risk entry mode. The establishment process was often initiated by the CEO or the board of directors, with a Norwegian skilled engineer as an expat, responsible for the start-up of the subsidiary. A number of the companies faced limitations with regards to equity, previous experience, international network, strategic focus, and marketing analysis. For SMEs with limited financial and human resources, Rasheed (2005) found that the entry mode decision should be regarded as a trade-off between focus in the home market and the foreign market. An equity mode of foreign operations (as wholly owned) requires substantial financial and human resources. By this, the transfer of resources to the foreign market may endanger the emphasis of activities and development in the domestic market. The findings of Rasheed (2005) indicate that SMEs can experience a higher market performance through exporting (non-equity mode) if the domestic industrial growth is high. Most managers responded that they perceived the Norwegian industry to represent great demand with a forecast of increased demand due to new oil discoveries. However, Tseng (2007) supports the use of wholly owned entities if the firm possesses resources such as specific know-how or unique technology that should not be leaked to other actors. This is stated to be the most efficient mode to exploit competitive advantages without the risk of diluting the know-how. In this regard, the theory fits the findings with the managers that perceive their know-how to be their most valuable competitive advantage.

Socio-cultural differences

Many of the managers we interviewed noted a feeling of mistrust from American firms when they arrived to Houston. American managers were skeptical, with regard to whether Norwegian firms' competencies, products and services could apply to the American market and to their overall commitment in Houston. This was also confirmed by our key informants who emphasized that Norwegian companies need to establish subsidiaries with a long-term perspective to succeed. American managers had to be ensured about Norwegian companies' real engagement and commitment in Houston, and did fear that newcomers could disappear suddenly from the market. Norwegian subsidiaries therefore had to convince potential American business partners through intensive networking and product demonstration that they had a long-term commitment and were a credible partner to deal with.

"Skal du pre kvalifisere deg så må du inn og snakke med bedriftene for å komme med på bidders list, og eneste måte å komme på bidders list; det er at du kan overbevise dem om at du har kommet hit for å bli"

- Key Informant, Houston (Ref: 12.k)

Most informants and key-informants perceived American businesses to be very traditional and conservative in their business methods. Americans were known to prefer to do business with those firms they have had long-term and mutually beneficial relations with. Hence, Norwegian firms had to deal with and adapt to traditional and conservative American businesses. Therefore, Norwegian subsea companies chose entry modes with higher risk in the early phase of internationalization. The choice of entry modes by the Norwegian subsea companies contradicts the Uppsala model that presumes that firms usually select entry modes associated with lower risk in the early phase of internationalization, and gradually advances to higher risk entry modes in parallel with knowledge accumulation and experience (Johanson & Vahlne 1977). In Houston, it seemed important to select a strategy and market plan that establishes the foreign subsidiary for long-term purposes. This gives the American companies a reassurance that the subsidiary is established to compete in the American market.

The oil industry has been a staple in the United States, the adaption of products and practices that facilitate a long-term orientation are crucial. Hofstede proposed that the American society is rather lax when it comes to focusing on the future, with short-term financial goals and bottom lines being more important, which does no justice in describing the oil industry in the U.S. Subsea oil products need to be produced and effectively made to withstand long-term weathering and use conditions, although this is somewhat assumed with the products, so it should be the focus and availability of service. Managers emphasized that establishment of subsidiaries in Houston is obviously a significant challenge, but showing internal strength through external practices aimed at tailoring goods for the customer both pre sale and post deployment will give American businesses the comfort of knowing they have invested in the right products and services for the long haul. Additionally several managers expressed that Americans are skeptical towards expats who are staying in the country. It seems many US managers fear doing business with newly established foreign subsidiaries due to the uncertainty of their life span and survival in the U.S. market.

"Vi har også hørt den at åja, du er en av de norske som prøver å etablere her borte- så forsvinner hele selskapet om et år- det vil vi ikke."

- Norwegian Subsidiary Manager (Ref: 2.b)

4.3.2 Market and technology barriers in the market entry process

"De som tror Amerika er likt Norge, altså det er kulturmessig og businessmessig, så tror jeg forskjellene er så store som jeg tror de kan bli. Mye mer forskjellig enn vi som Nordmenn tror, vi tror USA er så likt også vi vet hva USA er-, og det gjør vi ikke. Det er totalt to verdener."

- Norwegian Head Quarter Manager (Ref: 1.a)

This section highlights the many challenging obstacles that Norwegian companies face while establishing subsidiaries in Houston. Cultural differences, and the existence of entry barriers and the methods used to overcome them by SMEs will be examined.

Technology and industrial cultural barriers

Key informants (both Norwegian and Americans) explained that American businesses were fascinated with the scientific advancements offered through Norwegian technology. Still, many companies found it difficult to turn the interest into revenues. A number of the Norwegian managers argued that their products were superior in terms of advanced technology and effectiveness, while on the other hand, it seems as the American companies distinguish the Norwegian technology as an unnecessary cost. This is simply not understanding cultural differences but differences that exist between society and industry, more specifically the conservative oil industry in the United States.

"(...)det er en anerkjennelse at det norske miljøet ligger langt fremme teknologisk, men det er likevel en kultur som sier at vi vet nok best sjøl."

- Norwegian Head Quarter Manager (Ref: 4.a)

Informants in Houston agreed that it was essential to adapt Norwegian technology to the American market. Norwegian firms needed to adapt and respond more to local industry, and to the culture in which they resided. It was also expressed by many managers that Norwegian firms needed to be more aggressive in marketing and informing American businesses about the benefits of the innovative technology that had to offer. Therefore, we argue that Hofstede's cultural dimensions prove to be ineffective in assessing the oil industry. American managers needed to feel confidence, both proven and socially, in the products they sourced. We learned through one interview that American managers showed doubt in Norwegian products. This could be due to the way Norwegian firms market their products. In the United States, masculinity flourishes, which is quite opposite from the way things are in Norway. If Norwegian managers boast their products specs and benefits, and not assume they will be proven through trial, we believe more attention and opportunity will come from it. It is almost like American managers need to be assured socially that the products they are investing in are the best in the market. This is one significant cultural difference that exists. Norwegians tend to be more soft-spoken and humble, while Americans tend to boast about success with confidence. But we learned through one interview that different approaches were taken, and this was facilitated through

learning from a network partner in the U.S. market. Yet, the American oil industry seemed more conservative with respect to applying new technology.

One informant explains:

"De fleste som kommer over viser til at de har med ny teknologi. Men i Amerika er det det mest konservative markedet jeg vet om. De er ikke interessert i ny teknologi- de er interessert i noe som fungerer."

- Key Informant, Houston (Ref: 12.k)

American oil industry, since its beginnings has been characterized by a sense of conservatism, where companies tend to use technology that has proven results, and has been effective in the past. This is the general perception among informants and key informant. They also claimed that the American oil industry is less innovative and modern compared to the Norwegian oil industry. Another point, emphasized in interviews, that reinforces this technology conservatism is the weaker employment laws in the USA. Employees may risk losing their jobs if they make a mistake when encountering an important business decision, e.g. if they decide to use a technology that does not function or results in extra costs. Job security was stated to be a large constraint for firms attempting to adapt new technology in Houston. This observation is based on the perception that Norwegian technology must be proven and tested in the Gulf of Mexico prior to operation. Project managers prefer to use technology that has been used in a number of prior projects and has proven reliability. The risk of employing new technology in American companies is hindered on the notion that, if something were to go wrong, the purchaser might lose their job. Therefore, the difference in employment law and other regulations between Norway and the United States, is one factor that could explain the difference in adaption of new technology.

Lately, however, informants and key informants have observed changes in the American oil industry. The Macondo oil spill in 2010¹⁰, has led to changes in

¹⁰ On April 20, 2010 an explosion occurred on the Deepwater Horizon, a mobile offshore drilling rig, forty-one miles off the southeast coast of Louisiana. The rig was owned by Transocean, the world's largest offshore drilling contractor, and leased to BP, one of the world's largest energy companies. The explosion caused a blowout, killed 11 workers, and ignited a fire that led to the sinking of the rig. After the explosion, an attempt to activate the BOP failed, and oil started gushing into the Gulf of Mexico, causing horrific harm to the marine environment, fouling the

regulations and safety procedures that favor advanced and more environmental friendly technology. With this new outlook in the American oil industry, new opportunities can be created for Norwegian firms. However, as one key informant argued, one should still expect the purchase process of new technology to be performed in a slow pace, even with more strict specifications with new safety regulations.

“Avstanden fra at en kunde sier at dette er et spennende produkt og dette liker vi og dette kan vi tenke oss- til at de faktisk går inn og kjøper det; den er ganske stor. Igjen, Amerika er utrolig konservativt, ting tar tid og om du ikke har tid til å la den prosessen gå sin gang så bør du vurdere om dette er det rette markedet å gå inn i. “

- Key Informant Houston (Ref: 12.k)

Shall you follow your customer?

Several managers highlighted the importance to follow important customers (MNCs) abroad. They often felt obliged to follow customers and establish a presence in Houston to maintain and develop the customer relationship further. The MNCs expressed to the SMEs that they valued highly their product and services, and needed them for continued operations abroad. These SMEs aimed to increase business with these customers in new markets and strengthening relationship bonds, while seeking to cultivate a long-term mutually beneficial relationship.

“Vi følte egentlig at det var påkrevd at vi gjorde det, men vi kunne kanskje holdt igjen og t.o.m. ikke vært der enda, om vi virkelig hadde vært knipne. Men vi gjorde det for å utnytte mulighetene med dem best mulig. “

- Norwegian Head Quarter Manager (Ref: 6.a)

Following the customer did not reduce risks or challenges in the foreign market. Some managers experienced difficulties to get in contact with the MNCs business

shores of Alabama and resulting in multibillion dollar losses to the fishing and tourism industries, among others. Nearly three months after the deadly explosion, BP finally announced that it had capped the hemorrhaging well. (Perry, 2011)

unit in Houston, even though the MNC's unit in Norway had encouraged them to go. One manager referred to this problem as *waterproof walls* between business units in MNCs. Several SMEs had serious problems with this, as the MNC was the most important motive to establish in Houston. A manager in HQ revealed this problem early in the pre entry phase:

“...The MNC sa at om vi skulle fortsette å være med de, så måtte vi være med de ut i verden. Og det betydde i første rekke Houston. Så spurte vi om vi fikk garantert leveranse om vi flytter bort til Houston? Nei, det fikk vi ikke, vi måtte bevise at det vi lagte var bra produkter. Det var ingen automatikk her.(...) Vi hadde egentlig lite valg, for skulle vi være med dem, så måtte vi være med dit. Så, men jeg vil jo si at de lot oss i stikken. Det gjorde de faktisk. I hvert fall umiddelbart. “

- Norwegian Head Quarter Manager (Ref: 5.a)

4.4.1 The importance of business network - a barrier

"Amerikanerne handler kun med folk de kjenner. Det betyr at du er nødt til å bygge nettverk."

- Key Informant, Houston (Ref: 12.k)

Nearly all managers emphasized the importance of business networks to succeed in Houston. Substantial differences exist between Norwegian and American perspectives on the importance of business networking. Informants and key informants claimed that Americans emphasize personal and social aspects in business networking, and mentioned the importance of golf, sporting events, going out for lunch or dinner, and the sharing of information about family and social issues. Socializing in informal settings and engaging in soft conversations are critical in getting to know one another before *talking business*. Arenius (2005) emphasized the importance of substantial business networks, and that firms can overcome psychic distance by gaining direct experiential knowledge through their networks. Although Hofstede prescribes the U.S. as being a rather individualistic society, American business interaction is far from that. A close business relationship enables trust to be formed, which leads to a relationship that is mutually beneficial. Not only will the firms complement each other with production, service, deployment of employees, and also new business opportunities can be realized through this network. The following quotes illustrate the above accounts:

"Jada, du går ut og er sosial med dem. Og det er klart... Jeg liker ikke baseball, men du gjør det for du gjerne vil lære og så er du egentlig et lite barn som egentlig spør; hva skjer nå da? ... Og amerikanerne vil like å fortelle om sine ting. Og da har du mye mer åpen dialog sammen med dem."

- Norwegian Subsidiary Manager (Ref: 11.b)

The ability to create an open dialog with the locals seems to be extremely important. Several managers mentioned that the social aspect contributes more to the exchange of information between the individuals because trust is built outside of the business setting. It seems like managers rely more on each other in private

settings than during a meeting in the office. SMEs in the initial stage of the internationalization process lack sufficient knowledge and resources (Chetty & Campbell, 2003). Therefore, a network can provide firms with an ability to identify and exploit specific business opportunities that would have been otherwise unattainable due to lack of resources (Agndal et al., 2008). Managers with international experience are more aware of the importance of networking, and through this experience, can leverage themselves a better undertaking in exploiting different business opportunities abroad (Arenius 2005). This is confirmed by several of the interviewed managers.

"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 then what he can do in the office."

- American Subsidiary Manager (Ref: 9.b)

Managers with international experience

Lechner and Dowling (2003) emphasize that a manager's network is the most important factor in overcoming the liability of newness when entering foreign markets. Only a limited number of the Norwegian subsea companies could rely on their managerial competence and network in order to overcome liability of newness in Houston. In the initial startup, most of the companies turn to organizations such as Intsok and Innovation Norway for advices and support. Some managers argue that Norwegian companies are in a fortunate situation, due to the valuable sourcing and assistance provided by these actors. Innovation Norway has been referred to as a *door opener, one that has provided valuable market knowledge and given companies advice and recommendations for their future processes*. Some HQ managers have suggested that the collaboration with Innovation Norway has provided them with valuable input and increased their understanding for the critical elements in the internationalization process. Innovation Norway comments that *all* Norwegian companies are welcome to discuss strategic plans and objectives with them and in turn receive valuable feedback in which most companies would benefit from. Some of the managers

also refer to the IFU¹¹ contract which is provided by Innovation Norway. This contract facilitates firms with their first communication and cooperation with an international partner, a vital step of the internationalization process. Managers based in Norway value the relation toward Innovation Norway more than managers of the subsidiaries in Houston. The reason for this is not straightforward, but the subsidiary manager mission, which is to control the establishment process rather than implement HQ objectives, could provide as alternative explanation.

The personal aspect in business relationships creates a trust and a more open dialogue that facilitates an exchange of information on new market opportunities, potential customers and competitors, all of which is crucial to advancement in the Houston business market. Managers with international experience from our sample were more aware of this difference, and could use their already established network to overcome their lack of knowledge (Arenius 2005, Crick & Spence 2005). Not all Norwegian managers were prepared and knowledgeable about these cultural differences before entry, but tried their best to cope with this networking challenge. One key informant claimed that successful Norwegian firms generally had managers that were sociable, jovial, nice and positive – a prerequisite to succeed with networking. Social capabilities and personality traits therefore seemed to matter greatly in addition to other capabilities, when recruiting expats. Furthermore, expats needed to be patient, persistent, hardworking, and reliable to succeed in network building and relationships with potential partners.

Network learning

The business literature emphasize three types of network learning: partner specific learning, transfer of experiential learning in a relationship to other relationships, and learning to coordinate activities through interaction (Johanson and Valhne 2003). Some Norwegian companies with well-established business relationships with larger companies already established in Houston (large Norwegian MNCs) and American companies pre-entry, benefited largely from their partners'

¹¹ 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 leads to international market success. In 2012, Innovation Norway invests over 300 million NOK, in new industrial and government research and development contracts (IFU / PRD). More information: <http://www.innovasjon Norge.no/Finansiering/IFUOFU/>

networks. The internationalization process of these firms was based on unanticipated opportunities that arose out of their partner network, which is in accord with Johanson and Valhne (2003). These networks typically contributed to promote the new “Norwegian company” and gave them access to valuable business partners and target markets. These firms’ internationalization process in Houston was facilitated through partner specific networks while others without local networks faced considerable obstacles. Our research findings thereby illustrate that close collaboration with business partners in Houston create a mutual beneficial relationship with high commitment. These business relationships also led to resource sharing, new project ventures and mutual promotion of technology and business. These benefits are supported in previous studies (Anderson and Witz, 1992; Blankenburg Holm et al., 1999; Johanson and Valhne 2003).

Furthermore, companies can over time develop the second and the third type of learning. Other Norwegian subsidiaries relied on their American managers’ network, which also facilitated the network building process. Crick and Spence (2005) emphasize the importance of hiring a manager with international experience in the early phase of the internationalization process. The managers’ network is emphasized as the most important to overcome the liability of newness (Lechner and Dowling 2003). Managers with international experience can have the option to use the three different types of network learning. Additionally, based on the three types of learning a fourth one arises. The fourth type of learning is where firms learn to build new business networks and connect them to each other (Johanson and Valhne 2003). Several managers with international experience had experienced previous start-ups and could use their experience to benefit from the fourth type of network learning. Our findings therefore show that companies, through time, can develop capabilities to benefit from all four types of learning.

4.5 Challenges in the start-up of organization

The formal setup of the company as a legal entity and registration was a straightforward process for the companies. The process that followed seemed more of a challenge. Most managers experienced the startup process as exhausting and challenging. Managers' often pointed to a lack of local business network and to challenges in getting access to potential customers as some of the key barriers in the startup process. Informants collectively stated that the startup process requires 3-5 years with poor results and turnover combined with a daily struggle for survival. In many ways it could appear as if the companies underestimated the challenges of starting operations in America as these two HQ managers elaborate:

«Hvis du skal til Kazakhstan så skjønner alle at dette er veldig annerledes. Skal du til Amerika så våger folk å tro at det bare er å ta en drosje, de snakker jo engelsk og man innbiller seg at det er veldig likt, og det er det ikke. Det tror jeg kanskje er det neste målet å finne ut av – at man må være klar over hvor annerledes det er.»

- Norwegian Head Quarter Manager (Ref: 1.a)

«Amerikanere er amerikanere, de er vant til å forholde seg til de de alltid har brukt. Og de er ganske konservative. Teknologisk så ligger amerikanerne bak oss på den måten at det er grovere, og det er ofte enklere. Så vi har slitt litt med å komme inn til de lokale, for vi kunne ikke språket, selv om vi kunne snakke engelsk. Skjønne på hvilke arenaer ting blir avgjort, det slet vi veldig med.»

- Norwegian Head Quarter Manager (Ref: 4.a)

Lack of knowledge seems a common factor to why companies experienced challenges in the initial stages of internationalization. With lack of resources and limited previous international experience it seems as if the process of suffering abroad is one of a *trial and error* approach. One key informant explained that some companies *start running before they know the direction*. Most SMEs seem to base their startup by doing most of the effort themselves. However, informants and key informants have argued that it is not necessarily better or more efficient for an MNC with virtually unlimited resources. Several large Norwegian companies are pointed out as companies that faced great challenges in the

international expansion towards the U.S market. To act and behave as an international company is stated to be a process that requires a corporate culture and a long term base in the foreign market.

«Jeg skal være forsiktig med å bli for kategorisk, men det er klart at jeg så- en av grunnene til at jeg sluttet, var at jeg ikke så selskapet som noen internasjonal aktør i det hele tatt. Det var et norsk selskap med norsk forankring, norsk teknologi. De forsøkte å ekspandere ved å kjøpe opp bedrifter, og etter hvert forsvant innmaten i de bedriftene- og de lyktes aldri...

- *CEO, American Company (ref: 10.k)*

Our findings show that the managers most commonly overestimated their market knowledge pre-entry. This may represent a major downfall since this overestimation of market knowledge decrease firms' preparedness for conducting business in particular markets in which they wish to enter. This case of overestimation leads to a 'shock effect' where managers of entrant firms realize their lack of local market knowledge (in accord with Pedersen and Pedersen 2004). The time it takes for a manager to realize this shock is quite sporadic based on firm competencies and industry. According to Pedersen and Petersen (2004) explicit, or easily transferable knowledge can only carry a firm so far in new markets, but it is the realization of the overestimated tacit knowledge, or the work related practical knowledge, that produce a e shock effect. The internationalization process of a firm is usually described by the geographical spread of the firms' international activities while committing individual resources to foreign markets. The oil industry, especially after recent events in the gulf, has experienced a series of checks and measures to ensure the safety of products and more importantly the impact these products have on the environment. Companies who seek to operate in markets with rather standardized products do not experience such 'shock effects' because much of the knowledge can be acquired before market entry, but in industries like the oil sector with refined learning processes and extensive product modification in order to comply with rules and regulations 'shock effects' are prevalent (Pedersen and Pedersen 2004).

4.5.1 Differences in organizational culture

"Kulturforskjellene, måten å gjøre ting på, måten samfunnet er organisert på i USA er så dimensjonalt forskjellig fra Norge."

- Norwegian Head Quarter Manager (Ref: 1.a)

Several of the interviewed companies had experienced a kind of cultural shock in Houston. One example is the large differences between the Norwegian and American organizational cultures, which were emphasized by informants. The American organizational culture is characterized by hierarchy, where the operations are controlled by *top-down* management. More, it seemed that the American employees were more used to receive orders instead of taking a personal initiative. These two factors are very different compared to the Norwegian organizational culture, and can be related to the power distance dimension (cf. 2.2.1)

On the other hand, Norwegian managers expressed that Americans were very easy to work with. There are some differences in mentality and work behavior, but still it is possible to manage those differences. When sourcing American employees to work in Norwegian firms, there is going to be some front-end differences. With the hierarchy and formality in U.S. business most American employees expect to be told what to do and what tasks to focus on, because they are used to a corporate culture that lack an openness with their superiors. This is very different than the practices in Norway where a creative atmosphere characterizes business. Several managers emphasized that this difference can be simply overcome, and the informal atmosphere in Norwegian firms can foster great morale and idea generation when applied to subsidiaries in Houston. Several managers have expressed that Americans accept the Norwegian model; some Americans even enjoy adapting to a more flat structure. The key was to be the aware of the differences and to be able to handle them while guiding the employees in the right direction. Americans get surprised over how Norwegian companies deal with their employees, in terms of openness, job security and flat structure. These are factors that could contribute to a better work environment and in the same time enhance employee morale. This is claimed by several managers in this study, where one of the key informants states as follows:

"Føler du tryggheten så kommer kreativiteten. Du klarer aldri å skremme noen til å gjøre en god jobb. Det er det mange som fortsatt forsøker; du klarer aldri å skremme noen til å vise mer initiativ. Det eneste måten du får folk til å ta initiativ på er å bygge tryggheten."

- Key Informant, Houston (Ref: 12.k)

Still several managers warned against adapting Norwegian work culture in their subsidiaries in the United States. It is very important to keep it simple and try to combine the two different work cultures to the benefit for the overall company, while adapting to the local culture. One informant illustrates this issue:

"Det er viktig å være åpen for å forstå deres tenkemåter. Ikke komme hit og si at slik er det i Norge, slik må vi gjøre det her for slik har vi gjort det i Norge i så mange år. Vi må prøve å lytte til dem, kanskje inngå kompromiss og fortelle at dette må vi ha inn for det er bare slik det er- kanskje ikke si så mye om Norge- og så kan vi prøve å tilrettelegge litt ift hvordan du ønsker å ha det litt. Og så blir det en middelvei. Men ikke trø noe over hodet på dem som heter Norge. Det liker de ikke."

- Norwegian Subsidiary Manager (Ref: 2.b)

Norwegian companies have to be aware of the cultural differences in order to be able to overcome them in the early phase in the internationalization process. The easiest way to overcome these obstacles is through preparation. It is important to be open-minded to be able to adjust to cultural differences. This can be done through research, interaction with other Norwegian companies in the area, and professional consultants. Managers remarked that even though they thought the Norwegian model of employment was favorable, they only exploited it to a lesser extent while being open in accepting American practices. They argued that the subsidiary had to use American methods in conducting business, and also towards its employees. Liability and legal issues was emphasized as a key reason.

"One of the things that I remember from the legal perspective, I remember when I was applying for a directors and officers insurance here, that was new to Norwegian since you don't need to cover it. It is more, the liability that centered

around the US offices really have to do with the employee litigation than anything else."

- Norwegian Subsidiary Manager (Ref: 13.b)

4.6 The access to and transfer of knowledge between HQ and subsidiary

This section will focus on the access and transfer of knowledge between the HQ and the subsidiary. Interviews have been conducted from both headquarter and subsidiary perspectives, and will be reflected upon in this section. The focus will first focus on the choice between an expat and a local, and their role in knowledge transfer. We then analyze how social capital can enhance communication between subsidiaries and headquarter. Furthermore we will examine how the Norwegian subsea companies experienced the transfer of knowledge.

4.6.1 The choice of expat versus locals and their role in knowledge transfer

The selection of subsidiary management is an issue where the companies we interviewed had different opinions. Some managers swear to select a Norwegian manager that has proven trustworthy and knowledgeable through years of acquaintance with the company prior to expansion. Headquarter managers argue that this person will strengthen the relationship between the two offices and facilitate a higher degree of confidence in the subsidiary in the eyes of HQ in Norway (in accord with Harzing, 2001). The other view is that subsidiary management has to be headed by a local manager in order to utilize local networks and relations. Local market knowledge has also been applied in the arguments of having a local manager (Mitra & Golder, 2002). Several managers state that local employees are needed in order to build a truly local organization. The question is not about if the subsidiary should have only Norwegians or American employees, but if one should ground the organization in an American leader or a Norwegian one.

«Du er nødt til å tilpasse deg til det amerikanske samfunnet. Kostnadsnivået også tilsier at en Man bør bruke amerikanere så mye en kan.. Men det er klart at det er veldig mangfoldig for oss å ha en nordmann som kan dette, fordi det er mye letter å kommunisere med en nordmann med norsk verdi bakgrunn.. Det reduserer risikoen.»

- Norwegian Head Quarter Manager (Ref: 1.a)

There is also a substantial difference among backgrounds of the various subsidiary managers we interviewed. Most of the managers had a technological orientation, educated as an engineer or a technician. Rarely does the subsidiary manager hold a business related education. However, the findings suggest that the Americans that were hired had a greater focus on sales activities, marketing, and networking, compared to Norwegians. The latter held a greater focus on the technological competence, while the Americans are more focused on establishing contacts and presenting the company.

“Han amerikaneren selger på en helt annen måte en oss som nordmenn. For han eier ikke skam i livet. Vi er jo mye mer beskjedne. Han bare går bort og snakker med noen og du må ha det når du er der borte. Jeg har lite tro på å sende over en nordmann som skal sitte i Houston alene og selge. Det har jeg ikke tro på. Ikke bra.

- Norwegian Head Quarter Manager (Ref: 3.a)

The most common view from headquarter management was that they trusted a Norwegian subsidiary manager more than a local manager, even if they acknowledged the need of a local representative. Additionally, the use of an expat will contribute to managerial development and organizational structuring, as managers from the host market will gain international experience (Harzing, 2001). Of the subsidiaries interviewed only 2 out of 15 had a local American manager. One of the two American subsidiary managers argued the following:

“How do you get the product to the market? Do you give that to a 25 year old kid and say; here try it! Or do you hire a guy that has been in that business for a long time and knows people and say; here, do you think you can do it? I know I could, because I know executives at BP, at Shell at Exxon and some other of these companies, who have known me from my time at Baker. I think you get a lot better result if you from the beginning- your goal is to have a local organization. I think it works better.”

- American Subsidiary Manager (Ref: 9.b)

The arguments provided by the American manager would be difficult to contradict. Still, several Norwegian managers faced many obstacles in using an

American manager at the initial stage. They perceived a Norwegian manager to be more stable, easy to communicate with and well oriented within the technology and expertise of the company. The Norwegian subsidiary managers argued that the choice of Norwegian managers was proper and effective as long as the expat succeeded to integrate in the local community, respecting the culture and accepting the *American way*. The same managers pointed out that there were several societal and cultural conditions they didn't like in Houston, but explained that; *there are plenty of things I would change in Norway too*. It is a matter of acceptance and flexibility. One subsidiary manager claimed; *you have to face the challenges and wrongs with a smile!*

Additionally, great rotation of American employees, low degree of loyalty and low degree of efficiency has been suggested as reasons to why the Norwegian headquarter managers prefer Norwegian subsidiary managers.

"Vi hadde en amerikansk leder fra 2001-2007. Så fant vi ut at vi fikk ingenting til når det gjaldt vekst på akkurat det. Ganske enkelt fordi at kulturforskjellen på amerikanerne og det å skulle vite inngangen i organisasjonen her i Norge for å få attention og for å få prioritert osv. Selv om vi tok disse to karene til Norge mange ganger, og lot de treffe folk og sånn, men det var liksom ikke noe sånn "klikk klikk" så hadde de opprettet forbindelsen. Det fant vi var veldig tungt, så i 2007 besluttet vi at vi måtte ha en norsk leder der borte. Og det har vi nå"

- Norwegian Head Quarter Manager (Ref: 4.a)

4.6.2 The role of social capital

To succeed in developing a subsidiary organization, recruit employees, to build a business network and so on depended largely on the social capital of the managers. The concept of social capital emphasizes the importance of relationships and networks, and more importantly the opportunities and resources available from such relationships (cf 2.7.2). A manager with great international experience and resulting network from past work can contribute greatly to the social capital of the firm (cf 2.7.2). Agndal (2008) remarks that firms realize social capital through their network relationships, and that they acquire mutually beneficial resources from these relationships. Subsidiary staffing strategy is a crucial resource in which SMEs with an international outreach need to focus on for survival in the foreign marketplace. One key issue is staffing with expatriates, with extensive international experience, or using local workers who are knowledgeable in the market culture and environment. Fang et al. (2010) noted the importance of expatriates in the transfer of both, their own technological and managerial expertise, but also the transfer of organizational knowledge between HQ and subsidiary. Although expats possess crucial organizational knowledge they lack the local market knowledge, Fang et al. (2010) also notes that using local managers enables the firm to better adapt HQ knowledge and processes into the target local market. High-tech firms need the technological support for product-related activities, and know how. Several managers claimed that markets in the United States were getting ever more saturated with new technologies to less costs, and highlighted need of a local manager in the future to handle the increased competition. There were two problems that were expressed throughout our interviews, first the recruitment process in the United States, and second the distance from production in Norway. Although managers is a costly investment, supporting and funding the subsidiary efficiently in the United States would allow for quicker response times and the chance to take advantage of unanticipated opportunities. But, not only do subsidiaries need a healthy dose of capital; they need an effective workforce, and close contact with HQ, both for employee morale and transfer of knowledge.

It is one thing to have a manager with superior competence within one's own home market, but it is truly another if a manager possess prior international experience and substantial internal firm specific knowledge. Innovative highly specialized firms have the opportunity to jump borders and exploit opportunities

abroad; having a highly dynamic manager who can quickly adapt to unexpected market changes can ensure stability for the firm, while utilizing his/her international experience and network (Arenius 2005). Lechner and Dowling (2003) stress the importance of employing a manager who is internationally experienced and connected; such connections will enable the firm to overcome the liability of newness. It is a known fact that smaller firms have a higher propensity to fall through than older more established firms, especially in foreign markets. Young organizations face liability of newness when they have to learn new roles, but most importantly their inability in the early stages to compete effectively with established firms as well as their low level of legitimacy in foreign markets. Singh et al. (1986) explored the external legitimacy and internal coordination with respect to organizations overcoming the liability of newness. They found that firms with proficient external outreach were more capable in overcoming the barriers of legitimacy and competition than firms that were more internally coordinated. This strengthens our claim that firms that aim to branch into foreign markets need a manager with sufficient international experience and networks.

The problem that most of our informants highlighted is the doubt that many American managers showed towards their products and services, doubt in product legitimacy. A competent manager who is well connected can not only adapt the subsidiary to new market conditions but also utilize his/her network to enhance the credibility and value in their products and services. An established managerial business network can also help to reduce the barrier of psychic distance, as the network can help overcome cultural specific attributes that might be unknown to the entering firm (in accord with ref Agndal et al., 2008; Han, 2006; Arenius, 2005). We therefore argue that use of local managers or home-country managers is a trade-off between acquisitions of local market knowledge and the development of the organization as a whole.

"Læring i forhold til kommunikasjon er den viktigste internasjonale læringen"

- Norwegian Head Quarter Manager (Ref: 7.a)

As aforementioned, the transfer of knowledge between business units in MNCs is critical to ensure these firms' competitive advantage and superior performance (Lord & Ranft, 2000). In this research, we emphasize the transfer of three kinds of knowledge: organizational values and practices, technological, and marketing knowledge. Most firms interviewed acknowledged the value of knowledge transfer, and claimed that knowledge transfer contributed to a better understanding between the HQ and subsidiary. Firms especially aware of this issue pre-entry demonstrated higher capability to coordinate the flow of knowledge (in accord with Lord & Ranft, 2000). In the following, we elaborate on the transfer of organizational values and practices, the transfer of technology, and marketing knowledge.

Transfer of organizational values and practices

Several of the Norwegian managers emphasized the importance of transferring the organizational culture, values and practices from HQ in Bergen to the subsidiary in Houston. The strong ties and involvement from HQ may function as a safeguard to obtain the information flow (Polanyi, 1962). One of the main reasons to recruit Norwegian expats to run the subsidiary was their ability to understand the organizational culture in Norway and hence deploy it in the subsidiary. Some companies sent American employees to Bergen to learn the organizational culture and practices. However, it can be questioned if employees can learn another country's organizational culture during a 3 weeks stay.

A number of the managers also acknowledged the difficulty in transferring these values because of large cultural differences between the two countries. Perceptions of what kind of knowledge transfer that was desired changed with time. Increased knowledge of the local socio-cultural conditions (in Houston) changed initial perceptions of knowledge transfer and use, and gradually favored a more locally adapted approach.

"Det er viktig å være åpen for å forstå deres tenkemåter. Ikke komme hit og si at slik er det i Norge, slik må vi gjøre det her for slik har vi gjort det i Norge i så

mange år. Vi må prøve å lytte til dem, kanskje inngå kompromiss og fortelle at dette må vi ha inn for det er bare slik det er - kanskje ikke si så mye om Norge - og så kan vi prøve å tilrettelegge litt ift hvordan du ønsker å ha det litt. Og så blir det en middelvei. Men ikke trø noe over hodet på dem som heter Norge. Det liker de ikke."

- Norwegian Subsidiary Manager (Ref: 2.b)

Transfer of technological knowledge

Technological knowledge refers to knowledge regarding the products (technology). Typically, subsidiaries rely heavily on technological knowledge developed in the home country of their parent firms, and because of its value and rarity, technological knowledge provides a firm with strategic advantages in international expansion (Fang et al. 2010). A majority of managers at both HQ and the subsidiary emphasized that this kind of knowledge is the most frequently transferred.

"90 per cent would be technical, and it is directed to the computer program and how you handle that one."

- Norwegian Subsidiary Manager (Ref: 13.b)

As nearly all parent-firms develop and produce the technology in Norway (at HQs), it is essential that knowledge is transferred to the subsidiaries. This can be done through training of subsidiary employees in Norway or Houston and through different forms of communication. On the other hand, managers in the subsidiaries were conscious of the market differences and the need to adapt technology and products.

"(...) then it comes up a lots of ideas, which comes from the meetings with our clients here which has different types of problems and your ideas about solving them back home. And we have to bring them back home."

- Norwegian Subsidiary Manager (Ref: 13.b)

This exchange of knowledge contributes to better and more harmonious understanding (in HQ and subsidiaries) of the different markets: the North Sea and Gulf of Mexico, and was deemed necessary to achieve market success in Houston. As aforementioned, even well-established technological advancements from Norway had to be adapted, tested and verified to fit the Gulf of Mexico market. Subsidiary managers with experience based knowledge of operations in the Gulf of Mexico, and with close contact with customers had the ability to suggest adaptations of the technology to local market needs.

Transfer of marketing knowledge

Marketing knowledge is a crucial asset for firms, and contributes with time to brand building. Yet, although a brands' value is transferable to new products and technologies, its transfer to a foreign subsidiary could be difficult because of the high location specificity of marketing knowledge (Fang et al 2010). Subsidiary managers experienced challenges to market and to sell the parent-firm's technology in Houston. Cultural distance between Norway and the USA and differences in the local industry culture and market needs were major explanations for this. Reputations obtained in Norway are not always transferable to the new business environment. Managers also understood that they had to build local business networks and engage in socializing to acquire local market knowledge and to gain new customers – a different exercise compared to business in Norway. Hence, marketing knowledge obtained in the home market did not seem to fit the host market. To be able to adapt to local market conditions, the subsidiary managers had to be knowledgeable of the host country's political, economic, and socio-cultural institutions and practices. Hiring local managers (Americans) in subsidiaries could make the adaptation of marketing knowledge easier and faster, as they already possess the necessary local market knowledge. Their profound knowledge of the host-country market enabled them to identify application opportunities as well as misfits associated with the parent-firm's marketing knowledge. In the case of Norwegian subsidiary managers, it seemed that acquiring the local market knowledge was experience-based and a long-term affair:

"Vi lærer hver dag hvordan markedet fungerer. Tror jeg har vært her nå i 22 år, men hvert marked har sin (...) jeg har vært innenfor mange typer markeder

innenfor olje og gass og shipping, hvert marked har sine modeller, ingen tvil om det."

- Norwegian Subsidiary Manager (Ref: 1.b.2)

5 Discussion and Conclusion

This case study has revealed some specific issues related to the internationalization process of SMEs from a Norwegian oil & gas cluster. Overall, the companies stated that they were committed to Houston and the international establishment. The average years for SMEs established in Houston was 4,3 years for the specific sample¹². We can therefore argue that the firms from the sample still is in its early phase of establishment. However, a surprising amount of the firms suffered from lack of plans and strategies prior to establishment.

Underestimation of the cultural differences and a tremendous faith in their Norwegian products should be perceived as two important factors to why the decision makers initiated the establishment without any detailed plans or strategies. Costs related to operations of the subsidiary and the expenses of expats are proven to be significant. The key informants and some managers argued that thorough plans and strategies pre-entry could function as an efficient method of cost reduction. Key informants also elaborated that more activities and workload related to the subsidiary start-up could have been performed prior to entry.

Due to the fact that SMEs hold high-tech products and great competency, most firms chose a wholly owned greenfield as an establishment mode. This is in accordance with the literature, as e.g. a joint venture would increase the risk of competitive knowledge to be leaked. Thus managers should be aware that without any local partners, the access to local market specific information is more challenging. The managers' response was to focus on the increasing importance of the local business network. The value and importance of business networks was clearly critical in the U.S market. Even though business networks naturally are of importance in Norway, the social aspect of networks was stated to be more critical in America. The research did not achieve to reveal if the Norwegian managers failed or succeed regarding formation and care of the business networks, yet a number of the managers argued that they were surprised by the increased importance of the personal and business networks. Due to these cultural

¹² Excluding key informants and facilitators

differences, Norwegian managers should be trained prior to the foreign activities so they better understand the importance of networks, and how these may be assembled and kept. On the other hand, managers with prior international experiences was much more open minded towards these differences and seemed more prepared to identify and react upon these local behavioral tendencies.

Most firms still had difficulties in reaching sufficient financial performance and sales. Yet, managers at the headquarters of Norway and subsidiaries in Houston stated their commitment to the market and their further efforts. This is in compliance with the literature, which states that the internationalization process should be strategically, and imminent demands to profits should not be a requirement or decisive. Also most managers perceived Houston to be the most important energy hub of the world. The perception was that “*you are almost expected to be here*”. Motives as access to information, knowledge of global market demands and closeness to decision makers toward critical industry leaders was also emphasized. However, several of the key informants demonstrated some uncertainty to the future importance of Houston as a hub. Requirements toward local content in emerging nations within Africa and in Brazil were used as examples to why the future position of Houston should be perceived questionable. Norwegian managers also supported this statement as they argued that future investments and initiatives would occur in countries such as Brazil. Norwegian managers therefore have to be careful to decide to establish operations in Houston mainly because “*most others are doing it*”.

The SMEs were highly focused on their technology know-how and focused on establishing their competitive advantage through their high-tech products. The motive for internationalization was to reach new markets for their existing products. Some, however, realized that the market inequalities led to difficulties with product standardization and were compelled to adapt to the American market. It should be emphasized that it seems as the Norwegian small firms have exaggerated faith in their Norwegian developed products. It seems as some managers believe that due to great success in Norway, the introduction of the product in the American market will reach success almost automatically. More than a few of the managers showed great pride of the technology development in Norway and the related knowledge and competence. Yet, we would argue that the

Norwegian managers fail to understand if the demand for these state-of-the-art products actually exists in America. Managers did acknowledge that Americans found their products to be exciting, but at a far too high cost and sophistication. Norwegian managers should be aware of the importance of thorough market analysis and discussions of demand and needs prior to the decision of establishment.

An important finding is related to the time needed for the sales decision to be made. Norwegian managers stated that even though American firm showed interest and stated their willingness to purchase the product, there was still a long way to the actual purchase. Due to cultural variables and liability, the firm has to conduct a great process of supplier approval, certification and documentation of both the firm and the product. Most American decision makers are risk averse and would avoid any products that not have proved its reliability and performance through a number of previous operations. American decision makers showed skepticism toward how long the firm or the management would be present in Houston before they returned home. Norwegian managers often was replied to by Americans by; *“how long are you going to be here before you return home?”*. Promotion of commitment and long-term orientation should be perceived as critical for Norwegian managers in building trust with the American purchasers. The Norwegian firms had problems to convince this commitment also due to the fact that they rarely had engineers and R&D department in their foreign establishment. If customers would have conversations with skilled personnel, they had to perform this through email or by phone. Due to the great time difference- this was hard to implement without thorough planning. This was emphasized as a great challenge for the Norwegian SMEs. At the same time several of the subsidiary managers argued that the initial decision of production and development had proved wrong. Most of the firms established production in the foreign unit, while development and engineering was kept home in Norway. The initial motive was due to the perception of cheap production and labor cost in America. This perception turned wrong. It was true that labor cost was cheaper, yet efficiency was evenly lower. Production in Norway can most definitely compete with production in the U.S due to efficiency, know-how and precision. Some managers also argued that the decision of not having engineering in the foreign establishment resulted in poor performance. The requirement of

adaptation and the customers need for interaction led to the need for employees with the specialized knowledge. Managers agreed that there is a need for a *critical minimum mass* of employees, meaning that the foreign unit has to hold a certain set of employees and competence, if it should be able to meet the requirements of the markets. This would increase the trust of the customer and enable the subsidiary to adapt to the demarcated of the local needs.

The firms seemed to transfer technology and knowledge in a sufficient level. Still, few firms had proper routines for rotation of human capital. Just in a few of the firms, the employees rotated between the subsidiary and headquarters to secure strong internal ties and transfer of knowledge. Most subsidiaries were constructed as *sales offices* and did not have an extended strategic role, except for sales and access to market information. At the managerial level, the firms had routines for visits between the different offices. Especially subsidiary managers stated that the effect of visits from the home office was of great value. However, several of the key informants warned firms not to heavily marketing *Norway*, meaning that it was far more effective to position the subsidiary as American without putting too much focus in creating a Norwegian profile in the American market.

Some of the challenges and the organizational dimensions discussed are applicable for all of the firms, while other dimensions are more specific for each firm. It will never be possible to list a complete picture of all the “to do” and “wrongs” for all the firms. However, most of the issues discussed are based in the actual awareness of these issues. A general finding was that the experienced managers were more aware of the issues, than what the more inexperienced was. Most managers had limited background within business. Several of the managers was highly specialized engineers, or with other technological experience. Often they were situated in the managerial position due to sufficient organizational capabilities. Managerial training or education within international management was not a subject in any of the SMEs. The firm solely relied on the experiences and the capabilities the manager possessed prior to entry. This situation may be used as an argument that SMEs underestimate the challenges of internationalization toward the U.S market or that they are not aware of the critical issues toward establishing a subsidiary in a foreign market. This could

reduce the situation were most of the managers stated that they had performed costly errors and mistake.

A final remark must be done toward the facilitators of international business. Three organizations were emphasized by the managers as important for Norwegian SMEs in Houston. Firstly The Norwegian Seamen's Church was argued to be important for the family of the expat and also for networking among the Norwegian companies. Most managers visited the church each Saturday to discuss business specific issues with other managers. This was stated to be a great arena for exchange of information and contacts. Secondly, Intsok was highlighted as an important facilitator to reach market info and to facilitate useful seminars and conferences. The events of Intsok made it possible to meet with potential customers and exchange important information of networks and market tendencies. Finally, Innovation Norway Houston (INH) was stated to be a valuable partner for many of the firms. If the company is within a certain set of conditions, they may receive monetary support from INH. In addition Innovation Norway holds an extended network of trustworthy lawyers, consultants, advisors and administrative personnel which the SMEs may enjoy form. More, INH holds offices for very small Norwegian firms for rental in the imminent phase of establishment. Most managers and key informants stated that *all* Norwegian SMEs would enjoy great benefits of the access to knowledge, network and advice that is held by Innovation Norway in Houston. A few of the managers even stated that their establishment in Houston would not be possible without the support of INH. Naturally, the managers of the SMEs indeed have to do all the hard work themselves, yet INH may be a highly valuable partner to *hold hands* in the imminent phase of establishment.

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Appendix:

Appendix 1: Preliminary Thesis Report

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Preliminary Thesis Report

(GRA 1902)

- A local Cluster going international

Hand-in date:
16.01.2012

Campus:
BI Norwegian School of Business, Oslo

Supervisor:
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Program:
Master of Science in International Management

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Abstract

This master thesis is part of the research project titled: “Local cluster going international: balancing local and non-local networking”. The Research Council

of Norway and the clusters: NCE Subsea¹³ and NCE Maritime finance the project. The research problems in this thesis have to match with the overall research problems in the larger project, and are developed through collaboration with the research project leader. One major research objective is to investigate the internationalization processes of firms from the two regional clusters: NCE Subsea and NCE Maritime. In our master thesis, we concentrate on market entry processes of firms in the subsea cluster in Bergen, with a focus on market entry to Houston, USA. We are also interested in the relations between headquarters (in Bergen) and the subsidiary (in Houston) with a focus on knowledge transfer both ways.

In spring 2011, we conducted in-depth interviews with seven top managers of different firms in Bergen with a head quarter (HQ) perspective¹⁴. In these interviews, we concentrated upon four main topics. We were interested in the decision-making process prior to the market entry, investigate how the management assessed the necessary resources and on the preparation for the process. Second, we focused on the learning process after establishment, i.e. what kind of adjustments they implemented, and what kind of challenges that emerged. Third, we focused on the relationship between the HQ and the subsidiary with an emphasis on the transfer of knowledge and learning. Lastly, we focused on the process of establishment with a retrospective approach. In this part, we examined how successful they perceived their own process and what they would have done differently.

The future prospect is to conduct additional interviews in Bergen and Houston to accomplish the data-collection phase. There have been established a relationship with *Innovasjon Norge* in Houston. The representative from *Innovasjon Norge* is positive to assist our research: to contact and select relevant subsidiaries, and to be a key informant in our study.

¹³ 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. (nce.no)

¹⁴ In addition, we interviewed two managers with experience from subsidiaries in Houston, to get the perspective from the subsidiary.

We have already completed some of the objectives for this thesis to date. The interview guide for Bergen and Houston is accomplished, we have finished almost all interviews in Bergen, and we are in the initial stage of making appointments with subsidiaries in Houston. However, we experienced that some key informants had problems in giving clear answers to some of our questions. Most of the managers participating had a technically oriented background and perhaps had not reflected on some of the issues presented. We have to revise the transcripts and find out which questions were poorly answered, to find questions that are more proper. We should also consider giving extended background information for each topic so that the key informant better understands what kind of elaborations we are looking for.

Field of Study

This master thesis focuses on Norwegian SMEs in the subsea cluster in the region of Bergen. The cluster is perceived as an international leading center of expertise in operations, maintenance, surveillance, modifications and upgrades of subsea installations (NCE memo, 2009). There are approximately 160 member companies with a total annual turnover of 11.6 billion Norwegian kroner, representing a workforce around 4000 employees (Jakobsen & Fløysand, 2011). These firms deliver high-tech solutions to offshore oil and gas production domestically and internationally.

In late 2006, the cluster was approved as a *Norwegian Centre of Expertise* (NCE) due to its international and domestic growth potential and its national importance substantial impact of the Norwegian industry. There are some large multinational companies in the cluster, but the SMEs are also important members. These smaller firms are important subcontractors for the bigger firms in the subsea cluster around Bergen.

Our master thesis' research objective is to investigate the market entry processes of SMEs from the subsea cluster. The common feature to the participating companies in our study is that they all have a subsidiary located in Houston. The paper will investigate the different approaches to internationalization chosen by the different firms. We will reveal the different valuable resources in this process and how they conduct their decision-making process. Comparing the different

firms can reveal important factors in the process of internationalization by a SME. At the same time, we adopt a dyadic approach by interviewing both HQ and subsidiaries. This approach enables us to obtain perceptions of the same topics from both sides of the dyad. This dyadic approach can increase the validity of our research, and will provide us with useful knowledge about the relationship between the subsidiary and the HQ.

This research is based on existing literature within the field of internationalization processes, foreign market entry processes, market entry modes and knowledge sharing and transfer in SMEs.

Literature Review

This part will present the literature of theories that try to explain the internationalization process. The focus will be on literature that explains decisions made prior, during and after the establishment of subsidiary abroad. Furthermore, we will combine the different literatures to provide a framework for empirical investigation. In addition, we will revise this literature review according to the information gained from the interviews, later in the master thesis process.

Small and Medium sized Enterprises

The SME is defined as a firm with 500 or fewer employees (Cavusgil, 2008). Certainly, this is an American perspective, where companies in general are bigger than in Norway. However, the competitive advantages of an SME are typically their innovative and adaptive capabilities. They often target market niches that MNE's perceive too small to focus on. Mostly they adapt their products and marketing to special customer needs. Moreover, SMEs are usually more flexible and faster to respond to local market needs than MNEs (Cavusgil, 2008). However, they are often constrained by limited resources that prevent them from international expansion. That is why they leverage the service and the expertise of intermediaries and facilitators to succeed abroad

The internationalization process:

In the literature of the internationalization process, many theories try to explain factors taken in consideration when establishing a subsidiary abroad. The Uppsala Model emphasizes that the lack of knowledge about foreign markets creates an uncertainty and is a great obstacle to the firms' internationalization process. Market knowledge can be gained through operations abroad (Johanson & Vahlne, 1977). This model focuses on how the internationalization of firms begins in close markets that are similar in terms of psychic distance. The term psychic distance, is defined by Johanson & Vahlne (1977) as "*sum of the factors preventing the flow of information from and to the market*". Examples of factors related to psychic distance are differences in language, education, business practices, culture and industrial development. In other words, the firms will start internationalizing in geographically close countries through incremental learning and then start to internationalize into markets further away. Incremental learning is defined as gradually learning through "learning by doing", where you enter similar countries and then use the acquired knowledge to move to more distant markets (Johanson & Vahlne 1977).

The Uppsala Model, has in the last 20 years, been challenged by firms that have internationalized early on in their business life cycle. Traditionally, companies tested their technology in the domestic or in close markets, whereas today, a large number of companies test their technologies in distant markets in an early phase. Forsgren (2002) argues in his article that the concept of learning in the Uppsala Model is too narrow, which in turn limits the models ability to explain and predict the internationalization behavior precisely.

Many researchers due to the global competition and the accelerating technological development that force firms to internationalize more rapidly than some decades ago have emphasized this observation (Johanson & Vahlne, 2003). The Uppsala Model was based on Swedish multinational enterprises (MNE) that started to internationalize to similar countries and then moved further away and experienced incremental learning. In our sample of SMEs from the subsea cluster, there are both early and late internationalizing firms, hence both the Uppsala model and the born global theory seem relevant to consider in our study. In this section, we

review literature on the internationalization pattern of high-tech SME, and reveal the differences in their internationalization process compared to the Uppsala Model.

In this paper, we divide the internationalization process in three stages: (1) strategic pre-entry internationalization process, (2) internationalization process and strategies (3) local and global networks. The selection of foreign market is defined as the moment considering internationalizing to actually selecting a foreign market. This includes the reason to internationalize and why selecting that specific market. The second stage will focus on the strategies used to overcome the psychic distance and the use of networks. Here we seek to determine which factors influenced to choose the specific mode of entry. Then in the end we will analyze the importance of networks and the transfer of knowledge between headquarter (HQ) and subsidiary.

(1) Selection of foreign market:

Network perspective: the importance of different relations.

“The old models of incremental learning are no longer valid” - Johanson and Vahlne (2003).

The Uppsala Model predicts that firms start to internationalize according to psychic distance (Johanson and Vahlne, 1977, 1990). However, research shows that technology-based firms were more influenced in their choice of market selection by domestic client followership, sectorial targeting, and industry trends (Bell 1995; Arenius 2005). High tech firms are dependent on internationalizing more rapidly due to the global competition and the high growth of technological development than some decades ago (Johanson and Vahlne 2003).

Firms that do not follow one specific path when internationalizing, illustrate this new trend. The Norwegian subsea companies fall into the categorization as technology-based firms. This research seeks to investigate if the market selection was influenced by domestic client followership, sectorial targeting and industry trends. Another interesting factor is the influence of the growth technological development and if that influenced firms to internationalize to Houston.

The dynamic environment has forced companies to be more innovative- due to the increased competition to survive. Still, many firms successfully penetrate markets rapidly and manage to overcome the psychic distance. This is something that is illustrated by the subsea companies. Arenius (2005) argues that firms are able to overcome psychic distance by gaining direct experiential knowledge through their networks. Axelsson and Easton (1992) define network as “sets of two or more connected exchange relationships”. While business networks are defined as sets of interconnected business relationships, in which each exchange relation is between businesses firms conceptualized as collective actors (Anderson et al., 1994; Johanson and Vahlne 2003). As the Norwegian subsea companies have internationalized to markets further away, we seek to reveal the impact of existing network of the firms, with focus on networks from the subsea cluster.

Social Capital

SMEs in the early stage of the internationalization process often lack resources (Chetty & Cambell – Hunt, 2003). These firms will often lack financial funds, knowledge about foreign market and international contacts. They need to be innovative in the internationalization process and focus on their existing relationship with other firms to identify and exploit specific business opportunities (Agndal et al., 2008). Another way to internationalize when the resources are limited is to rely on founders, owners and managerial experience.

Internationalization research literature emphasizes the importance of experience in the management. This is also confirmed by Crick and Jones (2000) who revealed that many companies make their market-selection decision based on the previous international experience of the manager. This experience could be international working experience, experience in living abroad and other international experience, which will decrease the perceived psychic distance (Madsen and Servais, 1997; McDougall et al., 1994; Arenius, 2005). This can indicate that network, or so called Social Capital, is more important than what the Uppsala model predicted. Social Capital is defined by Nahapiet and Goshal (1998, p.243) as *“the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit [...] social capital comprises both the network and the assets that*

may mobilized through the network". In other words, Social Capital is a firm's network of relationship and the resources that can be acquired from the network, and consider both actual and potential network (Agndal 2008). Furthermore, it will be essential to investigate the experience of the founders, owners and managers to reveal the impact of their social capital for the internationalization process.

Relationship commitment and learning

Many firms internationalize based on unpredicted opportunities that arises from their network. Firms are dependent on relationships that develop gradually through interaction between each other, which in turn will lead to higher commitment to the relationship (Johanson and Valhne 2003; Anderson and Witz, 1992; Blankenburg Holm et al., 1999). Internationalization is according to the process view a process of increasing commitments to foreign operations. The greater, the more specific, and the more integrated with other firm activities in those market are, the stronger is the firm's dependence on them (Johanson and Valhne 2003). This is emphasized by Johanson and Valhne (2003) when they state that the earlier experience and commitments will influence where the first market entry will occur. The impact of relationship and commitment will be investigated to reveal their importance on Norwegian subsea companies decision processes.

We will further on take a look at literature which try to explain firms' international expansion, and try to develop an understanding of how firms overcome market uncertainty, psychic distance and lack of market knowledge.

Internationalization process and strategies:

Forsgreen (2002) argues in his review of the Uppsala process of internationalization that learning is acquired through other means than only through learning by doing. The concept of incremental learning is resource and time demanding and requires competence, which may be missing in a firm in the beginning of the internationalization process. Three types of learning get attention; learning through imitation, acquisition or proactive market research (Forsgreen 2002). The first opportunity is to imitate other companies, where the firms still have a level uncertainty and decide to follow or copy the actions of

other firms. Another opportunity is to increase the speed in the internationalization process by acquiring local companies or personnel that possess the necessary market knowledge. This point is the opposite of the Uppsala model that emphasizes the importance of incremental learning. The third option is market research through networks, alliances or surveys. This market research could provide the firm with general information, but which also could be useful to get insight in the market (Forsgreen 2002). Here, this research seeks to investigate the role of the three types of learning and their role to overcome the lack of incremental learning.

The internationalization process of a Born Global

Since the 1970s and 1980s, a new type of firm has emerged. With limited resources and lack of knowledge, these firms internationalized rapidly from inception. The liberalization of the economy and the increased globalization should be considered as the driver for the emergence of born global firms (Tamar, 2004). The phenomenon of born globals cannot be explained by the Uppsala model and indicates a clear gap within the previous fields of research.

This type of internationalizing strategy was in the beginning named leapfrogging (Hedlund & Kverneland, 1985), Innate exporters (Ganitsky, 1989) and High Technology Start-Ups (Jolly et al., 1992). In 1993, McKinsey defined these types of firms as Born Globals. McKinsey defined Born Global working with an Australian study, as firms that began exporting, on average, only two years after their foundation and achieved 76 percent of their total sales through exports (Rennie, Michael W. 1993). These firms did not follow the traditional internationalizing strategies, where the primary focus of their activities remained at the home market, but rather started to internationalize from inception. Born Global is defined as: *“a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources and the sale of output in multiple countries”* (Oviatt, 1994:5).

McKinsey's definition includes that a firm should be exporting two years after foundation to be categorized as Born Global (Rennie, Michael W. 1993). This excludes firms that started to export later than two years, but that experienced the same internationalization process as a Born Global. Therefore we choose to focus on the definition by Gabrielsson et al. (2008) define a born global firm as one

having products with global market potential. The firm can combine this potential with an entrepreneurial capability to seek methods of accelerated internationalization. The reason for choosing this definition is because we feel this grasp the concept in a precise and relevant matter, and without being too technical as e.g. McKinsey's proposed definition. Further a *born global* is often perceived as a *small* technology-oriented firm operating in international markets. The foreign markets they enter are often with high psychic distance. Simultaneously it is interesting that the firms often initiate their market entries without high degree of market knowledge or cultural understanding.

Furthermore, it is important to acknowledge the different factors emphasized by researchers to be the reason for the rapid market penetration of Born Globals, where focus has been on managerial experience and vision (Arenius 2005; Gabrielsson et al. 2008). Arenius (2005) defined the speed of market penetration as "*the time needed from market entry until the generation of sales income from that market*". Managers with international experience will increase the market penetration and help the firm to overcome their lack of knowledge through their network (Arenius 2005, Crick & Spence 2005). This is also confirmed by Crick and Spence (2005) where they emphasize that a firm's internationalization in an early phase need recruitment of an executive with the required experience. Gabrielsson et al. (2008) believe that the founder and its global vision at inception are the key factors contributing to the success of the Born Global.

With the mentioned findings, we would now like to reveal previous research of the market entry process of born globals. A survey of UK high-tech companies revealed that the entry mode decision of young, resource-constrained firm is a trade-off between the resources available and the support requirements of the customers (Burgel & Murray, 2000). The firms often use direct export or intermediaries in their entry mode because these are not resource intensive modes. One important factor in the choice of entry mode was found to be the level of customization required. In case of high customization, the firm often found intermediaries to be of less value. Product complexity and need for customer interaction could also affect the choice between direct and indirect export. While direct export let the firm have control over their know-how and operations, they

suffer of being alone. With use of intermediaries or allying with a partner, the born global gain access to a network and the experience of the partner.

The survey of Burgel and Murray (2000) find the entry decision to be a function of firm-specific, product specific, and target country specific factors. With regards to target country, it is found that most born globals enter countries with high psychic distance. This entry decision is not in accordance with Uppsala, because it implies that other factors must be regarded as more important for the firm, than psychic distance. In fact, the survey found that strategic exploitation is of greater importance in the entry decision (Burgel & Murray, 2000). It is believed that the specifications of the country these firms enter are of greater importance than the distance. Further, the strategic exploitation is found to be more important, in the entry mode decision, than psychic distance. In other words, the exploitation of the commercial value in the technological competency is of high importance to insure their survival. These factors are of importance when revealing the reason high tech firms do not follow the Uppsala model.

The level of previous international experience of managers had high effect on the firm's ability to conduct direct sales to foreign customers. However, this was more regarding network development than knowledge orientation. Burgel and Murray (2000) argue that the exploitation of already established networks let managers evolve into strong personal network and therefore limits the need of market knowledge through own experiences. Experiential learning, the key variable of the Uppsala internationalization process, is therefore concluded to be of less value as an explanation variable for these young, high-tech firms in the internationalization decisions (Burgel & Murray, 2000).

We argue that research indicates that the perspective of organizational capability of the firm is a better way to reveal how these young firms conduct their entry decisions. In this regard, both ends of the value chain should be approached simultaneously (Freeman, Edwards, & Schroder, 2006). An advantage of approaching the supplier side of the chain is the loyalty and trust created by a stable relationship. A strong relationship with the supplier would lead to flexibility and mutual benefits of market shares. Customer requirements of large volume or customized quality would be easier to comply with support by the

suppliers. A formal relationship turns personal over time. Freeman et al. (2006) argue that a personal relationship with strong ties leads to a higher exchange of knowledge. Further on Freeman et al. (2006) state that the actors in such a relationship also help to point out large foreign customers.

Collaborative partnerships with foreign customers and suppliers and use of personal networks are two out of five strategies presented by Freeman et al. (2006). Use of advanced technology, client followership and multiple modes of entry are also useful strategies for a small firm according to Freeman et al. (2006). They argue that these strategies should be advantageous to overcome constraints in the internationalization process and lead to early and rapid foreign market entry.

Operation Mode:

In this section, we discuss factors that are important in the decision of operation mode. One perspective is to reveal which strategic reason the firms have to enter the foreign market (Tseng, 2007). There are two main motives to enter a foreign market according to Tseng (2007). Either choosing an *asset-seeking* motive where we seek to find country specific advantages of technological resources, market relevance or natural resources. The second motive is to exploit firm specific advantages in a foreign market. These advantages are defined as either technological capabilities, marketing capabilities and firm size.

Tseng (2007) states that a joint venture mode should be considered if the motives are *asset seeking*. The reason is that a partner from the foreign market would bring access to resources that are costly or prohibited to reproduce or transferred outside of the firm that controls the resources. Especially local market knowledge is perceived to be gained rapidly in a joint venture with a local partner. Also, if the firm-specific assets are difficult to redeploy overseas, then the joint venture should be considered as the most appropriate option for an FDI. A wholly-owned subsidiary should be considered if the firm possesses resources such as specific know-how or unique technology that should not be leaked to other actors. This is the most efficient mode to exploit competitive advantages without the risk of diluting their know-how. However, additional perspectives need to be considered in the operation mode decision.

A different, resource based view of the firm considers the effect of the domestic environment. As retrieved, SMEs suffer from limited resources and the entry mode decision could be seen as a trade-off between focus in home market and foreign market (Rasheed, 2005). An equity mode of foreign operations, such as wholly owned subsidiary, would require substantial financial and human resources. By this, the transfer of resources to the foreign market would decrease the emphasis of activities and development in the domestic market. Rasheed (2005) finds that the environmental factors should be taken into consideration in the decision of the entry mode strategy. The results indicate that SMEs can experience a higher market performance through exporting (non-equity mode) if the domestic industrial growth are high.

(3) Local and global networks:

Managerial experience

Another factor is the importance of a manager with international experience to penetrate the market rapidly. Managers with experience can provide a company with networks, the necessary experience to contemplate between different opportunities and the experience to make the fundament for future prospect. Arenius (2005) stress the importance of a manager with international experience as they can “... *take advantage of their international experience and target distant markets immediately*”. The importance of managers’ or founders’ network is also emphasized by Lechner and Dowling (2003), where they mention managers’ network as the most important to overcome the liability of newness. In internationalization processes, there are certain events that cannot be planned, and where it is more important to be able to adapt and act dynamic. The importance of requirement of an executive that has the experience and contacts of a network illustrates this (Crick and Spence 2005). Furthermore, this research will reveal the importance of using existing network in the early phase of internationalization and how these networks decrease psychic distance. Managerial resources with international experience can contribute to enable firms to prepare for international development and target growth markets (Crick and Spence 2005).

Managers tend to overestimate their perceived familiarity with local markets when entering a new market. This is confirmed by Pedersen and Pedersen (2004) who reveal that managers relies too much on the information they get through network, where they overestimate their knowledge of foreign markets before entering. In other words, managers tend to believe to have knowledge about the foreign market before entry, whereas they realize their lack of knowledge and experience a shock effect in the first eight years from establishing presence in the market. The shock effect is only valid for tacit knowledge and explicit knowledge, and is at the largest in close distant markets and lower in high distant markets (Pedersen and Pedersen 2004).

Network learning

There are three types of business network learning (Johanson and Valhne 2003; Håkansson and Johansson, 2001; Pahlberg, 2001). The first type of learning is partner specific, which is an outcome of interaction between firms. Where the firms learn about each other, such as how the partner adapts to different circumstances or the roles of different individuals. This type of learning will contribute to higher commitment to the relationship. Furthermore, the second type of learning is when companies learn something from a relationship that can be transferred to and used in other relationships. Examples of this could be information on how to create new connections, and how to develop different relationship. The third type of learning is to know how to coordinate activities through interaction. This could concern for instance supplier relationships, and issues such as on time deliveries. Based on the three a fourth one arises, where firms learn to build new business networks and connect them to each other (Johanson and Valhne 2003). Network and relationship building is time and resource demanding, and therefore the internationalization will be based on the managers existing network. Johanson and Valhne (2003) confirms this when they state that the earlier experience and commitments will influence where the first market entry will occur.

Access and transfer of market knowledge:

One of the major concerns in the internationalization process is the access to market knowledge. Market knowledge is usually divided into *explicit* and *tacit*. Explicit knowledge is regarded as demographic data, macroeconomic statistics

and other identifiable market measures. Tacit knowledge on the other hand is the opposite of explicit knowledge. This knowledge is more *hidden* and more experientially-based knowledge useful to navigate the intricacies of different cultures, political regimes and socioeconomic systems (Eriksson, Johanson, Majkgard, & Sharma, 1997). Explicit forms of market knowledge that do exist might be of questionable quality or might be expired due to political or economic changes. The acquisition of the explicit market knowledge can therefore evolve into a lengthy and difficult process. However, tacit knowledge tends to be even more difficult to acquire (Johanson & Vahlne, 1977).

Even though the acquisition of the various kinds of market knowledge is difficult enough, another perspective of importance is the transfer of knowledge within the organization. Organizational learning about a new host country is not a smooth and seamless process. It appears to be a complex process that varies significantly from firm to firm, due to variations in internal flows of local market knowledge (Lord & Ranft, 2000). Moreover, tacit knowledge seems to be acquired through personal experiences and therefore difficult to separate from the individuals who possess it (Polanyi, 1962).

By this, the HQ can involve in subsidiary decisions and assist the strategy development. Without HQ involvement in subsidiary strategy development, the transfer of knowledge would be limited. Another key ingredient of the organizational structure is the involvement of executive managers. A reward or incentive system should be implied to increase managers' active engagement in divisional strategy formulation and implementation (Lord & Ranft, 2000). Managers do often have accumulated host country knowledge through past experiences. An incentive system will increase the probability that managers share their knowledge to other divisions (Lord & Ranft, 2000). Moreover, rotation of managers and the transfer to different locations could lead to more internal share of knowledge.

In this thesis we will focus on the use of host country managers. Hiring local managers is an effective method of acquiring both tacit and explicit local knowledge (Mitra & Golder, 2002). The necessary familiarity with the local market and business leads to a higher emphasis of hiring local managers. But, on

the contrary, use of local managers will limit the *management development* and the *organizational development* (Harzing, 2001). In other words, managers from the home country will not gain the necessarily international experience if local managers are used at the sub. Further, the creation or improvement of communication channels between the HQ and sub will suffer of less verbal communication (Harzing, 2001). We therefore argue that use of local managers or home-country managers is a trade-off between acquisitions of local market knowledge and the development of the organization as a whole.

These findings illustrate that organizational structure is decisive for the internal transfer of knowledge. The relationship between the sub and HQ affects the level of knowledge transfer. Appropriate use of executive managers and subsidiary managers can facilitate higher level of internal transfer of knowledge. Use of local managers in subsidiaries should be perceived as an efficient method of acquiring both tacit and explicit local knowledge, while the organizational development would be limited without use of home-country managers.

Methodology and Data Collection

The methodology in this paper will first introduce the research design we have found appropriate, which is a case study. This study will enable us to develop a thoroughly understanding about the internationalization process of the participating SME's. On the other hand, we are not able to generalize our findings due to the fact that we only investigate a limited number of firms in one cluster. The research instrument in use is in-depth interviews with managers of headquarters in Bergen and subsidiaries in Houston (see appendix for the two semi-structured interview guides).

The main idea of case studies is to look at cases in order to develop theory inductively (Eisenhardt and Graebner, 2007). In terms of the underlying philosophy of this method, there exist differences among academics regarding the right way to perform case studies. For our study, the *constructionist research design* is deemed appropriate, as it assumes that «there is no absolute truth, and the job of the researcher should be to establish how various claims for trust and reality become constructed in everyday life» (Easterby-Smith et al, 2008). Due to the fact that we conduct in-depth interviews to collect our data, we have a

qualitative method, meaning that the data collected is mainly in the form of words (Easterby-Smith et al, 2008).

The main purpose of our interviews is to get an understanding of the managers' and the subsidiaries view on the situation in their own companies, the perceptions they have about the process of internationalization, and why they believe this is the case. We cannot reveal these rich data by using a questionnaire. But, we seek to cover certain aspects and topics throughout the interviews in order to get sufficient knowledge about our research questions. This leads us to using semi-structured interviews, with a topic guide for the interviewers in order to make sure that all topics are covered. The procedure for our interviews will be elaborated on in the next section. The language of the interviews is Norwegian in Bergen and English in Houston. Citations (Norwegian) that we will use in the final thesis will be translated into English.

The research question

This research includes a great variation of topics covered by various fields of literature. We have chosen to ground our interview guide in the existing literature covering numerous themes in the internationalization field. This broad theoretical perspective may contribute to produce richer data than a narrower perspective. We formulate our research question as follows:

How does high-tech SMEs from the subsea cluster perceive and deal with the market entry process, and how do they experience the relationship and the knowledge transfer between the HQ and the subsidiary?

This research question will be an overall guideline for our interview guide and will influence the direction of all the questions.

Schedule and Progress

Most of the interviews in Bergen are already conducted and transcribed. This overview shows both activities already done and what remains.

| Date | Activity | Comment |
|------------|---|-----------------|
| 01.04.2011 | Draft of Literature Review | Draft completed |
| 01.05.2011 | Interview guide HQ finalized | Completed |
| 01.08.2011 | 8 x HQ interview/Transcription, Bergen | Completed |
| 16.01.2012 | Hand in preliminary thesis report | |
| 10.02.2012 | 3 x HQ interview/Transcription, Bergen | |
| 10.02.2012 | Interview guide Subsidiary finalized | |
| 26.02.2012 | # x Subsidiary interview/Transcription, Houston | |
| 01.03.2012 | Analyzing and Interpreting the data | |
| 01.04.2012 | Review of the structure and the data | |
| 01.09.2012 | Conclusion and hand-in | |

We are still not sure how many firms we will interview in Houston. However, it is likely that we will conduct interviews with subsidiaries outside our initial population. The reason is that we have established a relationship with *Innovasjon Norge* in Houston. The Norwegian team of *Innovasjon Norge* in Houston is eager to expand our population to secure more information and a broader data collection.

In March, we are able to see if any data are missing or if more information is required. We are prepared to ask the interviewees to provide us with more information if necessary. It will be likely to ask the HQs more questions after the interviews of the subsidiaries have been conducted. Also, as this paper has a broad research approach it is possible that the literature review should be reviewed after all the data is collected and analyzed.

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Appendix 2: Invitation the research project Houston

Research project on Norwegian subsidiaries in Houston

Company name:

Hi,

I refer to our conversation where we agreed that I should send you an e-mail.

We invite your firm to participate in a research project financed by NCE Subsea, NCE Maritime, and the Research Council of Norway. We aim to investigate how Norwegian subsidiaries in Houston cope with market entry, competition, and market challenges.

We plan to conduct interviews (ca. 1 hour duration) in week 7 and 8 (from 13th to 24th of February), with firms in Houston. We hope that your firm will participate in the study.

We will concentrate on the following topics: subsidiary strategy and development, communications with headquarters, subsidiary relations with local firms in Houston, main experiences and learning.

We will treat all information confidentially, according to research ethics.

Two research assistants; Kjetil Njærheim and Anas Chair Yemlahi, will conduct the research in Houston in close cooperation with the project leader.

We look forward to hearing from you.

Yours sincerely

Project leader

Inger Beate Pettersen, PhD

Associate professor

Project leader

BI, Norwegian Business School

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Intervjuguide - subsea bedrifter:**Del 1: Introduksjon og historie****Informasjon (5-10 min)**

- Si litt om temaet for samtalen (bakgrunn, formål)
- Forklar hva intervjuet skal brukes til og forklar taushetsplikt og anonymitet
- Spør om noe er uklart og om respondenten har noen spørsmål
- Informer om ev. opptak, sørg for samtykke til ev. opptak
- Start opptak

Bakgrunnsinformasjon knyttet til den ansatte og generelt om ansatte:

- Stilling, utdanningsbakgrunn, arbeidserfaring, bransjer, utenlandserfaring.
- Hva er utdanningsnivået til de ansatte i bedriften, og hvor mange ansatte i bedriften har utenlandserfaring?

Bakgrunn knyttet til selskapets internasjonaliserings prosess:

- Fortell om bakgrunnen til selskapet, når det ble etablert, ideen bak etablering, ca. omsetning, antall ansatte, vekst
- Fortell litt om bakgrunnen til internasjonaliseringen, hvordan fikk dere ideen til å gå utenlands, hvilket marked valgte dere først og hvorfor akkurat det markedet?
- Hvilke faktorer påvirket valg av marked? Hvorfor akkurat det spesifikke markedet?
- Hva er/var motivasjonen for internasjonalisering?
 - Kan du beskrive prosessen som førte fram til den første eksporten/eller internasjonalisering? Hvordan begynte det? Identifikasjon av marked, kunde, markedsmuligheter – eksportør eller kjøperdrevet, proaktiv eller reaktiv? Forespørsel fra kunde, eller proaktivt salgssarbeid fra dere? Strategisk fundert eller mer utnyttelse av muligheter som dukket opp?
 - Hvilken innflytelse hadde nettverk på avgjørelser i forhold til internasjonaliseringsprosessen i tidlig fase?

Del 2: Internasjonaliseringsprosess og strategier – bruk av nettverk

- Hvordan fikk dere (nødvendig) markedskunnskap (hva er kritisk markedskunnskap), fikk dere tilgang til den via egne ansatte/egen kompetanse, via nettverk, etc.
- Hva med valg av inngangsstrategi (indirekte eksport/direkte eksport, agenter, salgskontor, kontrakter (lisensiering, franchising) – hva har vært avgjørende faktorer for valg (produktfaktorer/service, organisatoriske/ressurser, markedsbetingelser, risiko, kundekrav etc.)
- Hvis markedsetablering – beskriv prosessen med å etablere seg, inklusive bruk av interne og/eller eksterne nettverk/ressurser (om mulig få de til å eksemplifisere hvordan ulike nettverksaktører blir brukt)
- I hvilken grad har relasjoner til norske kunder en betydning for internasjonalisering? Godt rykte via norske kunder, godt rykte gjennom subsea klyngen? Erfaring med oppdrag som underleverandør?
- I hvilken grad har relasjoner til utenlandske kunder en betydning for internasjonalisering? Samme som ovenfor.
- Har dere møtt ulike barrierer for internasjonalisering? (finansielle, organisatoriske, person ressurser, kompetanse, ikke tilgang til nettverk, markedskunnskap, tid og ressurser, risiko, kulturell distanse, mangel på commitment i ledelsen, hos personer)
- Og hvis barrierer: hvordan har dere håndtert disse barrierene (spesielt få fram om nettverk har spilt noen rolle mht å overkomme barrierer – og på hvilken måte og type nettverk)
- Hvorfor (eller hvorfor ikke) har dere ”lykkes” med internasjonalisering

Del 3 Lokale og globale nettverk – informasjonsflyt og læring, dilemma

- Hvilke nettverk har hatt størst betydning for bedriftens utvikling, for kunnskap, kompetanse, markedskunnskap og lignende, hvilke er viktig fremover, og har dette endret seg over tid, etter hvert som dere har blitt mer internasjonale?
- Hvor bevisste har dere vært mht å utvikle relasjoner til andre aktører i klyngen, hvorfor har dere sett på dette som viktig/ikke viktig
- Hvilken innflytelse har nettverket på deres avgjørelser i internasjonaliseringsprosessen nå i forhold til da dere nylig hadde startet å utvide utenlands?
- Utfordringer med å overføre (eksportere/importere) kunnskap mellom hovedkvarteret i Norge og kontorene i utlandet?

Appendix 4: Interview guide for Norwegian Subsea companies – Subsidiaries
in Houston

Interview guide (subsidiary perspective) – Houston study

Topics

A. Background information

1. President/general manager
 - 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?
 - (We assume that having an expatriate or a local/national as general manager will influence perceptions/experiences)

C. Linkages with local businesses/ organizations in Houston

9. How is 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' firms in Houston? Who? Where? How? Benefits?

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 evolution – what has been important/challenging in the various phases
15. How would you evaluate the subsidiary's performance today compared to expectations originally made by HQ before the subsidiary's establishment?
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?
- 17b. Has the background of NCE Subsea Bergen, other companies in Bergen, or the cluster as a whole been a useful tool to possess in Houston? (If the company derives from this cluster)

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)? If no, are you considering this option? If yes, how is the experience?
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 company benefit from working in a cluster with other Norwegian companies? (co-location)
22. What are the company's policy in local employees vs expats?
23. What are the future plans for growth/expansions
24. How important is the US market compared to rest of the world?
25. Was establishment in Houston strategic (closer to decision maker) or tactical (sales to Gulf of Mexico region) motivated?
26. Any other concerns you might have, not listed in this interview?

Appendix 5: Interview guide for key informants and facilitators

Interview guide – Key Informants - Facilitators

(IN, Intsok, Chamber of Commerce, Konsulatet)

Information

- The background for the research
- Explain the objectives of the research
- We will treat all information confidentially

1. Information about the key informant and the organization

- Numbers of employees, different roles and functions and the background of the employees? (education, experience)
- What kind of services do IN (others) 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

(Since we are first and foremost interested in Norwegian firms that have established own subsidiaries, we have specific questions regarding their needs, behavior and strategies when entering Houston)

- In the phase before market entry, what are the general concerns of Norwegian companies?
- How does the average SME prepare itself (strategy process, collecting market information, other) before the establishment?
 - Do the companies have a well-defined and developed plan of strategies and objectives before the entry- decision?
 - What motives are most important for Norwegian companies in the decision process pre- entry?

- Do the companies lack critical resources in the market entry process? If yes, which?

Do the companies experience any cultural, political or other barriers when entering Houston? If yes, which, why and how?

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- What are the main challenges of an SME 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

- o What is your impression of the relationship between Norwegian headquarters and subsidiaries in Houston?
- o What are the most important types of knowledge transfer between the subsidiary and the head quarter?
- o 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?
- o Does HQ take advantage of the experience and market knowledge locals possess?
- o Is there a need for improved mechanisms to strengthen future HQ-Subsidiary relations? If so, what steps do you have in mind (control, information flow, cooperation?)
- o 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? With who and to what extent? (Suppliers, facilitators, R&D etc.?)
- Is there frequent contact between Norwegian firms/subsidiaries in Houston? -Positive synergies, helping each other, information flow, business cooperation, other benefits?
-

5. Summary – closing questions

- How do US firms perceive the Norwegian oil cluster, and Norwegian firms and subsidiaries? (Image: trustworthy, competent, arrogant, flexible, competitive, other adjectives? Any benefits coming from Norway?)
- What kind of recommendations would you give to companies that consider entering the US market today? Examples of ‘best practices’
- What are the typical pitfalls Norwegian SMEs experiences?
- Any other issues not covered by our questions?