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Foreign acquisitions: The end of the Norwegian IT industry?



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Executive summary

When Norwegian IT companies are sold out of the country it often results in a debate regarding the effects it might have on the industry. There are both skeptics and those that endorse these acquisitions, but to our knowledge no research has been conducted regarding the effect it has on the acquired companies. This led us to the following research question:

What strategic and structural changes take place within Norwegian IT companies after they have been acquired by foreign investors?

An analysis of the market has been conducted which resulted in the creation of an overview of all acquisitions made in the Norwegian IT industry from 2003 to 2013. A quantitative and qualitative analysis of these acquisitions was conducted. Performance data was analyzed and compared to a control group, in order to uncover differences. This thesis also present results from multiple interviews with management in acquired companies, representatives from trade organizations, and other relevant actors.

The study showed that companies that were acquired often became a part of the overall strategy of the acquiring company, and lost control of some parts of the value chain. At the same time acquired companies were able to specialize in their core competencies such as R&D and software development.

Access to capital was found to be a problem for companies in the IT industry. Competence within sales was also found to be a challenge for companies with international ambitions. Low cost of highly educated employees, long-term relationships between companies and their employees, as well as strong ties to other industries was found to be strong attributes of the Norwegian IT industry. Few cultural differences between the acquiring and acquired company made the integration process in many cases fairly seamless compared to other industries. We are nowhere near the end of the Norwegian IT industry, and foreign acquisitions seem to be a necessary part for the future of the industry. With some minor, but important tax changes, the industry will be well positioned with a strong entrepreneurial culture that supports new and innovative IT companies.

1.0 Introduction

In the last years we have seen an increase of foreign acquisitions in the Norwegian IT industry. Big Norwegian IT companies such as Trolltech¹, Fast², and many others with them³ have been sold out of the country. What effects will this have on the acquired companies, and for the IT industry in Norway? This is one of the questions that led to this thesis.

The widespread use of acquisitions as a tool to grow, or get access to resources, has resulted in a lot of attention from scholars, and there has subsequently been conducted a wide array of studies on the subject. Research has shown that the average success rate of acquisitions is no higher than approximately 50%, based on measurements such as cumulative abnormal returns, expert informants' assessments, etc. (Schoenberg, 2006). This percentage however does not seem to curb the willingness of large actors in the Norwegian IT industry to acquire other companies. The intent of this case study is not to reexamine the success of the acquiring company, but rather to focus on the acquisition target, and whether or not they benefit from being acquired. Studies that focus on the acquired company, as opposed to the acquiring company, are not a frequent occurrence. For this reason, among others, we saw it as a good opportunity to study an area that is relatively unexplored.

Another interesting aspect of the acquisitions that have taken place is that there are two different types of investors that have acquired Norwegian companies, namely IT companies and private equity investors. There are certain expectations that follow these types of acquisitions, but in this thesis we wanted to examine what specific effects these acquisitions have had on the targeted IT company post acquisition.

¹ http://www.aftenposten.no/okonomi/innland/Nokia-sluker-norsk-IT-juvel-6734439.html#.UfjF741M_mo - 31.07.2013

² <http://www.idg.no/computerworld/article190550.ece> - 31.07.2013

³ <http://www.dagensit.no/article2158463.ece> - 31.07.2013

2.0 Research issues

2.1 Research statement

In our thesis we want to examine what happens to companies in the Norwegian IT industry when they are acquired by foreign investors. Does the type of investor (e.g. private equity players or industrial actors) influence what will happen with an acquired company? Do differences in the acquiring companies make for differences in the strategic issues behind the acquisition?

We will collect historical data dating back the last 10 years (beginning of 2003), and analyze all the foreign acquisitions done in Norway in this time period.

2.2 Research question

In the foundation of this thesis there is a problem statement, or research question. Through this paper we will answer this question and analyze the issues behind the findings.

Taking into account the above mentioned questions we have formulated a research question that will be the foundation for our thesis.

What strategic and structural changes take place within Norwegian IT companies after they have been acquired by foreign investors?

The purpose is to investigate what happened with the acquired company after being sold to a foreign investor/company. We will investigate the changes in the structure of the company and overall strategy such as changes in the location of the company, numbers of employees, changes in culture, what task or work the company does, and what products they are producing or services they are offering.

2.3 Research objectives

To be able to answer the research question we have a number of objectives we will investigate, and these are:

- What types of investors have acquired Norwegian IT companies in the last 10 years?

- What were the motives/strategies for acquisition behind the different investors?
- What has happened with the acquired companies after an acquisition?
- Compare the outcome related to acquisitions with different types of investors.
- Are there any changes in the productivity of the companies that have been acquired by a foreign investor?
- What are the implications, if any, for the Norwegian IT industry?

These objectives will help us when trying to answer our research question, and collect relevant information for our analysis.

2.4 Research method

To be able to give the best possible answer to our research question we will use a combination of quantitative and qualitative data. We will collect the necessary data and analyze the acquisitions done in the industry the last ten years. There to we will collect relevant performance measures to be able to give an in-depth analysis of the performance of the companies pre- and post-acquisition. We will further back up our quantitative findings with in-depth interviews to get a deeper understanding of what effects a foreign acquisition has on a company and on the industry as a whole.

3.0 Theoretical framework

3.1 Motives for undertaking an acquisition

To understand why acquisitions of companies happen; we first established different motives for acquisitions and which factors the acquiring companies can have as an underlying motivation for using time and resources to get control of other companies.

Berkovitch and Narayanan (1993) developed a framework with three categories of motives for acquisitions and three types of gains. The three types of motives were synergy, agency and hubris. The gains achieved through acquisitions where total-, target-, and acquirer gain. Total gain can be seen as all parts involved in an

acquisition benefiting from the acquisition. Target gain is a gain in the targeted (acquired) company, and acquirer gain is gain in the acquiring company.

For the purpose of this paper there are the three types of motives of interest. The first motive is synergy, which can be achieved through economical gain (e.g. scale economics) both for the acquiring company and for the acquired company's shareholder. This will imply that target, total and acquirer gain will be positive. Secondly, agency motives imply that the acquirer's management makes a decision based on personal benefits and not based on what is best for the company/shareholders. An example of this might be managers making the company more dependent on their skills. The last motive is the hubris motive, which is based on the management's miscalculation/lack of competence in estimating which synergies they are able to realize, which will not show any total gain.

In the following section we will go through the sub-motives of the three main categories mentioned above and describe them in detail.

3.1.1 Profit as motive

Hannan and Rhoades (1987) found that the foundation for all acquisitions is profit or profitability of the acquisition case. This can be both directly (through operational profit) or indirect (through access to market or technology that increases the profitability of the acquiring company). An acquisition case that is not expected to yield any long or short term profit (direct or indirect) will not be realized.

3.1.2 Management motivated by own interest

Personal or self-interest by the management team can be a motivating factor to acquire another company. An example is that the manager's payment correlates with the size of the company. This can, according to Wright et. al (2002), result in managers acquiring companies based on their own interest to get a higher personal gain instead of increasing the wealth of the owners of the company.

3.1.3 Risk reduction and diversification

Using acquisitions for risk reduction and diversification is a motive often used by family-owned companies since they often have a low degree of diversification, caused by being heavily financially represented in their own company. By

acquiring other companies their personal portfolio will become more diversified, and less risky (Scherer and Ross, 1990. pp 162).

3.1.4 Operational cost synergy

Motives for acquiring a company can be based on operational synergies as economics of scale (Chatterjee, 1986). Such operational cost synergies are typically distribution and administration (marketing, human resources, accounting).

3.1.5 Market and infrastructure access

Cloudt et. al (2005) mention that access to market and infrastructure in specific marketplaces can be a reason for an acquisition. Hereby a company can get access to a new market and use already existing sales channels and infrastructure. Acquiring a company in the target market can often be easier and faster than starting greenfield operations (Harzing, 2002).

3.1.6 Innovation motivated

As innovation often happens in smaller companies, the buyers, here referred to as large companies, have motives for acquiring smaller companies based on technical reasons and learning. These acquisitions are resource based or knowledge based, and will be a stage in integrating the resources or knowledge from a smaller company into the acquiring company (Barney, 1986)

Another issue that can be important is access to key personnel in another company that has precious know-how that the acquiring company wants. Here the importance of keeping central employees after the acquisition will be a critical factor in the success of the acquisition (Horwitz et al., 2002).

3.1.7 Intellectual property

In the last decade the focus on intellectual property and patents has evolved rapidly (Rivette and Kline, 1999). This has made companies more focused on achieving advantages by obtaining intellectual property.

To get access to intellectual property, companies will be motivated to buy other companies that hold specific rights. Hoberg and Philips (2010) found that companies with intellectual property are more likely to be targeted for a merger or acquisition. This implies that there are benefits to achieve through acquiring important intellectual property rights (Hoberg and Philips, 2010).

3.1.8 Financial synergies

Financial synergies can motivate an acquisition because e.g. the buyer has good access to less expensive capital (Chatterjee, 1986). Another profitable motivation can come from the acquiring company seeing a potential to make resources usage in the target more efficient (e.g. managerial skills) (Hitt et al. 1996). By improving resource efficiency growth in profit is possible to achieve.

Financial synergies are often a strong motive for acquisitions where operational synergies are not a motive, which is often the case in unrelated company acquisitions. Access to cheap capital is a factor that increases the motive for financial synergies. Since larger companies often have easier and cheaper access to capital it is evident that acquisitions with this kind of motive are done by larger companies that acquire smaller ones (Chatterjee, 1986).

3.1.9 Taxation

Acquisitions can also be motivated by taxation. Financial professionals used acquisitions to protect profits from taxation and as a possibility to cheaply keep investments capital (Bastien, 1987).

Until 2013 Norway was one of the few countries left that didn't have tax regulations that prevented multinational companies to transfer profit from Norway to another country with lower tax. The Norwegian government has made it harder to get deductions for interest expenses in Norway, which again makes it harder for companies to avoid income tax⁴. Without this regulation foreign companies could acquire companies in Norway based on the motive of getting access to a rich market and avoid tax in Norway, thereby boosting their profit since they would have an advantage against Norwegian companies.

The government in Norway has also announced a cut in the tax for companies from 28% to 27%. This reduction will be offset by an increase for the offshore industry and foreign companies⁵, but when looking at the Norwegian IT industry in isolation this is a tax reduction. Norway has high company tax compared to e.g. Sweden, and a reduction of the tax is said to be progress in making Norwegian companies more competitive in the global market⁶.

⁴ <http://www.nrk.no/okonomi/slik-skal-skattehullene-tettes-1.10978080> - 01.07.2013

⁵ <http://www.na24.no/article3620396.ece> - 01.07.2013

⁶ http://www.aftenposten.no/okonomi/Skattesatsene-skal-kuttet_-_varsler-Stoltenberg-7201603.html#UdFHbfIM_mo - 01.07.2013

3.1.10 Competition

An acquisition can be based on the target company's position in a specific market. Through the acquisition the acquiring company can develop a more efficient cost model and with that have a competitive advantage against the rival companies. And generate more power in specific markets (Chatterjee, 1986). Market coverage is, according to Capron (1999), one of the most important factors for the performance of the acquisition.

3.1.11 Vertical integration

Maddigan and Zaima (1985) showed that vertical integration often increases the performance of a company. This gives companies possible advantages lower material prices, reliable suppliers, and more streamlined sales channels (Williamson, 1971). If the companies have an opportunity to create a monopoly situation after an acquisition they have the possibility to create a situation with double marginalization, where they can evaluate the optimal amount and price of their goods sold to generate the optimal profit (Pepall et. al., 2008, pp 430-439).

3.2 Acquisition motives

In this section we will look at the above mentioned motives for acquisitions in connection with the different types of acquirers in the market. We will also take a look at the reasons why foreign investors acquire abroad.

3.2.1 Why do foreign companies look cross-border when acquiring?

Even though this question might simply be answered by looking at the patent pool of the acquired company, the market position it has, or simply the performance, there are other factors that contribute to explaining the attractiveness of foreign acquisitions. Shan and Song (1997) proposed companies acquiring foreign companies was motivated by country-specific and consequently company-specific technological advantages. This implies that companies will be drawn to acquire companies located in countries with strong clusters within the relevant industry. This will most likely be an important part of the decision for companies operating in a rapidly changing industry, such as the IT-industry.

Internationalization theory proposes that international acquisitions might be motivated by the characteristics of the acquiring company's assets. The theory states that when the assets of the company include factors such as;

- (1) technological know-how
- (2) marketing ability and related consumer goodwill
- (3) effective and dedicated management

It will be more likely to experience an incline in share prices when acquiring internationally, which will lead them to being more inclined to look outside their borders for acquisition targets (Morck and Yeung, 1992).

Concerning venture companies, which will most likely have different motives than related companies, the motivation for looking abroad is somewhat different. Venture companies are driven towards international acquisitions through institutional factors, industry factors, and organizational factors (Brush and Vanderwerf, 1992). Brush and Vanderwerf (1992) concludes that organizational learning of new technologies is an important motivation for acquiring abroad, in order for the venture companies to be able to redeploy these technologies in subsequent acquisitions.

3.2.2 The motivation of Private Equity funds

The main motive for a private equity fund to invest in a company is the financial motive to obtain return on their investments (Thomsen and Pedersen, 2000; Kaplan and Schoar, 2005). But if we're looking at the different types of private equity funds we see that some types, e.g. turn-around capital or management buy-out capital funds, have an intention of going actively into the operation of the acquired company to increase the performance. Here they are no longer "just" investors but managing owners. They observe a potential in the company to outperform the existing operation if they are managed correctly (Demaria, 2010, pp 87,88, 95-96,99).

Grimpe and Hussinger (2007) mention that private equity acquisitions might be motivated by patents or intellectual property, if the patents are of high value and have some blocking characteristics against competing solutions. PE funds can also be motivated by opportunities such as a fragmented industries that could increase efficiency through consolidation (Berger and Udell, 2002; Modell, 2012).

3.2.3 Motivation behind corporate technology acquisition

Resource-based acquisition based on a motive to acquire an innovation or technology is not uncommon. Technology acquisitions are often undertaken if companies see an opportunity to improve a product with the help or advantage of an innovation developed by another company (Ahuja and Katila, 2001). Sorescu et al. (2007) found evidence companies with strong product capital (e.g. companies with good development and support assets) being more careful and selective in their acquisitions, since they are looking for companies who can give them an innovative edge and contribute to development of new products.

If a corporation sees a possibility to develop a better product through making use of another company's intellectual property or patents, and create a competitive advantage, the acquirer can be motivated to acquire companies with this specific intellectual property (Grimpe and Hussinger, 2007).

3.2.4 Motives behind corporate consolidation acquisitions

The most common corporate acquisitions are horizontal acquisitions of companies in the same industry (Grimpe and Hussinger, 2007). There is a wide diversity of reasons why corporate M&A's are conducted. The most common motive is linked to economies of scale. Seth (1990) divided the motives for horizontal acquisitions into two main classes; value-creating theories and managerial theories. Value-creating theories evaluate the possibility of increasing performance and creating firm value. Examples of this kind of value creation can be everything from more effective production through centralization, or more effective R&D by pooling small R&D units together and thereby creating a better environment for developing new products. Additionally companies may also be motivated by marketing, distribution advantages, and access to human resources with a specific knowledge (Scherer and Ross, 1990. pp 163-167). Capron and Hülland (1999) found that companies tend to integrate the acquiring company with the acquirer. This means that the target company's resources become merged into the system of the acquirer and distributed through the acquiring company's distribution channels.

The second class of horizontal acquisitions mentioned by Seth (1990) is the managerial theories where the managers act on behalf of their own motives, through i.e. increasing their importance for the owners.

Adapting to a changing and new business environment is also an important factor behind acquisitions. Adapting or re-constructing divisions such as sales and marketing through the acquisition of another company can give the company an opportunity to create an efficient marketing infrastructure more quickly than on their own (Capron and Hulland, 1999).

Also the motive to eliminate competition has been an important motive for M&A's, but as this has been more difficult through stricter regulations by the authorities it has decreased dramatically (Scherer and Ross, 1990. pp 160).

As mentioned in 3.1.10, vertical integration can increase the performance and streamline the product value chain. This can motivate companies to acquire both above or below them in the value chain (Maddigan, Zaima, 1985 and Williamson, 1971).

3.3 Structure of the acquired company post-acquisition

The factors mentioned below are factors we have found to determine the structure of the company after the acquisition. Although researchers have found some factors that affect the structure of the acquired companies post-acquisition, there seem to be very little research regarding the specific changes in the targeted company.

3.3.1 Company similarities

Cloodt et. al (2005) describe the difficulties of integration companies when they have a low degree of similarities to each other. There is a higher possibility for failure when integrating different companies than in integration of similar companies. It has been shown that innovation in the acquired company will decrease after the integration. A low degree of integration would be preferable when acquiring a different company.

3.3.2 Cultural differences in cross-border acquisitions

Morosini et al. (1998) found that cultural differences had a positive impact on performance of acquisitions. This was based on the possibility to learn and adapt to cultural differences and routines, among other issues. Datta (1991) suggested that a high degree of integration will most likely wipe out these advantages, since the acquiring company often implements new routines and procedures in the

target. A low degree of integration, which will preserve much of the pre-acquisition structure, can enable the company to exploit these cultural advantages.

3.3.3 Stand-alone or component technology acquisitions

The amount of changes in the acquired company and structural integration into the acquiring company is also effected by the nature of the technology acquired. The different types of technology acquisitions referred to here is; stand-alone technology and component technology. Puranam, Singh, and Chaudhuri (2009) found that the acquisition of component technology, which entails a higher degree of interdependence, tends to result in a higher level of structural integration. Conversely, the acquisition of stand-alone technology, which tends to mean somewhat lower interdependence, will result in a lower degree of structural integration.

3.3.4 Development stage of the acquired company

The stage of development in the target company will have an impact on the post-acquisition innovation. Companies in early stages who have developed products but never launched them to the market will struggle more with innovation after an integration process, compared to companies who have innovated *and* launched products (Puranam et al. 2006). This implies that acquisitions of companies in early stages will benefit more from a low degree of integration, compared to companies in later development stages.

3.3.5 Specialization

Sharing of resources and economy of scale can make the acquired company more specialized and focus on some specific tasks instead of all parts of a value chain (Nayyar, 1993). By letting the acquired company focus on a specific task (e.g. innovation) the larger acquiring company can use its existing distribution channel to get the product to the market. This will streamline the process and take advantage of synergies and economies of scale.

In non-technological acquisitions investors will in some situations reorganize the acquired company in an effort to make them focus more on their core activities (Kaplan and Strömber, 2008). This reorganization will make the acquired company specialized and rather outsource the activities that is not a part of the company's core competencies.

3.3.6 Downsizing and the changes for employees

Downsizing is a tool regularly used by acquiring companies for a multitude of reasons. In horizontal acquisitions, where the companies are very similar, a reduction in the workforce is often necessary to reduce redundancies (Conyon et. al. 2002). Amess, Girma, and Wright (2008) found that acquisitions made by industry players resulted in a “[...] 16% and 22% reduction in workforce in the first two years after the acquisition”. Employees leaving due to changes such as lowered incentives (small companies often offer high-powered incentives to counteract the increased risk), and lowered autonomy (Puranam, Singh, and Chaudhuri, 2009) is a case of unwanted reduction in the number of employees. In the case that the founder of the company exits after being acquired, it may lead to the loss of customers, as well as tacit knowledge (Feys and Manigart, 2010) If the acquirer’s strategy is to acquire intellectual property there is a possibility for discontinuation of the acquired company, since the only goal is to get access to some specific resources (Feys and Manigart, 2010; Schweizer, 2005)

The acquisition might also entail changes in the wages of the employees. Amess, Girma, and Wright (2008) found that industrial acquisitions resulted in a wage increase when the acquisition was made within the same industry. Financial acquisitions, on the other hand, did not have any effect on the wages of the employees in the acquired company. The same article also found the increase in wages to be a result of termination of some of the employees, which enabled the managers to reduce cost and pay the remaining employees more.

3.4 Performance of the acquired company post acquisition

According to most papers and articles it is the acquiring company which is analyzed for changes in performance post acquisition (Datta, Narayanan, and Pinches, 1992), mostly due to the acquired company being integrated into the acquirer.

There are many different ways of measuring performance in companies, both quantitative, such as stock market returns (Datta and Puia 1995), or profitability (Hitt, et. al. 1998), and qualitative evaluations through interviews/surveys with managers (Brock, 2005). Schoenberg (2006) tested the comparability and correlation between four such common measures of performance (managers’

assessment, divestment data, expert informants' assessment, and cumulative abnormal returns). He found that all of the measures indicated an average acquisition success rate between 44%-56%, with a small positive correlation between managers' assessment and expert informants' assessment, and no significant correlation between the other metrics he tested. Schoenberg (2006) also concluded that you will get the most accurate measurement of acquisition performance through using different measurement techniques.

In the case of private equity buyouts the performance of the acquired company is fairly easy to measure, and has been reported to be above the market average in most situations (Phan and Hill, 1995). Since private equity investments are focused on short to medium term ROI for the investing company, and this return is directly tied to the performance of the acquired company, it is evident that performance will be of high importance for PE companies. Private equity investors focus on improving the existing company, without making too large changes to the company structure (Kaplan and Strömber, 2008). This enables the changes in performance to be observed without issue, since the general structure of the company remains intact.

Performance changes in technology acquisitions (intellectual property acquisitions) are somewhat harder to observe and measure. As mentioned in chapter 3.2.3, the main motivation for acquiring technology is the desire to obtain and transfer knowledge from the acquired company to the acquiring company (Grant, 1996). In such acquisitions the acquired company will normally be integrated into the acquiring company, which again means that you have to measure the performance of the acquiring company before and after the integration process to see how successful the acquisition was. Studies have shown that that the integration of acquired companies may ultimately lead to destruction of the integrated company's knowledge based resources (Graebner, 2004).

4.0 Methodology

The methodology can be seen as the framework or the guideline for the process of this thesis. (Yin, 2003, 3-4). We will describe the methodology used and discuss the restrictions that will occur as a result of using these methods. Our methodology is based on the book *Business Research Methods* by Bryman and

Bell. The purpose of the methodology is to structure the data collection, as well as the data analysis, with the aim of finding an answer to the research question that this thesis is based on.

4.1 The research question as a basis for methodology

The subject we are analyzing in this thesis has, as far as we could find, not been studied previously, meaning that our work in this field will be pioneer work. This entails that all the information we need to gather has to be gathered from primary sources, or secondary sources that had another purpose than ours.

To answer our research question we first need to list all the acquisitions done in the IT industry by foreign companies, and then collect all the needed quantitative information. The collected information will be used to figure out which companies might be relevant to interview in search for qualitative data. In order for us to establish a control group we will make a similar list of all Norwegian acquisitions done in the same period, which will help us in distinguishing what factors are specific for international acquisitions compared to Norwegian acquisitions.

4.2 Choice of methodology

We will use a combination of both qualitative data and quantitative data in this thesis. Since there is limited previous research in this field we will use a high degree of primary data collection through semi-structured interviews with relevant people in the respective companies and people who have extensive knowledge of the IT industry in Norway. Dess and Robinson (1984) stated that objective performance measures should not be substituted with subjective, if it is possible to access reliable objective data.

4.3 Quantitative data collection

Trough interviewing relevant people we will get a better understanding of the different acquisition cases, although it can be difficult to compare and establish a high degree of validity and reliability based on this information. (Bryman and Bell, 2011, pp.277-280). Quantitative data will be used to measure the performance and development of the company post acquisition. We will analyze

the performance development for each individual acquisition case and calculate if companies are performing better or worse after acquisitions. We will also compare foreign acquisitions against national acquisitions, and analyze if there are differences in performance between the two.

We have limited the industry to companies in the information technology industry, while the communication, telecom and media industries have been excluded from our thesis.

We have defined the IT industry as the companies registered under the following NACE-codes:

| |
|--|
| NACE codes: |
| <u>Technology sector</u> |
| 26.1: Production of electronic components and PCB |
| 26.2: Production of PC`s and additional equipment |
| 58.2: Program development |
| 62.010: Programming |
| <u>Service</u> |
| 46.5: Wholesale of IT and communication equipment |
| 62: Service related to IT (excluded 62.01 Programming) |
| 63: Information services |
| 77.330 Rental of computer equipment |

Table 4.1

4.3.1 Data collection: Norwegian companies acquired by foreign investors

Due to the limited amount of research our first step was to create an overview of which companies have been acquired in Norway in the last ten years by foreign investors. We did this by primarily using three kind of secondary sources. First (1) we used publicly accessible data published by Konkurransetilsynet (The Norwegian Competition Authority⁷) where we had to manually filter out the relevant acquisitions for our study. To complement this list from the Competition Authority we (2) used information gathered on the Internet by using some select

⁷ <http://www.konkurransetilsynet.no/en/> - 25.01.2013

keywords (see table below), in addition to (3) articles published by Norwegian IT trade magazines about acquisitions conducted in Norway.

The following sources are used:

| Source | Keywords |
|--|---|
| Magazine | |
| www.idg.no | fusjon og oppkjøp |
| Dagens næringsliv | http://www.dagensit.no/article2158463.ece |
| Wikipedia | |
| www.wikipedia.org | List of acquisitions by... Microsoft, Dell, Cisco, IBM, Google, Yahoo, Facebook, Symantec, Blackberry, Apple, Adobe System and Avandia |
| Google | |
| www.google.com | Using phrases such as: "Utenlandsk oppkjøp i Norsk IT bransje", "foreign acquisitions in the Norwegian IT industry", "liste oppkjøp norsk it bransje", "oversikt over oppkjøp Norsk IT bransje", "IT bedrift solgt til...", "IT + solgt + utland" |
| Konkurransetilsynet | |
| Registered acquisitions | All acquisitions done in Norway in the period 01.01.2007 - 31.12.12 within their categorization for IT and ICT industry |

Table 4.2

After this initial data collection we discussed our findings with Paul Chaffey (Director of Abelia) and Espen Andersen (Ass. Professor at BI Oslo). They were able to complement with some additional data and sources.

We expanded the list of relevant acquisitions by adding secondary data such as revenue, operational profit, total wages cost, and numbers of employees or FTE (Full-time employment). These numbers were collected in the databases of Proff Forvalt.

4.3.2 Norwegian companies acquired by Norwegian investors

In order for us to increase the validity of our analysis on performance of acquisitions made by foreign investors we benchmarked it up against national acquisitions in Norway to uncover whether there are differences.

First we conducted an overview of the Norwegian acquisitions done in the period 2003-2013, and then collected data such as; revenues, wages cost, operational profit and numbers of employees/FTE's. Afterwards we compared our findings within international acquisitions. To create an overview of the national acquisitions we will use the same approach as for the international acquisitions as described above. The sources used are as follow:

| Source | Keywords |
|--|---|
| Magazine | |
| www.idg.no | fusjon og oppkjøp |
| Dagens næringsliv | http://www.dagensit.no/article2158463.ece |
| Google | |
| www.google.com | Using phrases such as: "Oppkjøp i Norsk IT bransje", "Oversikt over oppkjøp i Norsk IT bransje", "IT bransjen, har blitt kjøpt" |
| Konkurransetilsynet | |
| Registered acquisitions | All acquisitions done in Norway in the period 01.01.2007 - 31.12.12 within their categorization for IT and ICT industry |

Table 4.3

4.3.3 The total marked

To achieve a more thorough understanding of the total IT market we created an overview of the total IT industry as we define it (definition in table 4.1). Again we used data gathered from Proff Forvalt. We made an overview of all active companies with revenue greater than 0 NOK in one or more of the years in the period 2009-2011. We sampled data for revenue, wage cost, operational profit and numbers of employees.

4.3.4 Our definition of an acquisition

- An acquisition of more than 50% of the Norwegian company.
- Acquired companies, registered in Norway but owned by foreign investors, will not be included in the list.

- When Norwegian based companies owned by foreigners acquires another Norwegian company, we see this as an international acquisition.
- If the nationality is unclear, the location of the headquarter will be the deciding factor.

4.4 Qualitative data collection

In order to get information about a topic like acquisitions, it is not sufficient to only use quantitative data. There are many factors in acquisitions that are difficult, if not impossible, to quantify, such as knowledge transfer, non-economical synergies, etc. Additionally, as mentioned in 4.2, lack of access to information is a valid reason to use subjective data, as opposed to objective (Dess and Robinson, 1948). Authors such as Bryman and Bell (2011, 402) and Harfield and Hamilton (1997) have suggested that qualitative research within fields such as strategy provides an important complement to the statistical analysis that quantitative analysis are known for. When measuring performance in acquisitions it is recommended to use both quantitative and qualitative data in order to insure the most accurate results (see 3.4 for more information).

In order for us to collect information regarding changes occurring in the acquired companies we used semi-structured interviews. In addition to providing us with information about the changes that have happened in these companies, we were also able to obtain more extensive information about the industry in general, which helped us when we made concluding remarks about what effect these acquisitions have on the industry as a whole. The information we collected from the interviews also helped us understanding results from our quantitative analysis.

4.4.1 Preparation

All the interviews were done after we collected data to the quantitative part of our paper. This gave us some insight into how the company was doing before and after the acquisition. In addition we have researched the company in order to understand what they do, and how they operate. Collecting this information prior to the interview might have made the interviewees see us as more professional (Easterby-Smith, Thorp, and Jackson, 2008), which made it easier for us to pick up interesting information.

The interviews took place at the interviewees company building, in order to minimize time spent, which made it more likely that they accepted the interview. In cases where we were unable to travel to the location of the interviewee, we used video conference tools such as Skype.

In preparation for the interviews we made an interview guide that helped us to focus on the questions relevant for our research question. Since we conducted semi-structured interviews the guide was only used as a starting point, and deviations were accepted. The interviews were held in Norwegian, since all of the interviewees are Norwegian, and then translated to English for the purpose of this paper.

4.4.2 Interview subjects

When choosing which companies to contact we decided to approach as many companies as possible, realizing that we will not be able to get interviews with all the companies approached. We also prioritized some of the largest acquisitions, since they have a bigger impact on the industry as a whole. Contact with some of the companies has also been established through personal connections, either directly or indirectly.

Due to the nature of this paper, and the information we are collecting, our interviews with industry players were anonymous. This would possibly encourage some of the interviewees to speak more freely, and in some cases we might not even have gotten interviews regarding an acquisition if not for the fact that they were anonymous.

Interview subjects – Industry players:

- CEO of a Norwegian IT company with approximately 160 employees, based in Norway and US.
- Head of information in a Technology company developing software.
- CTO in a Norwegian subsidiary of a US based IT company.
- A manager in a technology company bought by a private equity company.
- CEO in a Norwegian programming company, bought by a Swedish IT company.

- Former CEO in a previous Norwegian ERP-system developer.
- CEO in a Norwegian ERP-system company, bought by a Danish company.
- Previous CEO in a former Norwegian technology company.
- Consultant at an IT consultant company.

Interview subjects – Trade associations and other relevant actors:

- Paul Chaffey, CEO Abelia Norge
- Dag Johansen, Professor in informatics at Universitetet i Tromsø (University of Tromsø).
- Fredrik Syversen, Director of business development at IKT Norge.

4.4.3 Interview guide explained

We have developed two sets of interview guides. These guides were the basis for our interviews with industry players, people in trade associations and professors in the industry. In this section we will explain the interview guides and how we used them in the interviews.

Industry players

All of these questions were asked in Norwegian since the interviewees were all Norwegian.

1. *Why was the company sold, and what were the primary motives for selling the company?*

This question was asked to obtain an understanding of what motivated the companies to sell. Even though this question might be best suited for an owner rather than a CEO, we found that most of the CEOs had a good understanding of the owner's motives, and in some instances the CEOs themselves were the owners of the companies.

2. *What were the acquirers' motives for buying the company?*

This question was asked to get a better understanding of why foreign companies wanted to acquire Norwegian IT companies, in order for us to get more

information about the implications for the industry. We did not expect all of the interviewees to know the answer to this question, but some seemed to have a very good understanding of the motives.

3. *What structural changes have happened in the acquired company after the acquisition was finalized?*

This question is one of our research objectives, and was asked to get a broad understanding of some possible changes before we asked more specifically directed at different types of changes, and different parts of the company. Alternatives presented: Changes in the administration, leadership positions, number of employees, location, and strategy.

4. *Have there been any transfer of resources either to or from the acquired company after the acquisition?*

Asked as a follow up question to the previous question, in order to get a better understanding of the contribution of the acquired company to the acquiring company, and vice-versa. This question was also asked to uncover differences between technology acquisitions, private equity (PE) acquisitions, and consolidation acquisitions. Alternatives presented: Transfer of technology, competence, and funds.

5. *Was there any change in the number of employees after the acquisition, and/or were there any changes in turnover of employees after the acquisition?*

This question was asked to find out whether or not it is usual for the acquiring companies to fire a large portion of the staff after the acquisition, or alternatively invest in more new employees. The reasoning behind the question is that there seems to be a common conception that once a company is sold it is normal for acquirers to “trim down” the staff in order to realize synergies.

6. *Have there been changes in the management team? Have any external managers been hired, or have any managers from the management team of*

the acquiring company taken a management role in the acquired company?

This question is asked to determine whether or not it is normal for the acquiring company to keep or get rid of the managers that was employed prior to the acquisition. If the answer was yes, we asked if they replaced these managers with external people or people from the acquiring company (to increase control).

7. *Have there been any changes in the focus or investments in R&D after the acquisition?*

The reasoning behind this question is that the acquiring company, particularly in the case of PE acquisitions, might be tempted to reduce the long-term investments so that the market capitalization is increased in a short-term perspective.

8. *To what extent have the culture in the acquired company changed after the acquisition?*

This question was asked to uncover how much the acquiring company affects the acquired company. In some cases the acquisition might not result in any integration between the two companies at all. In other cases the acquired company might be dissolved and its employees scattered throughout the acquiring company. Alternatives presented: Have the acquired company adopted the culture of the parent company? Have the acquired company been integrated in the acquiring company? Have there been social events, or something similar, in order for the two companies to get to know each other better?

9. *If the culture of the acquired company has changed, is this viewed as a change for the better, or for the worse?*

In some cases the culture of the acquiring company is viewed as better than the culture of the target company and a change is welcomed by the management. In other cases the complete opposite might be true. We asked this question to find out whether or how the culture changed, and how big impact the cultural factor has on the acquisitions we looked at.

10. How has the customers reacted to the sale of your company to a foreign company?

This question was asked to find out whether or not the customers react in any significant way to the sale of the company. Additionally we want to find out if customers react in a different way when there is a foreign acquirer as opposed to an acquirer from the same country.

11. Have some parts, or all of the company, been moved abroad?

This question is based around one of our research objects relating to what effect foreign acquisitions have on the industry. We also wish to uncover if there is a difference related to what type of acquisition this was, such as PE acquisitions or market share acquisitions.

12. Is the acquisition viewed as successful seen from the perspective of the acquired company, and from the perspective of the acquiring company?

Even though we are aware of the success bias that might affect this answer, based on the fact that we ask high ranking managers in the acquired company, we asked this question to get a general understanding of the success rate of foreign acquisitions. Follow up question asked in many cases: What criterion was used to measure the success of the acquisition?

13. What is seen as the most desired change that has happened as a direct result of the acquisition?

This question was asked since managers usually mention many positive outcomes of being acquired, some of which might not be very important to them, and this question will help them to prioritize and reflect about what they are most satisfied with.

14. What is seen as the most unwanted/negative outcome of the acquisition?

This was asked to get the manager to reflect about and prioritize the negative aspects of the acquisition

15. Was the outcome of the acquisition in accordance with the pre-acquisition motives?

Since success factors in acquisitions is a theme where scholars differ a lot (see chapter 3.4), we included this question to pursue this subject a bit further. Managers might view an acquisition as successful, but this success might be based on other factors than the factors that they initially planned to use when measuring the success.

16. Based on your experience, how do you think foreign acquisitions of Norwegian IT companies affect the industry as a whole?

This question was asked in order for us to get insight into how the participants in the industry view foreign acquisitions. Since the interviewees have much more experience with the industry than we do, we expect that they have some opinions that we have not previously considered regarding the question of how foreign acquisitions affect the industry. We follow this question up with questions such as “is this good or bad for the industry?”, or “is it generally sought after to be acquired by a foreign company?”

Trade organizations and other relevant actors

The interview guide designed for use when interviewing people from trade organizations is partly based on our research objectives and partly based on the information we have gathered in the interviews with industry players and our subsequent analysis of these interviews.

1. What are the advantages of being acquired by a foreign actor, if any?

This question was simply designed to see whether or not the interviewee sees any differences in results when a company is bought by a foreign company, compared to when they are acquired by a domestic one. It is designed to get the

interviewee's first impression of foreign acquisition, before we ask more specific questions.

2. *What are the disadvantages of being acquired by a foreign company, if any?*

This is the same open question as the previous, but we were looking for distinctions.

3. *What are the most common motives behind foreign acquisitions when they acquire a Norwegian company?*

The reasoning behind this question was that we had some of the interviewees from the other interview sessions comment on foreign acquirers not acquiring to get market access, since the Norwegian market was too small for large international companies. We wanted to see if the interviewees from trade organizations had the same impression.

4. *What are the positive and negative sides of being acquired by a private equity company?*

Since some of the largest acquisitions in the Norwegian IT industry has been PE based, we wanted to see if the trade organizations had any opinions on such companies. Since PE companies have different motives and post-acquisition behavior, we expected them to have an opinion regarding the outcome for the acquired company.

5. *How do you evaluate the sales and marketing competence in Norwegian IT companies in general?*

This question was motivated by responses we got from our previous interviews, where the interviewees said that Norwegian IT companies have difficulties when trying to go from a small company with an idea, to a bigger company with a sound customer base. Some of the interviewees mentioned that a reason for this might be the lack of good sales and marketing competence.

6. *How do you rate the work that organizations such as Innovation Norway does for the industry?*

Since we have observed, both through numbers and from the comments from our interviews, that there are a lot of small companies and few bigger ones in Norway, we wanted to get input from the trade organizations regarding the support small companies get from various organizations.

7. *We observe that there are many small entrepreneurial companies in Norway. Are there any specific reasons for this? Why do you think this is one of the strong characteristics of the industry?*

This question was designed to dig deeper into the fact that there are a large amount of small start-ups in Norway, and to uncover why.

8. *What do you think of the two new seed funds that are being established in Norway in 2014?*

We were told in an interview that two new seed funds will be established in 2014. We wanted to ask the trade organizations if they thought this was the correct way to go when trying to help small start-up companies.

9. *What other organizations/funds can help Norwegian companies with access to capital?*

We previously knew about other funds such as venture capital and angel funds, but we wanted to ask the trade organization this question to learn what types of organizations/funds are actually present in the Norwegian market to a noticeable degree.

10. *What do you think the biggest challenges for the Norwegian IT industry are?*

Here we wanted to find out if the trade organizations had the same perceptions as the industry players on this matter. Since trade organizations have a somewhat different perspective than the companies we expected that they might mention some other challenges that we had not observed previously.

11. Will any of these challenges be alleviated by being sold to a foreign company?

This question was designed to make the interviewees reflect upon what international acquirers brought to the industry in terms of help. Possible answers we expected were capital access, S&M support, and access to the distribution channels of the acquiring company.

12. How do you think foreign acquisitions affect the Norwegian IT industry, and what consequences do you think they have?

Here we wanted the interviewees to think of the acquisitions in a larger perspective, not only focusing on single transactions. We also wanted the interviewee to approach the question with a more long-term oriented mindset.

13. What has to be done in order for the industry to be raised to/kept at a high international level in the worldwide IT industry?

Since we had asked the interviewee about challenges for the industry and the companies in it, we wanted to get their input on what was needed to improve the industry itself, as well as the conditions for the companies in the industry. We expected the trade organization to have other opinions than the actors themselves, since the trade organizations might have a broader view on the industry.

4.5 Reliability and validity

4.5.1 Reliability

Reliability is the degree to which a measure of a concept is stable, or, rephrased, if a similar study would result in the same conclusions and findings as this one (Bryman and Bell, 2011).

Generally speaking the reliability of our findings should be high, since we have confirmed that all of the acquisitions on our list is correct in the database Proff Forvalt. On the other hand the reliability of the list's completeness might be a point of discussion, due to the possibility of overlooked cases. The Competition Authority has certain criterion for requiring companies to notify them before an acquisition:

- Both companies need to have revenue in Norway, in total over 50 million NOK.
- The revenue of the acquired company must exceed 2 Million.

These regulations will have an effect on the completeness of the list from the Competition Authority. Additionally there are most likely some cases that have not been reported to the Competition Authority

The internal routines regarding archiving in the Competition Authority's database before 2007 made it impossible for them to extract an overview over relevant cases for this paper before 2007.

(Source: Hanneke Brouns, konkurransetilsynet)

4.5.2 Validity

Validity is concerned with whether or not one is measuring the concept that is being researched (Bryman and Bell, 2011). More plainly put, it measures to what degree the findings are answering the research question which is the basis for this paper.

The qualitative part of our research will most likely lead to relevant information for our research question since the questions were designed with the research objectives in mind. A concern is whether the interviewees answer honestly or not, due to the sensitivity of the subjects. To address this issue we have made the

interviews anonymous, and informed about their right to read through, and change their quotes if necessary.

In order to ensure validity in our quantitative data, we have conducted a thorough search of relevant literature to understand what performance parameters are most commonly used in acquisitions. By using NACE-codes and a clear definition of the IT industry, we ensured that the data was valid for our research question.

5.0 Quantitative research results

In this section we will present a step by step explanation of how we worked, and explain the process used when we collected and analyzed the data in our quantitative research. You can find the list we have made in appendix 1 and 2. We will explain the list, collected data, our calculations, and the sample size we have used in our calculations.

5.1 *Explanation of the collected data for foreign acquisitions and national acquisitions*

- All the information about revenue, wages cost, operational profit and employees/FTE are from Proff Forvalt's database⁸.
- Year of acquisition is always the year when the acquisition took place, regardless of whether or not there has been a merger.
- All numbers are KPI⁹ adjusted to the year of acquisition for each acquisition case, and calculation of sales growth and human capital value added growth are adjusted with the average market growth in sales (8% annual growth) and HCVA (2% annual growth)¹⁰. By doing this the results of the calculations will give us a benchmarking compared to the market.
- *Sales*: Calculations done are based on the average sales before and after the year of acquisition.
 - *If the acquired company merged with the acquirer*: The calculation of the average sales pre-acquisition is based on the average total

⁸ www.proff.no - 05.04.2013

⁹ For more information see appendix 3

¹⁰ Calculations and source will be given upon request

sales for both companies, dated back 2 years from acquisition year. The post-acquisition sales are then based on the average of the merged company up to 3 years after acquisition, depending on the time of acquisition.

- *If the company has not merged:* The average sales calculation for the acquired company was first calculated based on the two years before the year of acquisition and then separately for the three following years post-acquisition.
- *Comparison:* To compare the performance of the company's sales before and after an acquisition we calculated whether the company's sales growth outperformed the average growth in the Norwegian IT industry.
- *Wage costs:* The wage cost consists of the company's expenses for wages and pension.
- *Human capital value added (HCVA):* The calculation of Human capital value added was calculated as follows: $\text{Operational profit} + \text{wages costs} / \text{numbers of employees}$. Average HCVA was calculated for the 2 years pre acquisition and up to 3 years post acquisition.
 - *If the acquired company was merged with the acquirer:* The calculation for the HCVA was based on the average of both companies in total pre acquisition and an average of the merged company post acquisition.
 - *If the company has not merged:* The pre-acquisition average was compared with the post-acquisition average
- Where the table lacked numbers, the calculations are based on the numbers available, or not computed if there were not enough numbers to calculate any performance measurements.

5.2 Calculations

To measure the performance of the acquisition cases we will use the measurement HCVA and sales growth. After analyzing the performance of each acquisition case we will compare the collected data from foreign acquisitions with data from national acquisitions (see appendix 4, 5, 6, and 7 for calculations).

5.3 Sample size

First we had to check the sample size of our findings. Since our analysis was based on data from 2 years before and 3 years after the acquisition, it was not possible to collect all the data for the latest acquisitions. We had to limit our data to companies where the acquisition was conducted in 2010 or earlier. A problem also appeared regarding the availability of data from companies which were involved in an acquisition earlier than 2010. Proff Forvalt was missing data for some relevant companies, which forced us to exclude these companies from our calculations. After taking these issues into account we could collect data for the following number of companies and calculated their sample size and significance levels regarding generalizability of our findings:

International acquisition of Norwegian companies

Added value: 21 of 47 acquisition cases

95% confidence level and a confidence interval of 16%

Sales growth: 31 of 47 acquisition cases

95% confidence level and a confidence interval of 11%

National acquisitions (control group)

Added value: 22 of 68 acquisition cases

95% confidence level and a confidence interval of 17.5%

Sales growth: 21 of 68 acquisition cases

95% confidence level and a confidence interval of 18%

(Calculation based on a 95% confidence level and a 50% population percentages)¹¹

Through our calculations we found that the confidence interval on all samples are fairly high, which makes the sample we have too small to give a significant foundation that could be used in order to generalize our finding. Regardless of the generalizability, these measurements give us a very good indication about the outcome of international and national acquisitions.

¹¹Source: <http://www.nss.gov.au/nss/home.nsf/pages/Sample+Size+Calculator+Help?OpenDocument> - 10.06.2013

5.4 Performance measurement

As mentioned above we will use HCVA and average sales growth to examine whether a firm has positive or negative development following the acquisition. There are many possible performance measurement methods available, but we have chosen to use these measurements since they give a good understanding of the performance of the companies.

HCVA measures the revenue of the company but also the income of the people creating value in the company. It will also be a good indicator of the efficiency of the company and employees working in the company. Since our thesis focuses on the issue of foreign acquisition also at an industry level, it will be beneficial to take into account the total value the operation is creating instead of the value for the company and owners only.

We will calculate an average human capital value added for the years before and after the acquisition. Through this approach we will minimize yearly fluctuations, and get a better basis for comparison. The disadvantage of using HCVA in our case is that it does not take into account that nationality of the owner of the company, where the employees reside, nor where taxes are paid. But mostly the employees that work for an IT company stationed in Norway will also live in Norway and pay taxes here. The issue regarding where the company's profit is transferred will be determined by the nationality of the owner. In cases where firms are acquired by companies in the same industry and integrated into the acquiring company, there is a question regarding where (which country) the profit is distributed and also where taxes are paid.

Another issue by using HCVA is its lack of consideration for the value that investments in e.g. technology, R&D, and knowledge give the Norwegian IT industry. These are largely qualitative measurements that are hard to quantify, which make them more suitable for the interviews with relevant people in the industry.

Using average sales growth before and after the acquisition will eliminate some of the yearly fluctuations. One issue when using sales growth as a measurement is that it does not take external factors such as the financial crisis into account. Additionally the short period that the averages are based on can reduce the precision of the results. Sales in itself does not give any indication of the "health"

or financial performance of a company, but it can indicate whether or not a company is moving in the right direction.

6.0 The Norwegian IT industry

6.1 History of the Norwegian IT industry

The Norwegian IT industry was established in the 1950s in conjunction with the IT industry in the rest of the world. Norwegian contributions to the development of the global IT industry have been centralized around areas such as cellular standards (NMT), and to some extent search technology (Fast Search and Transfer)¹². The Norwegian IT sector is mostly located in and around Oslo, while Trondheim has a strong position as well due to NTNU's (Norwegian University of Science and Technology) position as a strong university.

When comparing the Norwegian IT industry with neighbors such as Sweden, Finland, and Denmark, Norway is lagging somewhat behind. Norway does not have large multinational corporations, such as Finland's Nokia and Sweden's Ericsson. Even Denmark, which is a lot closer to Norway in terms of overall size of the IT industry, have Bang & Olufsen with a strong international presence. It should be noted however that while the Norwegian IT industry does not have companies such as Nokia and Ericsson, it has contributed strongly in the success story of the Norwegian oil sector, which has resulted in a very strong oil service cluster developing in Norway (Reve and Sasson, 2012, 60-61).

Even though Norway is small in the global IT scale, it does have a fairly sizeable cluster of IT businesses located in and around Oslo. The trend in the recent years however is that Norwegian software companies are sold out to foreign investors/companies once they reach a certain size. This can most likely be attributed to lack of competent capital in the Norwegian market, and that Norwegian investors do not value intellectual property as highly as foreign investors such as investors from the United States (Andersen, 2011).

The high cost levels in Norway, coupled with a tendency for Norwegian

¹²<http://web.archive.org/web/20070213045903/http://telemuseum.no/mambo/content/view/29/1/> - 07.01.2013

companies to prefer outsourcing of certain activities, has led to outsourcing of many interesting positions, and a situation where ambitious employees in the IT industry look for work in countries where they can find interesting and challenging positions. This could be damaging for the Norwegian IT industry, especially since Espen Andersen discovered that recruitment of talented individuals was a major concern for most IT companies when conducting an analysis of the viability and future prospect of the Norwegian IT industry (Andersen, 2011).

6.2 Size of the industry

The Norwegian IT industry is comprised of two different sub sectors; the equipment and software sector, and the consulting and infrastructure sector. The equipment and software sector is focused on developing stand-alone software or software that acts as an add-on for existing software, while the consulting and infrastructure sector is more geared towards customizing existing software and solutions to the needs of the customers (Andersen, 2011). We characterize the two sectors as the technology sector and the service sector.

The size of the Norwegian IT industry is hard to determine due to problems with defining what the industry is comprised of. Statistics Norway have published an overview of the ICT industry in total. The number of employees in the ICT (Information and communication technology) industry is reported by Statistics Norway to be 72,776 in 2009 and 73,871 in 2010, revenues are reported to be 190.1 bn NOK in 2009 and 201.7 bn NOK in 2010¹³, and the value creation was reported to be 75.4 bn NOK in 2009 and 78.6 bn NOK in 2010¹⁴.

¹³ <https://www.ssb.no/a/kortnavn/iktoms/tab-2012-08-30-02.html> - 20.04.2013

¹⁴ <https://www.ssb.no/a/kortnavn/iktoms/tab-2012-08-30-03.html> - 20.04.2013

1 Informasjonssektoren. Sysselsatte personer. 2009-2010

| | 2009 | 2010 |
|---|--------|--------|
| Informasjonssektoren | 99 654 | 99 922 |
| IKT-sektoren | 72 776 | 73 871 |
| IKT-Industri | 4 012 | 3 911 |
| Engroshandel med IKT-utstyr | 9 937 | 9 675 |
| IKT-Tjenester | 58 827 | 60 285 |
| Innholds- og mediesektoren | 26 878 | 26 051 |
| Utgivelse av bøker, tidsskrifter og annen forlagsvirksomhet | 16 089 | 15 184 |
| Virksomhet innenfor film, video og fjernsynsprogrammer | 3 749 | 3 889 |
| Produksjon og utgivelse av musikk- og lydopptak | 469 | 489 |
| Radio- og fjernsynskringkasting | 5 824 | 5 813 |
| Andre informasjonstjenester | 747 | 676 |

Standardtegn i tabeller

Table 5.1: Employment in the ICT industry 2009-2010

Source: Statistics Norway¹⁵

Since we have narrowed down the industry to a more specific sector (see the list below) the numbers from Statistics Norway are too wide when describing the industry .

As mentioned earlier we have limited the IT industry to companies with the following NACE-codes:

NACE-codes:

Technology sector

26.1: Production of electronic components and PCB

26.2: Production of PC`s and additional equipment

62.010: Programming

58.2: Program development

Service

46.5: Wholesale of IT and communication equipment

62: Service related to IT (excluded 62.01 Programming)

63: Information services

77.330 Rental of computer equipment

Table 5.2

¹⁵ <http://www.ssb.no/emner/10/03/iktoms/tab-2012-08-30-01.html> - 05.01.2013

The industry we are focusing on have around 5,919 active companies. 60% of these are within the service industry related to IT. In 2011 the industry had a total revenue of 142 bn NOK¹⁶

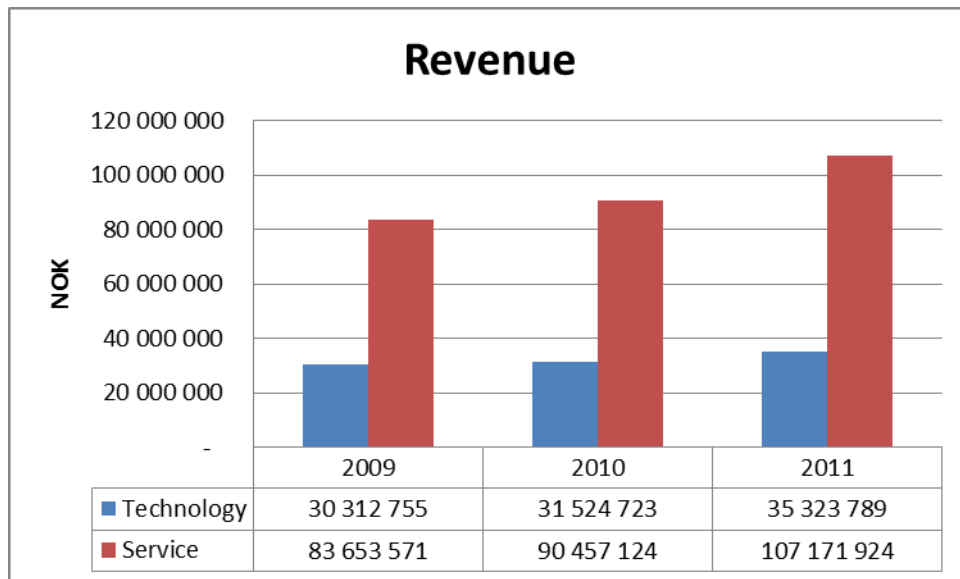


Figure 5.1: Numbers in 1,000 NOK, Industry development 2009-2011. Numbers KPI adjusted to 2011 numbers

Source: Proff Forvalt, Team analysis

The industry employed approximately 51,500 employees, 35% in the technology sector and 65% in the service sector.

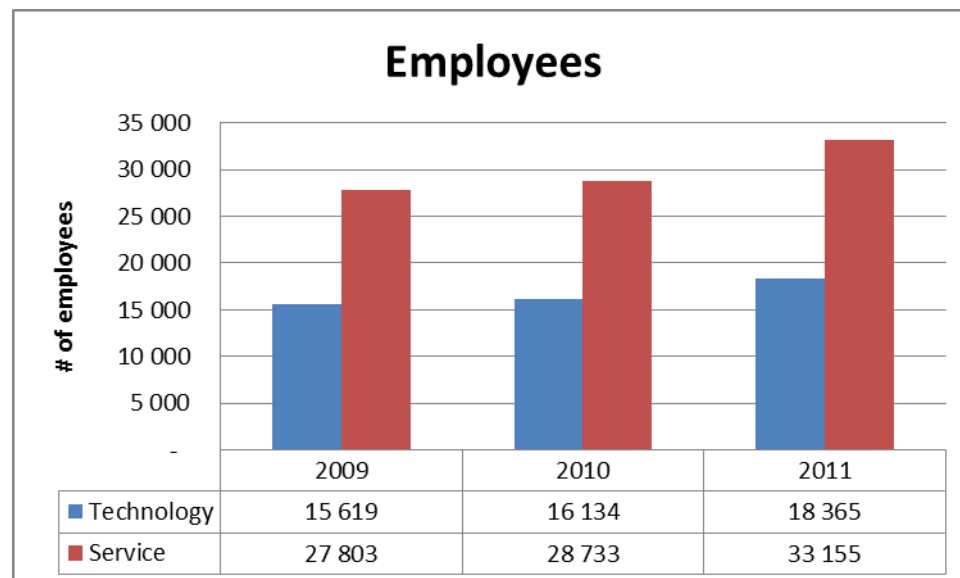


Figure 5.2: Number of employees in the IT industry 2009-2011

Source: Proff Forvalt, Team analysis

¹⁶ Proff.no and team analysis – 09.05.2013

The operational profit of the two sub-sectors shows a quite different picture than number of employees and revenue. The service and technology sectors are almost even in terms of pre-tax profitability, despite the size of the service sector being approximately double the size of the technology sector.

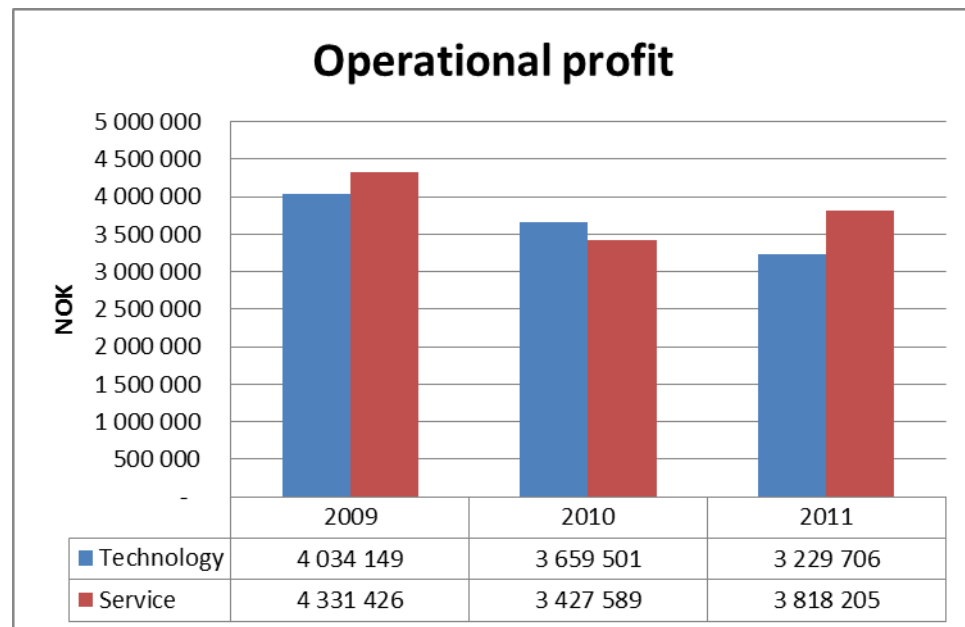


Figure 5.3: Numbers in 1,000 NOK, Operational profit in the IT industry 2009-2011. Numbers are KPI adjusted to 2011 numbers.

Source: Proff Forvalt, Team analysis

As we can see from the figures above there has been a steady increase in both revenue and number of employees through the last three years. Some of this growth could however be related to the financial crisis in 2008. Since our models have 2009 as a starting point (right after the crisis hit), the initial numbers might be lower than in a normalized external environment, and the subsequent growth somewhat artificial.

The value added per employee for the industry in 2011 was:

| Human capital added value 2011 | |
|--------------------------------|-----|
| Service sector | 831 |
| Technology sector | 776 |

Table 5.3: Numbers in 1,000 NOK and based on all active companies in 2011 that had all information available and registered employees ¹⁷

Source: Proff Forvalt, Team analysis

Andersen (2011) mentioned that these numbers have a degree of bias, since a lot of the value creation in the industry is shown in other industries since the IT industry is highly integrated in other industries¹⁸. The industry is employing 2% of the total employed workforce in Norway in 2011 and contributes with approximately 4% of the total GDP in Norway¹⁹

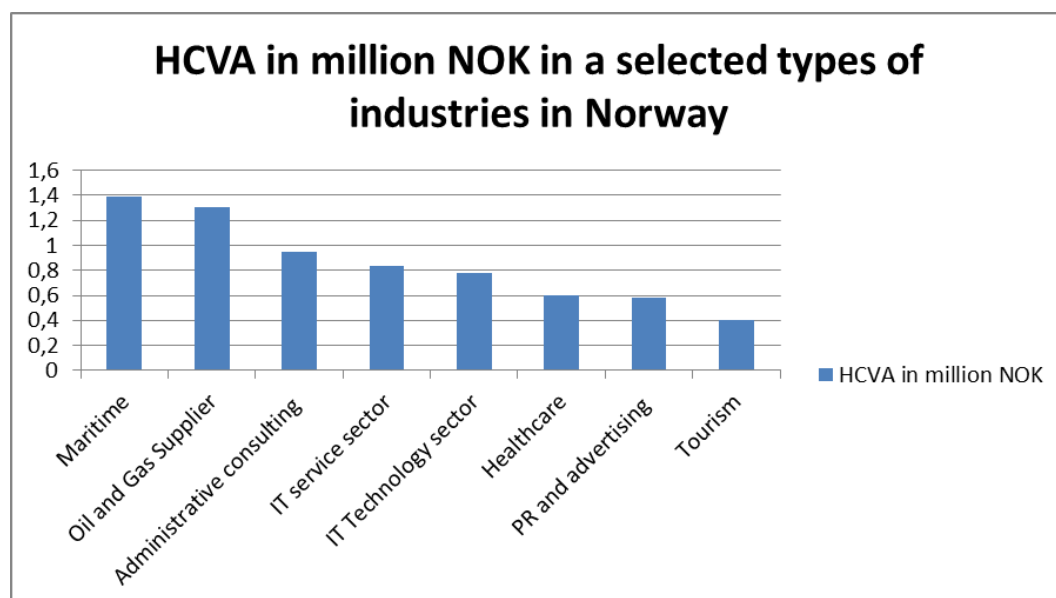


Figure 5.4

Source: Reve and Sasson, 2012 pp: 64, 86 and 166

As we can see from the figure above, the IT industry is average when looking at HCVA. Reve and Sasson (2012) also calculated an average HCVA of

¹⁷ Human capital value added: Operational profit + wages costs / # of employees

¹⁸ <http://www.magma.no/en-kunnskapsbasert-it-naring-aktivitet-og-effekt/> - 09.05.2013

¹⁹ <http://www.ssb.no/a/kortnavn/regsys/tab-2012-06-08-02.html> and

<http://www.regjeringen.no/nb/dep/oed/dok/NOU-er/2012/nou-2012-9/7.html?id=675474> - 09.05.2013

approximately 780,000 – 790,000 NOK for all clusters in Norway. This also indicates that the IT industry is on an average level in Norway.

6.3 The IT industry in connection with other industries

There is more than one example in Norway of companies that have grown quite quickly and steadily over the past years, mainly due to their efficient use of technology. One such example would be Evo Fitness, which is a fitness center that operates almost entirely without employees at their centers, and rather uses cameras to monitor their fitness centers. The chain does not offer sessions with personal trainers or group sessions, but for customers who do not require such services, Evo Fitness can boast with long opening hours (6 AM – 11 PM), low prices, and all of the equipment that can be expected at a fitness center.

Other examples of companies that have utilized business models that relies heavily on technology is; Skandiabanken, which is a completely Internet based bank that has scored very high on customer satisfaction surveys; Norwegian Air Shuttle ASA, that are able to undercut their main competitor on prices due to efficient use of technology; Yara, which relies on technology to differentiate themselves from their competitors (Andersen, 2011).

In addition to some select companies, the very successful Norwegian oil and subsea industry is reliant on technology to stay ahead of competing clusters. Due to the harsh conditions and the depth of the North Sea, where most of Norwegian oilfields are located, companies such as Statoil, Seadrill, and many others are very reliant on mechanical and technological excellence in order to maximize the profit from their operations.

The examples mentioned above are all good examples of how technology plays a vital part to the success of different Norwegian companies. But, as Andersen (2011) mentions in his paper, neither of of these companies would be called an IT company. For this reason, one could say that the Norwegian IT industry is bigger than it appears on paper. Additionally, since the Norwegian market is very expensive to operate in (high wages, fairly high taxes, etc.), efficient use of technology is even more vital. In other words, when a company operates in a

market with some comparative disadvantage, it needs to develop a comparative (or competitive) advantage in another area. Strong IT capabilities have the potential of being this comparative or competitive advantage.

6.4 Four cases of foreign acquisitions in Norway

Since our interviews with the industry players are anonymous we have made four case examples of acquisitions done in the industry by foreign investors in the time period we are analyzing. These cases are based on publicly available information we have gathered in papers and other media. We will use these cases as example cases throughout the thesis to exemplify or explain statements or processes. We have selected cases that represent both industrial and PE acquisitions. All are well known acquisitions and often mentioned in the media, which made data collection easier.

6.4.1 Cisco – Tandberg

Tandberg was established by the engineer Vebjørn Tandberg in 1933 and first started to produce loudspeakers and radio receivers. After some trouble the company went bankrupt in 1979 and was divided into smaller entities, one of these was Tandberg ASA²⁰. In 1989 the company was the first to develop a Videophone for ISDN connection²¹. Jan Opsahl, who was hired as CEO in 1988 and chairman after 1997, saw the potential for videoconference systems and narrowed down the strategy to only focus on videoconference systems. The revenue went from 80m USD in 2001 to 900m in 2009 (Andersen, 2011).

Fredrik Syvertsen in IKT Norge explained the success of Tandberg as follows:

“Tandberg is not only a technological wonder, but first of all it is a sales miracle.”

In 2009 Cisco acquired Tandberg for 3.4 bn USD and in 2011 the name was formally changed to Cisco. Tandberg’s Lysaker office became Cisco’s center for videoconference systems worldwide and has increased from 65 to 550 employees (Andersen, 2011).

²⁰<http://www.tandbergerne.no/index-filer/historie.htm> - 28.06.2013

²¹[http://no.wikipedia.org/wiki/Tandberg_\(selskap\)](http://no.wikipedia.org/wiki/Tandberg_(selskap)) - 28.06.2013

6.4.2 Microsoft – Fast Search and Transfer

In 1997 Fast Search & Transfer separated out of Opticom. Their technology had its roots in the student community in Trondheim, and was to a great degree based on the thesis of John Markus Lervik, Ph.D.²². The company was in the market for search technology, and storage and transfer of large quantities of data. Their search technology became the largest on the Internet, but was later outperformed by Google in the consumer search market. Fast then specialized within search technology for web sites (Andersen, 2011). They had Fortune 500 and Global 2000 companies as customers and enjoyed great success within their field²³. After some turbulent times and lack of capital for further development the company was sold to Microsoft²⁴. Fast was sold for 6.6 bn NOK in 2008 and Microsoft used Fast's technology as underlying technology for their SharePoint platform. Fast, name changed to Microsoft Development Center Norway in 2011²⁵, also became Microsoft's development center for search technology worldwide (Andersen, 2011). One of the main underlying reasons for selling Fast to Microsoft has been said to be the lack of capital for developing the marketing and sales of the products worldwide²⁶.

6.4.3 HG Capital – Visma

The private equity company HG Capital acquired Visma in 2006, when they beat a bid from Sage plc²⁷ when management and board of directors recommended the stockholders not to accept. Sage offered Visma 125 NOK per share, while HG Capital raised the bid to 135 NOK per share, valuating the company to 4.32 bn NOK.

HG Capital stated that they believed that the low margins Visma had at the time of the acquisition did not reflect the real potential of the company. They believed

²² <http://www.dn.no/forsiden/kommentarer/article1284649.ece> - 01.07.2013

²³ <http://www.dn.no/forsiden/kommentarer/article1284649.ece> - 01.07.2013

²⁴ <http://www.okokrim.no/id/9116A12483C157FDC12576F1003DE1F8> ;
<http://www.dn.no/forsiden/kommentarer/article1284649.ece> ;

http://no.wikipedia.org/wiki/Fast_Search_%26_Transfer - 01.07.2013

²⁵ <http://www.digi.no/859328/fast-bytter-navn> - 01.07.2013

²⁶ <http://www.dn.no/forsiden/kommentarer/article1284649.ece> - 01.07.2013

²⁷ <http://www.hgcapital.com/content/case-study-page?nid=326> - 10.07.2013

that Visma's profitability would rise significantly when the integration of several companies they had bought in the years and months prior to the acquisition was finalized. HG Capital also believed that there still was a lot of growth potential despite the fact that Visma already held a position as a market leader in the Nordic countries in their market as a provider of accounting, resource planning, book-keeping and payroll software for SME's²⁸. HG Capital assisted Visma in making a series of acquisitions in the following years, as well as making some adjustments in the organization in order to increase efficiency, without making too radical changes.

With HG as owners (from 2006 to 2010) Visma²⁹:

- Increased their EBITDA by 265%.
- Had revenues rise by an average of 16% p.a.
- Doubled their investments in R&D and new product launches.
- Had the number of employed people in Visma increase to 4,200 from 2,512.

In 2010 Visma was sold to another PE company Kohlberg Kravis Roberts (KKR) for 11 bn NOK³⁰.

6.4.4 Texas Instruments – Chipcon

Texas Instruments (TI) acquired Chipcon in 2006 for approximately 1.3 bn NOK. The acquisition was motivated by TI's wish to extend their portfolio in the short-range radio frequency market, which was growing rapidly at the time due to an increase in the use of wireless devices³¹.

TI announced that they would keep the headquarters located in Norway, and they also announced that they wanted to hire between 15 and 30 new employees. In order for TI to retain the founder of the company, a clause was included in the contract stating that Geir Førre would stay with the company for 18 months after the acquisition, and he was not allowed to recruit people from the company for a

²⁸ <http://www.hgcapital.com/content/case-study-page?nid=326> - 27.06.2013

²⁹ <http://www.hgcapital.com/content/case-study-page?nid=326> - 27.06.2013

³⁰ <http://www.dn.no/forsiden/naringsliv/article1983567.ece> - 27.06.2013

³¹ <http://www.idg.no/bransje/bransjenyheter/article3187.ece> - 28.06.2013

year after he left³². After Førre left the company at the end of the 18 months period, he was sued by TI for trying to recruit one of the employees in the company.

Geir Førre founded a new company after his exit of Chipcon named Energy Micro. The company focused on the development and production of a variety of microchips. In June 2013 Silicone Labs acquired Energy Micro for approximately 1 bn NOK.

7.0 Findings

7.1 Quantitative analysis

The Quantitative findings will be used as a platform for our more in-depth qualitative findings. We will explore the fields of international acquisitions more thoroughly, with the intent of getting qualitative data that will be used in the analysis that follows.

7.1.1 International acquisition in Norway

In the period 2003 until end of 2012 there have been 47 international acquisitions of Norwegian IT companies. The greatest acquisition undertaken in the industry in this period was the acquisition of Tandberg by Cisco for 17.2 billion NOK in 2009³³. Visma was acquired by the financial company HG Capital for 4.3 billion NOK in 2006³⁴. These are good examples of huge acquisitions undertaken in Norway, not only by other IT related companies but also private equity.

³² <http://www.dagensit.no/bransje/article1278783.ece> - 28.06.2013

³³ <http://www.idg.no/computerworld/article145301.ece> - 30.05.2013

³⁴ <http://www.dn.no/forsiden/borsMarked/article2157612.ece> - 30.05.2013

The distribution of the acquisitions can be seen in the graph below:

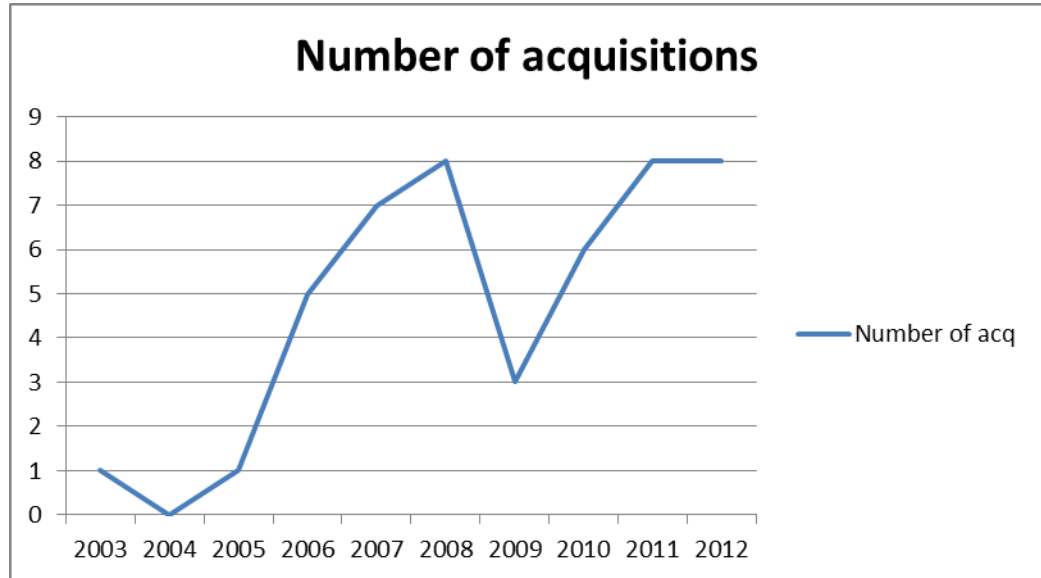


Figure 7.1

Source: Team analysis

The distribution shows a clear increase of foreign acquisitions during this time period. The decrease in 2009 was due to the financial crisis in 2008 and later.

As we found in our chapter on national acquisitions, the buying patterns are fairly similar in both Norwegian acquisitions and international acquisitions of Norwegian IT companies.

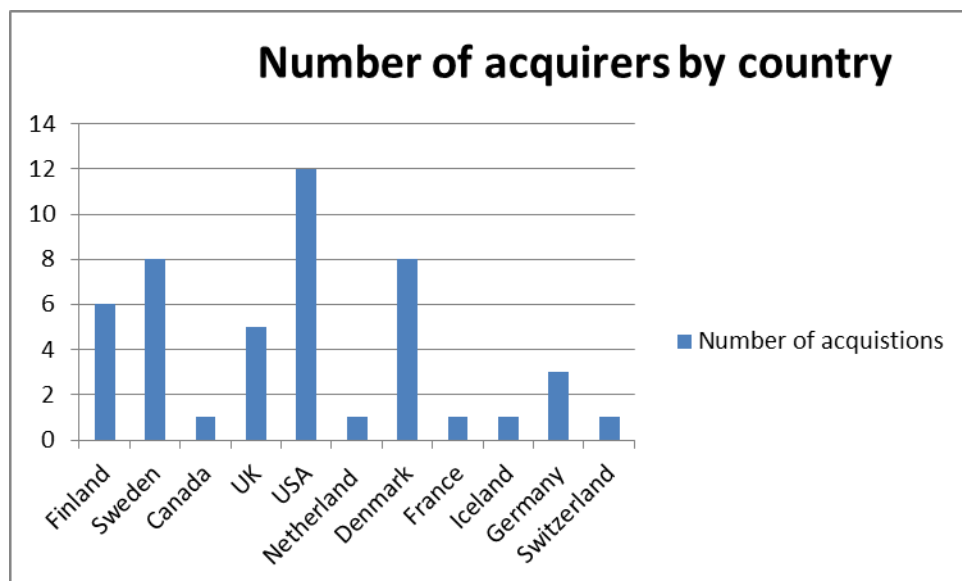


Figure 7.2

Source: Team analysis

It is clearly seen that most of the acquisitions are undertaken by companies from the Scandinavian countries and USA. Since USA has the biggest IT clusters in the world it is to be expected that they are heavily represented as acquirers in any IT industry.

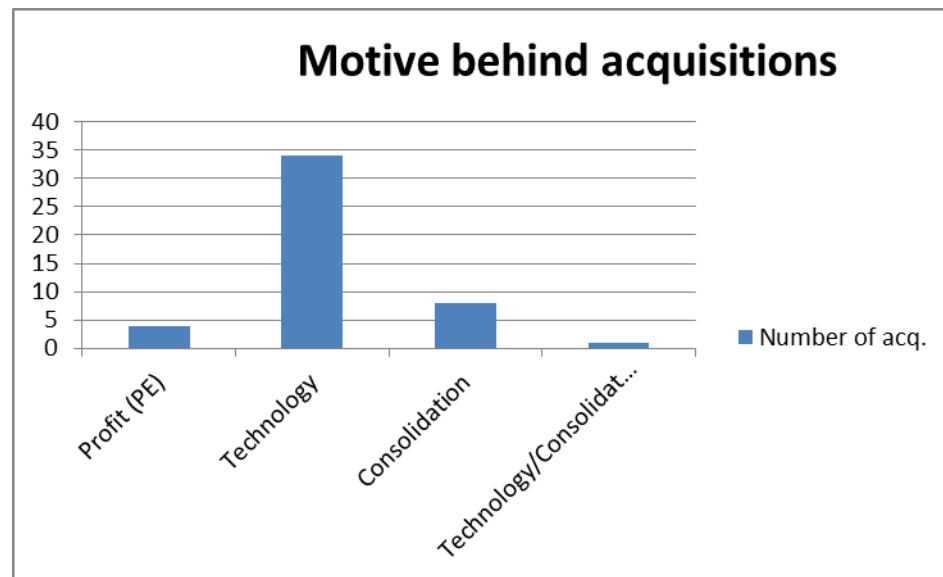


Figure 7.3

Source: Team analysis

If we look at the motives for the acquisitions, we see that a significant number of the acquisitions were technology based. This can be e.g. access to a specific technology such as a specific program, or competence within development of a type of program. Eight acquisitions were motivated by consolidation, which has sub motives such as: Expectations of getting access to customers, reducing competition, expectations of getting access to markets, or achieving economies of scale by creating a larger organization. Foreign companies integrate Norwegian companies after an acquisition, because they are motivated by access to a market (Norwegian market) and the infrastructure that the acquired company controls in Norway. This can often be a more attractive solution, compared to starting a greenfield operation in Norway. There are also often several upsides to an acquisition, and technology is seldom the only motive since they often also acquire a customer base and/or infrastructure. PE acquisitions are mainly motivated by financial gains and in some cases synergies with other companies that they own.

7.1.2 National acquisitions

In order to create a control group (to compare the group of companies that were sold to foreign companies) we created a list of Norwegian IT companies bought by other Norwegian companies. The list was compiled by using the same approach as our original list, namely through information we got from the Norwegian Competition Authority (Konkurransetilsynet) as well as using the internet with some specific search phrases and IT-news pages such as www.idg.no.

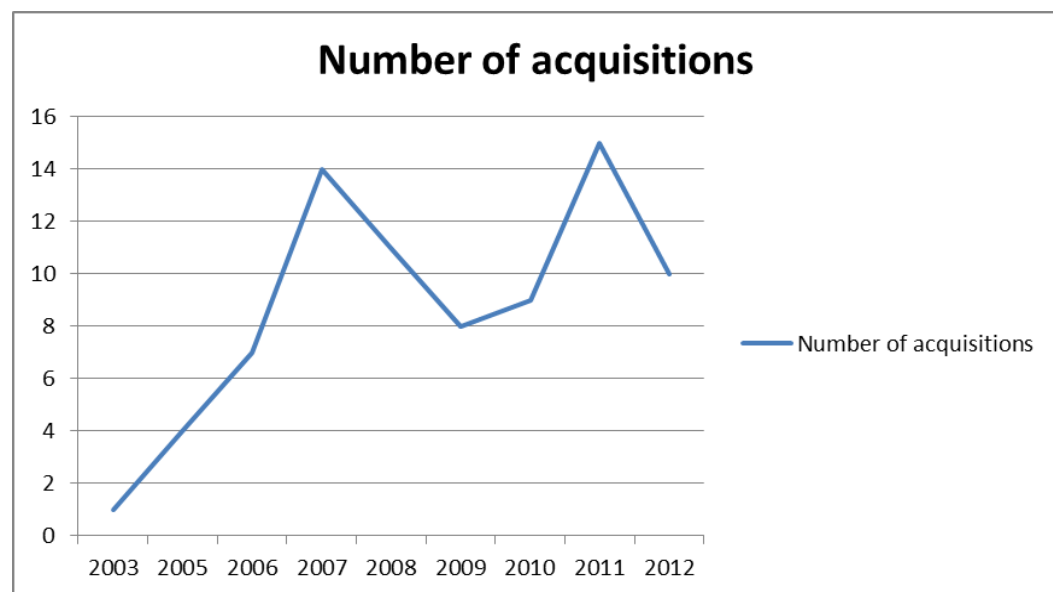


Figure: 7.4

Source: Team analysis

As we can see from the graph above there has been a steady increase in acquisitions after 2003, with a small decrease after 2008, most likely due to the financial crisis that struck at this time.

Two of the biggest acquisitions in this segment of the industry are EDB's acquisition of IS Partner sized 1,192 billion NOK³⁵, and Ergo Group's (later Ervry ASA) acquisition of Alliance ASA at 912 million NOK³⁶. These acquisitions were both motivated by consolidation and access to market shares.

³⁵ <http://www.idg.no/bransje/bransjenyheter/article12095.ece> - 11.06.2013

³⁶ <http://e24.no/makro-og-politikk/edb-kjoeper-is-partner-fra-statoilhydro/2186752> - 11.06.2013

It is worth mentioning that there are some select companies in the Norwegian IT industry that are responsible for a bulk of the acquisitions. These companies are Atea ASA and Evry ASA (including their predecessors). The two companies are behind more than one quarter of the acquisitions (23 of 79) in the Norwegian IT industry. Both companies operate in the IT infrastructure and IT consulting sector. Here we have two large companies with financial size and willingness to buy smaller IT companies, operating within the consulting and infrastructure part of the IT industry. In the software sector the acquisitions are more scattered, and there is no company responsible for a bulk of the acquisitions.

7.1.3 Performance calculation

We wanted to find out how many companies had better performance after an acquisition. The criteria was that the growth should outperform the average industry growth of 8% in sales and 2% in Human capital value added³⁷ that include a 1.84% average KPI adjustment (see appendix 3).

Our finding showed the following results:

International acquisition

Human capital value added

Our findings showed that 10 of 21 (47.5%) observations had a higher HCVA after the acquisition than before.

Sales

Of the data from the collected companies, 16 of 31 (52%) had higher sales after the acquisition than before.

This shows that of the foreign acquisitions around 50% of the companies outperform their pre-acquisition growth and the average market growth.

National acquisitions

Human capital value added

The findings showed that 13 of 22 (59%) companies had a higher HCVA after the acquisition.

Sales

15 of 21 (71.5%) companies had higher sales results after the acquisition.

³⁷ Calculations and source will be given upon request

When we compare the growth in performance of the national acquisitions with the foreign acquisitions, we see that the national acquisitions had a higher percentage that outperformed the market and their own pre-acquisition growth, than in the case of international acquisitions.

Accumulated sales would be a suitable measurement to use when analyzing and comparing the composition of the international and national companies outperforming the market. The data set we use is, however, not suited for calculating accumulated sales due to a high number of repeat acquirers.

7.1.4 T-test

By using a t-test we found no evidence that there are significant performance differences in human capital value added, and sales growth, for companies that were bought by national or international companies (see appendix 10). This can be an indication that there are no differences in the performance of sales and human capital value added, and that it does not matter if a company is acquired by an international or a national company or investor if we only take into account the objective performance measurements.

7.2 Qualitative analysis

In this part we will explore the findings from our interviews with actors in the industry and supporting organizations. The qualitative researched opened up for more detailed information around the acquisition cases and subjective thoughts and experience around international acquisitions.

7.2.1 Implications of an industrial acquisition

Through the interviews the subjects often stated there is a higher degree of change in industrial acquisitions, compared to financial acquisitions. Based on the motives to acquire such as; technology, market access, or customers, the acquiring company might integrate parts of the target company. This will give the acquiring company advantages such as: access to new distribution channels, better/different technological solutions, an increased product portfolio, and/or more vertically integrated products. This leads to a situation where it is more common that the whole company is integrated into the acquirer. After the integration process is

complete the new company might be able to extract economies of scale. Outsourcing also cuts cost dramatically due to the high cost level in Norway.

“Norway, being a rich market with high prices, can offer foreign acquirers opportunities to cut cost dramatically if they outsource and move workplaces to another country. This will increase their profit significantly.” - Quote regarding outsourcing

An increased professionalization of the Norwegian division is normal after an international acquisition. Sales and R&D often become more professionalized, and taken to a new level. Smaller Norwegian sales organizations could also be closed or partly integrated into the sales organization of the acquiring company.

Some stated that the R&D department was developed further. Through new processes R&D became more strategically planned and often coordinated with the existing R&D department of the acquiring company.

Some interviewees said that you might lose R&D to the buyer but there were also cases where the R&D department in Norway became centers of expertise for R&D in some specific fields, and increased in size.

If an industrial acquisition is motivated by technology it can give the Norwegian company a sales boost, because they get more professionalized and have access to new sales channels. The drawback might be that the Norwegian brand disappears and get totally integrated into the acquirer brand, thereby losing its connection to Norway, which again influences somewhat negatively on our IT industry reputation.

7.2.2 Implication of a Private Equity acquisition

There was a general perception among our interviewees that having private equity owners will allow companies to act more long-term oriented compared to companies that are publicly traded. PE companies usually operate with a time frame of 5-7 years before they sell the acquired company. Publicly traded companies however, will be evaluated each quarter after presenting their quarterly numbers. If a company performs badly, it will often be “punished” immediately

by a drop in their share prices. This is also often the case when long-term investments are the reason for the bad performance.

The interviewees said that PE acquisitions led to fewer changes than industrial acquisitions. Even though PE companies have been known to restructure in order to increase the efficiency of companies, it seems that this is not a heavily used strategy in the IT industry.

“Our owners operate with the philosophy of buying well run companies, and intervene as little as possible. A consequence of this philosophy is very few changes.” – Quote regarding restructuring as a result of a PE acquisition

In the cases we have examined PE companies have used their positions in the board of directors to monitor and affect the companies to some degree, without making very radical changes in the company structure. This is in contrast with the industrial cases where changes and cuts were more frequent

One interviewee experienced that focus changed slightly towards sales from R&D after being acquired by a PE company.

Another attribute of PE companies mentioned in our interviews was that they favored using management ownership in the company as a preferred way of incentivizing top management. This aligns the motives of management with the motives of the owner, which reduce the need for monitoring.

7.2.3 Buyer's motives for acquisitions

If we look at the data we have collected the major motive behind acquisitions seems to be access to some type of technology from Norwegian companies, such as specific programs that serve niche customers or a technical solution. It was also mentioned that the motive for acquisitions of a technology company was based on consolidation, and to get faster access to market shares in a niche part of the market.

Also mentioned in the interviews was that acquisitions motivated by market access is seldom used as a leading motive.

“I don’t think big international actors buy Norwegian companies to get access to the tiny Norwegian market. The market is too small.” – Quote regarding motive for acquisitions

Behind financial acquisitions motives were “right timing” or low price and a potential to improve efficiency. In another case the company was for sale, and the acquirer bought the company since it was a good opportunity. No other clear motive was mentioned in this case.

7.2.4 Owners’ motives for selling

Through our interviews we found there was one clear motive mentioned by most of the interviewees, namely financial gain for the owner. The other motives that were mentioned were ranked lower than financial gain. In cases where the owner and founder is the same person and she/he wanted to leave the company, she/he preferred to sell to an IT company. IT companies do not engage the founder to the same degree as PE companies after the acquisition according to the interviewees.

Another motive mentioned in addition to a good price was the wish to become international. An international partner would support such a motive. Even though many of the companies we interviewed had an international presence, it was very hard for the acquired company to achieve the level of growth they wanted. The distribution channels that large international acquirers had access to made it possible to achieve this international growth.

7.2.5 Structural changes in the acquired company after an acquisition

Change in number of employees

IT companies bought by PE companies do not report any significant cuts in employees as a result of the acquisition.

The one significant change in number of employees mentioned by many of the interviewees was that some functions such as accounting and sales, experienced significant cuts in the headcount.

Other reasons for a reduction in numbers of employees were employees quitting since they did not want to work for the acquiring company, or groups of employees leaving to start a new (sometimes competing) company.

“[...] during the two years after the acquisition there was a couple of employees [...] that were very fond of the entrepreneurial spirit we previously had, that chose to quit.” – Quote regarding employees quitting since they enjoyed the entrepreneurial spirit of small companies

The acquiring companies tried to retain engineers and programmers since they were the source of know-how and technology. These attempts had varying degree of success according to the interviewees.

Cultural changes

Cultural changes and challenges were not looked upon as a big problem. Comments such as:

“A programmer is a programmer, even if she/he is Norwegian, Swedish or American.”- Quote regarding cultural similarities

can be interpreted to mean that the development and operational parts of the organization does not have major cultural changes or issues that has to be handled. Often the cultural changes were more present in administrative and sales oriented parts of the organization, which was shown by statements such as:

“The Danish people are much tougher and stricter.”- Quote regarding administrative changes

or

“The focus on reporting of financial numbers has become much stronger.” – Quote regarding financial changes

or

“Due to the integration the whole organization has become more bureaucratic.” -

Quote regarding administrative changes

The comments show that the administrative functions had the hardest time implementing or handling the cultural changes. Despite the fact that administrative functions had some cultural clashes with the acquiring company, nobody described it as a situation that could harm the acquisition in such a way that it could fail.

Change in focus on R&D

When asking the interviewees about any changes in the focus on R&D after the acquisition we got mixed responses. One of the interviewees informed us that they were almost only doing R&D (mostly development) after they were acquired, while another told us that they quit R&D completely and were only doing adjustments to their existing product.

“[...] development was shut down; there was only a few left that continued to make adjustments.” – Quote regarding complete shutdown of R&D

In the cases where it was obvious that the acquiring company wanted the target company to continue independently, it seemed like they were willing to contribute financially in order for the target to continue developing their products, or develop new ones.

“[...] if you become acquired by another IT company you will get more help to focus on R&D and cultivate your technology [...]” – Quote considering the advantages of become industrial acquired.

While there were mixed results regarding changes in the focus on R&D, we found that some of the companies had their R&D processes gradually moved out of the country for different reasons.

Customer reactions

Nobody mentioned any major reactions from customers after an acquisition. Some issues due to changes in strategy that made the product/service less adapted to

certain customers were mentioned. Almost all stated that a good and informative information flow was the key to keeping the customers up to date around the acquisition case and succeeding in keeping the customers.

In one specific case the company mentioned that they talked to Norwegian customers and convinced them to become operated from Sweden instead of Norway, which enabled the company to reduce their operational costs. This case exemplifies that the importance of the location in this industry is not as crucial as in many other industries.

Structural changes in administration

The most common structural changes done in the acquired company after an acquisition were attempts to increase the effectiveness of administrative tasks. To what degree and when it was done vary from case to case. We found that initiatives like this were attempted in both financial and industrial acquisitions. Everything from outsourcing of selected positions to the acquiring company's country, such as accounting or call centers, to reducing and simplifying of processes. Economies of scale and the possibility of achieving a lower cost level by outsourcing from Norway has been the major motive.

Another issue mentioned many times in the interviews was the increased focus on reporting. Both financially acquired companies and industrial acquisitions lead to increased reporting after the acquisition. This was described as a negative, because of an increased focus on the short-time profit and because it reduced the employees' work capacity in the market and towards customers. The positive side was that they had a higher control level and a better foundation for analyzing performance.

In many cases the industrially acquired companies were managed by the top management of the acquiring company, meaning that overall strategy was managed from abroad. Restructuring of large parts of the organization was also a common occurrence. An example would be that departments or market segments restructured and adapted to the new merged organization. The management in Norway got less responsibility, and less company control.

Structural changes – Location

When asking the interviewees about changes in location of the target company, we wanted to uncover whether or not it was common for the acquirer to move parts of the organization to other countries.

We found that offices located in other countries were integrated with offices of the acquiring company, and in some cases shut down.

“Yes, the offices we had in other parts of the world was absorbed by the local offices of [name of acquiring company], with the exception of the offices we had in Scandinavia.” – Quote regarding the absorption of offices

It was also a common occurrence that some of the support functions were outsourced from the company, in order to reduce costs.

In most cases the development departments were left untouched to a large degree, and kept in Norway. But in some cases the interviewees explained that the growth in development happened in other countries than Norway even though it was related to the product of the acquired company.

Structural changes – Strategy

The changes in the strategy of the acquired company seemed to be tied up to what type of company that was buying. In financial acquisitions the strategy of the company normally continued with only slight modifications. In industrial acquisitions the changes were much more radical. In some cases, companies that had operated the entire value chain themselves were changed to become one part of the value chain, namely R&D. They went from having their own business strategy to be a part of the acquiring firms' strategy. The consequences were loss of contact with the market since sales and marketing were fully controlled by the acquiring company, and at the same time increased specialization in their area of expertise. The Norwegian companies became a provider of a specific technology to the acquirer.

“If all the functions such as strategy and finance end up in Silicon Valley we will end up with a challenge regarding the competence required when starting a new company.” – Quote from Paul Chaffey – CEO at Abelia

Most of the companies acquired for their technology or their market positions had to adopt the strategy of the acquiring company, which led them to address the needs of new customers with new products, although these products were quite similar to the products they offered before the acquisition.

Transfer of resources

It was mentioned that most of the exchanges between the two entities was competence transfer. IT competence was often exchanged through collaboration in projects or by people working in the other entity for a while. Administrative competence was exchanged through members in the management or new board members with industrial knowledge.

We observed exchange both ways, but mostly we see an exchange from the acquirer to the acquired company. One possible explaining factor might be that the companies we have interviewed still exist or is more or less implemented into the new organization.

Best changes

The best changes that happened as a result of the acquisitions were stated to be access to competence from the acquirer, through exchange of employees, or new people brought in to the board of directors and management. With this new access to competence the companies were able to realize new and more advanced projects, become more professional in their execution, and achieve more efficient administration and financial management.

Another positive aspect was cross border collaboration in big cases and projects. The professionalization of R&D was achieved through the development of efficient, focused, and well planned projects. The S&M departments were also developed further, and they got access to new sales channels.

Some interview subjects also mentioned the importance and advantage of an increased network after the acquisition, which gives better access to people, and a larger organization with more execution force, better suited to handle and succeed in projects.

“Suddenly we had 80 new colleagues. The best part about it was probably that we learnt a lot from each other, We were able to merge the best parts from both Norway and Sweden.” – Quote regarding increased company network

Worst changes

When we asked about negative changes we got many different opinions. One change that was perceived as negative was that companies bought mainly for their technology lost touch with the market and customers. This was a result of them focusing on their developmental resources, while the acquiring company managed sales and other customer related activities.

“We lost the part of the business related to being a part of the process from start to end, since we are no longer involved in the “go-to-market” activities.” – Quote regarding losing touch with the market

Another change that happened in some cases was key employees leaving the company. Key employees with no problems getting a new job opt to leave due to the uncertainty following the acquisition. In some cases the acquiring company gave these employees additional benefits, in order to ensure that they stayed with the company.

Some of the interviewees also experienced an integration process taking more time than expected, and/or was conducted in a less than optimal way. This often led to a period where the target company performed worse than before the acquisition. Another recurring theme in the interviews was increased levels of bureaucracy. Small companies, used to delegate a lot of responsibility to their employees, found themselves with slower response time to customers' inquiries, since they had to implement new procedures of how to react to these situations.

7.2.6 Post-acquisition performance

In most cases the interviewees reported that the owner of the target company was satisfied with the outcome of the acquisition, which in their case was the financial gain from the sale.

Regarding the performance of the company many of the interviewees reported that the synergies expected between the acquirer and the target company was harder to achieve than anticipated. These problems were mostly related to problems with the integration process. The integration process took more time than expected which caused stagnating performance in the acquired company.

Some of the interviewees mentioned that the differences in culture and technology of the two companies were bigger than expected, and made cooperation more difficult, again resulting in lowered performance.

7.2.7 Impact on the industry level

Attributes of the Norwegian IT industry

To fully understand the Norwegian IT industry we asked the interviewees about what special characteristics or attributes this industry has compared to other countries. Many of the interviewees highlighted that we have skilled people who are very apt at developing new technology and applications, which have a lot of potential, but there are few who have managed to take the next step to become a big and possibly an international company.

As mentioned earlier a positive attribute stated in many of the interviews, was that the culture of the Norwegian companies was fairly similar to the culture of companies from USA, Sweden, Denmark, and Finland.

The Norwegian IT industry was described to be an industry with strong engineers and a strong focus on IT with a high degree of advanced expertise, and less of a so called “dot-com” industry. The “dot-com” industry was described as an industry with innovative strategies that does not require particularly advanced technological solutions, such as companies like eBay or Amazon.

The interviewees also highlighted that skilled people are not very expensive in Norway, but less skilled labor on the other hand is expensive. This is most likely because we are a very egalitarian country, which also means that the differences in salary for the most educated and the least educated is relatively lower than in a lot of other countries. It is also relevant to note that this might be both a positive

and a negative fact, since it could mean that the most skilled and educated employees may seek out of the country when they look for jobs, in order to get a higher salary.

“[...] They [the engineers] are good, academically qualified, and have a good understanding of entrepreneurship and the community. We get a lot of output from the engineers we have. Despite this we have a moderate salary level for this kind of positions in Norway. A software engineer in Norway will on average get paid 20-25% less than in USA and Silicon Valley.” – Quote regarding salary level in Norway

Also mentioned was that the Norwegians often had more long lasting working relationships. The employees tend to stick with their employers for longer periods than in other countries.

Challenges in the industry

The challenges were often described to occur in the establishment stage and in the second growth stage. Some of the interviewees explained the growth stages as follow:

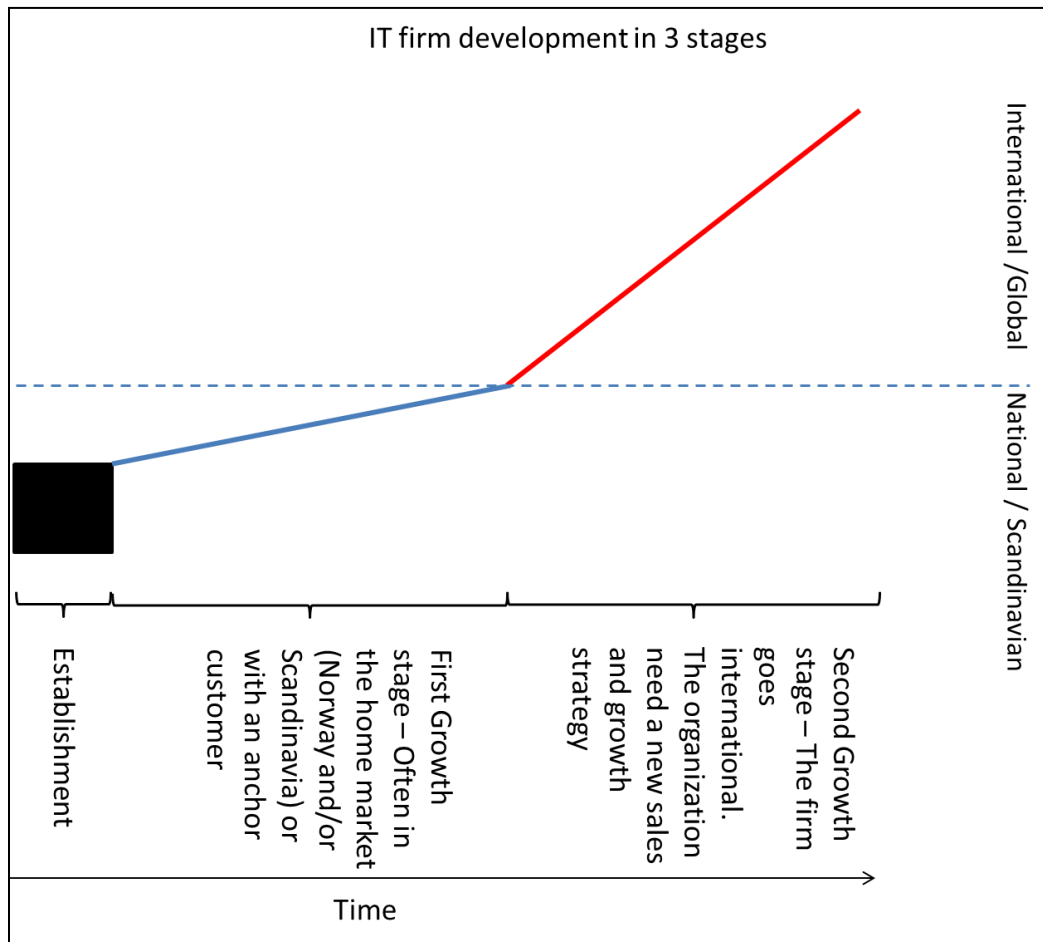


Figure 7.1

Source: Team analysis

The most present challenges mentioned in the industry are access to people, expensive workforce, lack of competence within sales and marketing, lack of access to capital, and the high capital tax.

The lack of well-educated people has been characterized as one of the major challenges for the industry. Some actors announce that this is one of attributes that mutes the potential growth of companies. This has opened up the industry to look abroad to find enough qualified workforce.

Lack of competence and experience within sales and marketing has inhibited Norwegian companies from accessing international markets without help from an

international player. A lot of the interviewees said the industry lacked something (they were not sure what) in order for it to grow past the point where it currently is. The option of selling to an international company seems more attractive and profitable than trying to enter other markets by themselves, since the acquirer has access to international and professional sales and marketing competence. One potential explanation of this problem that was mentioned during our interviews was:

“Who is the first person a founder recruits? It is a person with the same attributes as him/her-self [meaning a person with technical expertise]. Tthis is obviously the wrong move. They need a marketing person.” – Quote from Paul Chaffey – CEO at Abelia

Bill Gates and Steve Ballmer is a perfect example of a tech genius pairing up with a sales and marketing star to make Microsoft the successful company it is today.

One of the major problems mentioned is the access to capital to establish a company or getting established companies to succeed with international market strategies.

“It is more lucrative to invest in oil and gas in Norway. To put the money into a new rig is more lucrative than an IT company with some “black box” you don’t know much about.” – Quote regarding investments in Norway

Since Norway has the big and profitable oil industry, investors do not see the point in investing in IT, or other industries with higher risk, which they have less experience with.

Also mentioned as a challenge for the IT industry is the capital tax. It was said that this forces people to sell their company and reduce the incentives to invest in the industry.

“[...] companies start to become more valuable on paper, but do not create any profit. Then the investor, often the founder, has to pay high taxes on this fortune which he is not able to do. The result is that he/she has to sell the company.” –

Quote regarding taxation

A cultural issue mentioned is the Norwegian attitude towards sales and success.

“[...] it’s ok to be “Reodor Felgen” in Norway, but nobody wants to be “Blodstupmoen”³⁸. It is terrible to sell things, [...] but Norwegians invent something on each street corner.” – Quote regarding attitude towards sales

One last factor that has been mentioned is the Norwegian cultural trait “Janteloven”. “Janteloven” holds that no one man or woman should appear to be better than others. Since the notion of success is a driving force for many entrepreneurs who want to create something new, the culture for not perceiving it as entirely positive will result in less entrepreneurs and consequently fewer opportunities to create new successful companies.

Effects on the Industry

“I think it would be a serious sign of illness if Norwegian IT companies were not acquired by international investors.” – Quote regarding effect of foreign acquisitions

When a company is sold to a foreign company it puts Norwegian technology and competence on the international map. This will in the long run increase the reputation of the Norwegian industry and open up possibilities for other Norwegian actors in the industry.

Often commented by actors being acquired by foreign companies is that the customer and others do not see the company as a foreign company, despite their owners being foreign. They argue that the relevant question is where they are located. Some of the interviewees questioned whether or not a company traded at the stock exchange could be seen as “Norwegian” or not. In reality 37% of the

³⁸ Figures in famous Norwegian stop motion-animated feature film http://en.wikipedia.org/wiki/Pinchcliffe_Grand_Prix - 03.07.2013

owners in the Norwegian stock exchange (July 2013) were foreign investors.³⁹ The foreign investors are as such the largest group of investors on the Norwegian stock exchange, ahead of the Norwegian government with approximately 35%.

“If you look at the owner structure in Norway, you often have to go public. And who is the owner then? It can be a fund in UK. You give away the ownership in these cases too.” – Quote by Dag Johansen, Professor at UiT, about international acquisitions

One factor mentioned many times was that we have good support and funding solutions in Norway, but that it is still possible to focus more on this area and thereby creating an even better and more intense entrepreneurial culture. This again will maintain a stable industry that build up new companies after some others are sold out of Norway. The fact that Norwegian companies are targeted for international acquisitions and that international investors see a potential in Norwegian companies can inspire other entrepreneurs to start companies since the future possibilities for success are good.

To become acquired by a foreign company with good competence is often mentioned as positive for the Norwegian IT industry since it contributes in form of expertise and access to a larger workforce. Since many of the acquiring companies are based in bigger IT industries (such as Silicon Valley), they establish and maintain a good connection between the Norwegian IT industry and the other bigger industries. Ultimately, the Norwegian IT industry can benefit from these connections, in form of expertise, learning, and experience.

Founders reinvesting their money into the IT industry after an acquisition were mentioned as a positive side effect. Either they establish a new company themselves or invest in other companies and help them overcome the biggest challenges with their previous expertise. They spread their expertise as well as going forward as role models for other people who want to establish a company.

³⁹ <http://vpsinfo.manamind.com/sectorstats/stockListsInvestorLists.do?f=p&l=no> – 23.08.2013

Some interviewees mentioned the loss of interesting executive positions, such as strategic management, to the acquiring company. This results in a less interesting industry to enter for highly educated business people.

The result of the offshoring of administrative positions in the IT industry can be that the Norwegian IT industry becomes a “support” or “supply” industry for other bigger IT industries such as the cluster in Silicon Valley. The Norwegian industry will lose its completeness and be more dependent on other countries’ IT industries.

8.0 Discussion

8.1 Industry acquisitions

8.1.1 Buyers’ motives

As we can see from our findings, 34 of the 47 acquisitions had a technological motive (see appendix 1). Consolidation as a motive was found in 8 acquisitions and there was one acquisition where the motive was unclear.

From our interviews we had 6 totally clear motives that were based on access to technology or intellectual property. These are, according to Barney (1986), resource based acquisitions where a company such as Texas Instruments acquiring Chipcom, a smaller company, since they had innovated technology that Texas Instruments needed in their products. Through the acquisition Texas Instruments got access to the intellectual property owned by Chipcom and could take advantage of this in their products (Hoberg and Philips 2010).

Another main motive mentioned was access to markets; here we had two examples in our interviews. According to Harzing (2002) the argument for the acquisition was often that it was faster to get access to the market by acquiring a competitor in the specific market and thereby quickly increasing their market share.

We could clearly find that the main motive, as mentioned above, was technology and access to markets. But if we look at what the company have done post

acquisition, they often take advantage of synergies by making the organization more efficient by e.g. merging sales or administrative tasks in the two companies. According to Chatterjee (1986) operational synergies can often be a motive for acquiring companies. Eliminating a competitor by acquiring a vertically competing company in the same market and thereby gaining more market power can be seen as a second underlying motive (Chatterjee, 1986). By acquiring another company the acquirer also gets access to the target company's customers and if possible they can take out a higher potential from the new customer portfolio (Harzing, 2002).

Until 2013 the "loophole" for multinational companies to withdraw profit from the Norwegian entity and tax the profit in other more beneficial countries could be a positive underlying motive for undertaking an acquisition in Norway⁴⁰. It should be noted however that we do not have any evidence for this happening in the cases that we have looked at.

8.1.2 Sellers' motives

In the interviews it was mentioned six times that the acquisition was undertaken because the owners had received a tempting offer, twice it was mentioned that the opportunity to grow and become an international actor was the deciding factor, and in one case the reason was on a more personal level. As we can see it is clear that the financial motives are the most common for the owners of the acquired companies.

8.1.3 Change in number of employees

We were not able to find any clear pattern in terms of the change in number of employees for the acquired companies. In some instances the target company had a reduction in number of employees after the acquisition, in some they had more, and in some of the instances there was no change at all. From our collected data we were able to calculate that 12 of 23 (52%)⁴¹ of the acquisitions undertaken by foreign investors had increased their numbers of employees after the acquisition. The rest had reduced or held the number of employees steady. This implies that there is no clear pattern of what happened with number of employees after an acquisition.

⁴⁰ <http://www.nrk.no/okonomi/slik-skal-skattehullene-tettes-1.10978080> - 01.07.2013

⁴¹ For more information see appendix 9

As mentioned in 3.3.6, Amess, Girma, and Wright (2008) found that there was a 16% and 22% reduction in the workforce two years after the acquisitions. In our case, the change in the workforce the two years following the acquisitions was on average an increase of 25% followed by a decrease of 10% respectively⁴². This means that the acquiring company hired more people the year after the acquisition, and then made cuts the second year. It should be mentioned here that there is a possibility for some bias in these calculations, based on the fact that some numbers might be missing from the Proff Forvalt database. This could lead to our results being somewhat high. Despite these results being based on a pool of data that is too limited to yield statistical significance, it shows that in the case of the Norwegian IT industry, it is not likely for there to be a significant drop in number of employees following the acquisition.

In some cases where the acquisition of technology or intellectual property is the main motive, the reduction in the workforce seems to be somewhat higher, which is in accordance with the findings of Feys and Manigart (2010). In the case of Nokia's acquisition of Trolltech the reduction in number of employees was as high as 46% (from 228 to 122) the year following the acquisition, whereby it stabilized the year after⁴³. As we can see from the acquisitions in appendix 1 where Finisair acquired Ignis and SAP acquired Maxware, both are cases where the company would be shut down completely without a merge.

One business case we got access to, shows a reduction of employees after an acquisition in the acquired company. The acquired company was integrated and employees in the acquired company had to leave because of more efficient systems. From appendix 11 we can see that the workforce were to be reduced by 42% from 43 to 25 employees. The most radical actions were done in the offices abroad, where a total merger with the acquirer's branches was possible. But also a clear reduction in Norway can be seen. It seemed that the plan was to phase out the services that the targeted company offered, and replace them with the services of the acquiring company.

⁴² See appendix 1 for calculations

⁴³ See appendix 1 for calculations

The cuts we observe here might be expected when the acquirer tries to achieve operational synergies, which was mentioned as a motive in chapter 3.1.3. A normal approach when trying to increase efficiency is to merge administrative and supporting divisions together in order to reduce the number of employees (Chatterjee, 1986). An interesting thing to note however is that next to none of the interviewees reported that operational synergies was a motive for the acquisition.

One example of the increase in number of employees that happen in some cases was KnowIT AB's acquisition of Reaktor. Reaktor experienced an increase of 51% (from 95 to 143) in the year following the acquisition⁴⁴.

This case, among others, shows that acquisitions might also lead to an increase in the workforce due to reorganization. The research departments in the acquired company might become a center of expertise and increase rapidly in size, or access to new distribution channels boost sale and expansions are required. Our finding does not, however, give any clear indication of what factors influence this decision in the acquiring company.

8.1.4 Cultural changes

None of the interviewees mentioned cultural changes as a major challenge or problem post-acquisition. There were some complaints about more reporting, more bureaucracy, and that the acquirers management were demanding in their management style.

We will not take any position regarding the effects of these complains, but these changes are not necessarily negative. Some of these changes will also have a positive effect, and be necessary due to the increased size of the company.

As we can see from figure 7.2 most of the foreign acquisitions have been conducted by companies from Sweden, Denmark, Finland and the US. These countries have many similarities in business culture that make the process of integrating the different cultures somewhat easier (Vecchi and Brennan, 2009). It might also be an explanation of why the integration has been relatively successful in many cases.

⁴⁴ See appendix 1 for calculations

| IMSS IV country | Number of respondents | Power distance | Individualism | Masculinity | Uncertainty |
|--------------------|-----------------------|----------------|---------------|-------------|-------------|
| Argentina | 44 | 46 H | 46 L | 56 H | 86 H |
| Australia | 14 | 39 L | 90 H | 61 H | 51 L |
| Belgium | 32 | 65 H | 75 H | 54 H | 94 H |
| Brazil | 16 | 69 H | 38 L | 49 L | 76 H |
| Canada | 25 | 39 L | 80 H | 52 H | 48 L |
| China | 38 | 80 H | 20 L | 66 H | 30 L |
| Denmark | 36 | 18 L | 74 H | 16 L | 23 L |
| Estonia | 21 | 40 L | 60 L | 30 L | 60 L |
| Germany | 18 | 35 L | 67 H | 66 H | 65 H |
| Greece | 13 | 60 H | 35 L | 57 H | 112 H |
| Hungary | 54 | 46 H | 80 H | 88 H | 82 H |
| Ireland | 15 | 28 L | 70 H | 68 H | 35 L |
| Israel | 20 | 13 L | 54 L | 47 L | 81 H |
| Italy | 45 | 50 H | 76 H | 70 H | 75 H |
| New Zealand | 30 | 22 L | 79 H | 58 H | 49 L |
| The Netherlands | 63 | 38 L | 80 H | 14 L | 53 L |
| Norway | 17 | 31 L | 69 H | 8 L | 50 L |
| Portugal | 10 | 63 H | 27 L | 31 L | 104 H |
| Sweden | 82 | 31 L | 71 H | 5 L | 29 L |
| Turkey | 35 | 66 H | 37 L | 45 L | 85 H |
| UK | 17 | 35 L | 89 H | 66 H | 35 L |
| US | 36 | 40 L | 91 H | 62 H | 46 L |
| Venezuela | 30 | 81 H | 12 L | 73 H | 76 H |
| Total/IMSS average | 711 | 45 | 62 | 50 | 63 |

Note: (L) Low = index score ≤ IMSS average; (H) high = index score > IMSS average

Table A1.
Hofstede's measures of national culture and country classification

Table 8.1

Source: Vecchi and Brennan. 2009

An interesting finding was that the people we interviewed believed that a “programmer is a programmer” or that a developer in one company is very similar to another company’s developers. It was also stated that less changes was done in the R&D departments. This can be a direct indication of developers in the industry being fairly similar, and that differences in cultures are less significant. It was mentioned that a developer is more focused on what he/she is actually doing, such as programming. If he/she is interested in one specific topic it will be more or less irrelevant where he/she is working. This was also confirmed when one of the interview subjects told us that some programmers had quit their job, as a result of the company stopping their operation in a field where these developers found interesting. Cloudt et. al (2005) found that cultural similarities make it easier to integrate companies, and a higher chance for success can be expected.

In some cases differences in the cultures of the sales departments was mentioned. The Norwegian department would then have to be cut, or integrated with the acquiring company to adopt their culture.

None of our interviewees said that the companies were held completely separated. According to Morosini et. al (1998), cultural differences increase the chance for knowledge transfer and learning. Our cases support this finding, especially

regarding transfer from the acquirer to the target company. In three different acquisition cases it was mentioned that a more professional culture was established after the acquisition. They said that the acquirer had managed to bring the Norwegian business to a new level where they had become more professional in everything from sales to R&D, spending and operations.

8.1.5 Changes in the R&D department

As mentioned in our findings we saw two typical cases within the R&D development post-acquisition. (1) A tendency of a slow migration of the R&D operation from Norway, and (2) a higher focus and a development of a “center of expertise” within a specific technology.

Many of our interview subjects stated that there were no significant changes in the number of employees in the technical positions, and there was not reported any cuts in positions in the R&D departments. In some cases the R&D department had become controlled from outside Norway, and if there was an increase within R&D the increase often happened abroad. One of the factors explaining this might be that the access to qualified people in Norway is limited and it will be easier to get access to people in other regions. From our cases we see that this is the result if a company has somewhat “standardized” products without unique and advanced technology. In these cases the organization in Norway often ends up as a sales and operational office.

On the other side we have companies that are more specialized, with top shelf technology. In these cases we see a tendency where they became a center of expertise in their field. Nayyar (1993) explains that the acquisition gives the acquired company the possibility to specialize within one field, without requiring it to handle the whole value chain. This can be seen in cases such as Tandberg (see 6.4.1) becoming the center of expertise for Cisco in videoconference technology, and Fast Search and Transfer (see 6.4.2) becoming Microsoft’s global center of search technology. The similarities in these cases are that they have unique niche technology and expertise.

8.1.6 Structural changes in administrative functions

As we mentioned in our findings the administrative changes were mainly related to increasing efficiency in the supporting divisions of the company. Many of our respondents mentioned an increase in bureaucracy and reporting, often in a negative context in their opinion. Since a common motive for acquisitions is to achieve synergies (Chatterjee, 1986), it is to be expected that there are actions taken in order for the acquiring company to realize such benefits. When a company wants to achieve synergies it is not uncommon to implement new routines and reporting standards, in order to standardize processes. Despite the low number of interviewees mentioning synergies as a motive, actions that reduce redundancies are to be expected.

The other side of an increase in bureaucracy and reporting is that the acquired company will be more professionalized. In small companies with a lot of autonomy these changes might seem controlling and tedious, but they might also be a “necessary evil” in order for the company to grow from a small entrepreneurial company to a large international company.

Another change mentioned in our findings (chapter 7.2.7) was sales and marketing departments being shut down or moved to the acquiring company. In some cases this is linked to the fact that the acquired company is transformed from a company that operates all parts of the value chain to a company that only perform one or two specific parts of the acquirer’s value chain (see chapter 7.2.5 - Strategy). In other cases it seems like the sales division of the acquired company perform sub-par compared to the acquirer. One case showing the opposite is the case of Cisco’s acquisition of Tandberg, where the entire sales department was kept intact because it was seen as one of Tandberg’s success factors (see 6.4.1).

8.1.7 Changes in location

As mentioned in the findings (chapter 7.2.5 - Location) it is fairly normal practice for the acquiring company to either absorb the sales offices of the target company, or just close them down. This is most likely due to the acquiring company already having a distribution network they can utilize when distributing and selling the products of the acquired company.

In addition to the absorption of sales offices, it can be seen as lucrative for international companies to outsource parts of the supporting activities in the acquired companies due to the high cost levels in Norway. One CEO said:

“A Norwegian company running with 10% profit margin with Norwegian employees can reach 30% margin if they are able to move the operation and fire the expensive Norwegian staff.” – Quote regarding benefits of outsourcing

Even though this quote might be a bit exaggerated it exemplifies that foreign acquirers are able to increase the margins if they outsource some of the operation of the acquired company, either to the location of their own HQ or to another low cost country. The following statement from one of our interviewees shows that outsourcing is currently being used to lower the operational costs:

“We moved all the customers that accepted it to Sweden. This was because it is cheaper to operate them from Sweden” – Quote regarding outsourcing

8.1.8 Change in strategy

In industrial acquisition the main change in strategy is that the acquired company loses their independence in this area. Often the Norwegian entity loses the total control of the strategy process.

Pre-acquisition Fast had control over and managed the whole value-chain, but after the acquisition they became one part of Microsoft's value chain.

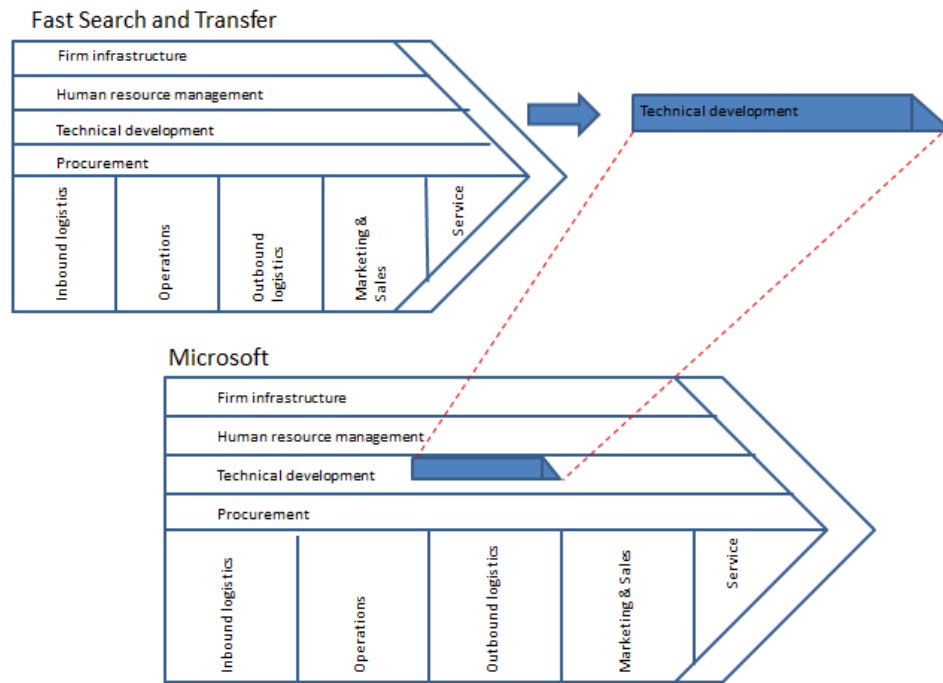


Figure 8.1 Example case

Source: Team analysis

As we see from our example case Fast Search and Transfer (see 6.4.2) becomes a center of expertise in their field, but at the same time a small part of Microsoft's overall strategy and total R&D. Being a small part of another company's value chain will reduce their control of the company, but at the same time increase their core competence in programming and allow them to specialize further.

Grimpe and Hussinger (2007) stated that horizontal acquisition was the most common type of acquisition for companies in the same industry. But in our case study we did not see any clear tendency confirming this statement. Due to a high degree of technological acquisitions of supporting technology of the acquiring company's product or service, these acquisitions are vertical. Vertical acquisition will give the company ownership of intellectual property rights, in addition to better and more reliable access to suppliers, which can increase the performance of the company (Hoberg and Philips, 2010; Williamson, 1971 and Maddigan and Zaima, 1985).

There are also horizontal acquisition where companies acquire other companies to get access to customers, technology only slightly different from their own, or to eliminate competition.

8.1.9 Post-acquisition performance

As mentioned in the findings the managers reported that they were fairly satisfied with the outcome of the acquisition in general. All of the interviewees stated that they were fairly satisfied or very satisfied, with the exception of one.

When we compare the performance between international acquisitions and national acquisitions we find that despite the numbers being good in both cases, national acquisitions seem to perform somewhat better on average. While 59% of the national acquisitions had higher human capital value added, and 71.5% had higher sales figures after the acquisition, international acquisitions resulted in an increase of only 47% and 52% respectively⁴⁵. The results for the international acquisitions are in line with the findings of Schoenberg (2006) who found that between 44% and 56% of all acquisitions are successful, while the results from the national acquisitions are, as we can see, somewhat higher.

One company that we interviewed mentioned that although the overall performance had been good, the first year after the acquisition they had stagnated a bit, both in terms of development and in performance. Another interviewee said that they (the acquired company) were very glad that there were no major changes the first year after the acquisition, since he believed that this would interrupt their operations.

This is not a one sided discussion however, and other interviewees have said the exact opposite, such as:

“In the first months [after the acquisition] one uses the big tools.” – Quote regarding the process after an acquisition

One last point that is worth mentioning is that there is a risk associated with being acquired for the technology and/or intellectual property one possesses. This is linked to the fact that the acquiring company might only be interested in the technology itself, and after having implemented this technology the rest of the

⁴⁵ See chapter 7.1.3

acquired company may be neglected. This might lead to a situation where the knowledge based resources in the target company is destroyed (Graebner, 2004).

One example that comes to mind here is the example of Trolltech. Trolltech was acquired by Nokia in 2008 and was supposed to be an essential piece in the operating systems in Nokia phones. This intention was abandoned some time later when Nokia decided to use Windows operating systems in their phones. In 2012 the former Trolltech, now Qt, was sold to a Finnish company named Digiia, and out of 125 employees that were supposed to transfer to the new organization 36 decided to leave the company⁴⁶.

Even though it is unclear whether or not the knowledge based resources in the company have been “destroyed” in this case, it is clear that the company has stagnated significantly and is not performing at the level it did before the 850 million NOK acquisition by Nokia.

8.2 Private Equity acquisitions

The PE acquisitions we have seen throughout this study have shown to be somewhat less disruptive to the acquired company, than the cases where the buyer is an actor in the same industry as the target.

As we can see from appendix 1 we have 4 international PE acquisitions in Norway in the 10 year period we are focusing on. Of these, Visma and Infocare (both acquired in 2006) show an increase of employees after the acquisition. For the two other cases, Basefarm and Daldata, is it not possible to get exact data since both acquisitions were undertaken in 2012 and the numbers are not available.

As we have mentioned in the findings it seems that a common perception among the interviewees was that PE owners will let the company act more long-term oriented compared to a situation where the company is publicly traded. One interviewee said that a company with strong organic growth was best off as a

⁴⁶ <http://www.digi.no/902499/hodeflukt-etter-qt-oppkjop> - 11.06.2013

publicly traded company, whereas companies that rely on acquisitions are better suited for private ownership. Since PE owners will try to increase the effectiveness in the acquired company (Hitt et al. 1996), it is likely that they will try to use their due-diligence expertise and other skills to achieve this.

PE companies will often require the acquired company to increase the amount of reporting, in order for them to be able to monitor the performance and progress. Some of the interviewees mentioned this as somewhat disruptive, and they did not see the benefits of this practice. This change is in line with what Demaria (2010, pp 87,88, 95-96,99) found to be an increasing trend among PE companies. Even though some might find it disruptive, increased reporting can in some cases lead to better control and ultimately more efficient operations. PE companies will also use incentive schemes, such as increasing the stakes that top management have in the company, which reduces the need for control and align the interests of the manager with the PE company. An example of this is the last PE acquisition in Norway, where Basefarm was acquired by Abry Partners, and the management reinvested parts of their profit from the acquisition⁴⁷.

Despite the fact that PE owners have a somewhat longer perspective than stock owners in general, some of the interviewees mentioned that PE owners increased the focus on activities such as sales, while R&D was down prioritized to some extent.

“ [...] if you are acquired by a private equity company, they will most likely focus on increasing the sales numbers, which will most likely decrease the focus on R&D.” – Quote by Fredrik Syversen in IKT Norge about the differences between industrial and financial acquisitions

The reason for this is most likely twofold: Skills such as sales is more generic than R&D and more likely to be one of the skills that the PE companies are able enhance in acquired company. Increased focus on sales will also boost the short-term profit of the acquired company, increasing the prize PE companies can get for a company some 5-7 years after the acquisition.

⁴⁷ <http://www.dagensit.no/article2519863.ece> - 09.07.2013

In some cases the PE company will use their position on the board of directors to affect the strategy that the target company follows. Strategy, together with sales, is somewhat generic (as opposed to more technical aspects of the operations such as development), and an area where the PE company might have strong capabilities. It was mentioned in some of the interviews that strategic help was appreciated and accepted by the acquired companies, since this is an area they do not have a lot of experience or expertise.

8.3 Impact on the industry

As Morck and Yeung (1992) found, technology was one of the main reasons for international acquisitions. This correlates with our finding that most of the acquisitions we analyzed had a technological motive.

Shan and Song (1997) found evidence for acquisitions of foreign companies being based on country-specific and company-specific technology advantages. One possible advantage could be the “loophole” in the tax law that gave multinational companies the opportunity to transfer profit untaxed from Norway (as mentioned in 3.1.8). Our interviewees did not give us a clear answer to this question. The advantages were found on a company level. Company-specific technology is, as mentioned earlier, often a motive for acquiring a Norwegian company.

8.3.1 Attributes of the industry

A high competence level in the industry was emphasized in the interviews. The percentage of highly educated workers in the IT industry has gone from 48% in 2001 to 51% in 2009. The percentages of people with a master’s degree have gone from 11.7% in 2001 to 14.9% in 2009 (Reve and Sasson, 2012; pp154). A well educated workforce is a good basis for the industry to keep up with the technological development and stay relevant in the future.

Since the Norwegian IT industry is referred to as an engineer strong industry with strong ties to other industries, such as oil and gas, outsourcing can be dangerous since these ties might be affected. The lack of flexibility especially in this part of

the IT industry can be seen as a contributing factor to preserving and developing the Norwegian industry.

Norway is often referred to as a high cost country where doing business overall is expensive. Overall this is probably a correct assumption, but if we go deeper into the problem we see, as mentioned by some of the interview subjects, that engineering positions in Norway has low salaries, compared to e.g. Silicon Valley. In 2012 the average salary in the Norwegian IT industry was between 580,000 NOK and 650,000 NOK⁴⁸. In comparison to the average salary in Silicon Valley, USA was 120,000 USD⁴⁹ (approximately 720,000 NOK⁵⁰).

This is 10% higher than the highest average in Norway, and is a clear indication that Norwegian engineers are less expensive than ones from Silicon Valley.

This is in line with the comment made by Dag Johansen:

“In Silicon Valley, you never know where a person is working the next time you meet him/her. They change companies and employers every 3 months. In Norway we are known for long working relationships”

A workforce that that is less mobile will reduce cost of employment further since companies will have lower recruitment and training costs

8.3.2 Challenges

The main challenges mentioned was access to people, access to capital and lack of expertise within sales and marketing. If we look at the survey done by IKT Norge (appendix 12) we clearly see that access to people and capital are two of the main challenges detected in their survey too. Only one of our interview subjects made a clear statement about not seeing access to capital as a major problem.

⁴⁸ <http://ssb.no/a/kortnavn/lonnikt/tab-2013-01-16-02.html> - 04.07.2013

⁴⁹ <http://www.indeed.com/salary/q-Software-Engineer-l-Silicon-Valley,-CA.html>;
<http://rivierapartners.com/2012/11/08/2012-q3-software-engineering-salaries-silicon-valley/> -
04.07.2013

⁵⁰ Used an exchange rate of 6NOK= 1 USD

Overall in Norway there is a shortage of engineers⁵¹ and this makes it even harder to attract people to the IT industry, since there is high competition from other industries such as oil and gas. Almost no unemployment in these fields is also indicative of not having enough people in Norway to satisfy the industry demand. The only possibility is to attract foreign people or relocate the company to a country with better access to relevant employees. Becoming acquired by a foreign company opens up the possibility of gaining access to a larger workforce, and makes it easier to establish entities abroad.

Access to capital is the other factor that often was mentioned as a major challenge. The access to capital in the start-up stage and in the situation of an international expansion (2nd growth stage, see figure 7.1) was mentioned as the greatest challenges. The interviewees proposed some solutions, which were as follow:

- Financial help in the start-up period – It was broad consensus among the interviewees that there was a strong need for capital for startup companies. This capital could come in the form of governmental arrangements, but most of the people we spoke to wanted more venture capital companies and other financial companies to invest in Norwegian IT startups.
- Regarding the seed funds that will be established in cooperation between the government and industries – The intention is good, but the interviewees were concerned that the initiative only would strengthen the already successful oil and gas industry.
- Change the capital tax to property tax and thereby eliminate the attractiveness to invest in real-estate instead of in businesses.

It was also clearly stated that we in Norway are too small to generate any big companies within the IT industry. We don't have the capital and access to people to manage the second growth stage from Norway. It was suggested that we instead should focus on creating a good foundation for entrepreneurs to start new companies and focus on becoming experts on development of SME and be a provider of new technology.

⁵¹ <http://e24.no/jobb/norge-mangler-10-000-ingenioerer/20328408> - 04.07.2013

An underlying issue often mentioned indirectly was Norwegian IT companies lacking in sales and marketing expertise. The focus on sales seems to be down prioritized and sales positions is not sought after. In Germany the attitude towards sales is completely different. If you are a German “Vertriebler” (sales person), or an American “sales representative” your position will be carry more weight than in Norway.

Looking at the possibilities of studying sales in Norway you will have a hard time finding any studies that will go deeply into this field. Both BI and NHH offer programs in marketing and brand management, and at several other schools you can specialize in marketing on a bachelor level⁵². To our knowledge, there is no school in Norway that offers a clear sales program or a master’s degree in sales. If you want to find these kinds of programs you have to go abroad.

The lack of expertise within sales and marketing might inhibit the industry in succeeding internationally without external support, and make them dependent on international companies with professional sales forces to take the step from being national to international companies. After being acquired Norwegian companies are forced to restructure the sales force, or in some cases use the sales force of the acquiring company.

Solberg (2009) found that successful exporters had only one major factor separating them from unsuccessful exporters. His study showed that *sales technique* was the major difference, and that most companies struggled with lack of this skill (Solberg 2009, 136). This finding support the fact that sales and competence in sales is an essential part of succeeding internationally. Tandberg poses as a good example of a Norwegian company managing to succeed in B2B sales of their products.

Another challenge mentioned is that the capital tax in Norway has a destructive effect on Norwegian ownership in the IT industry. This statement might be somewhat exaggerated, especially since the IT and ICT industry has some

⁵² <http://www.bi.no/masterstudier/>; <http://www.nhh.no/no/studietilbud/bachelor-i-%C3%B8konomi-og-administrasjon.aspx> - 04.07.2013

beneficial regulation regarding capital tax that exclude intangible and intellectual property to a certain degree (sktl §4-2 first subsection letters a to g). Goodwill will not be taken into account in the tax calculation, hereunder comes e.g. developed programs' value (Gjems-Onstad, 2012; pp 342).

The Norwegian culture does not seem to value success as high as other less egalitarian countries. As mentioned in our findings, inventing products is something that we are good at, but capitalizing on these inventions is not our strongest area of expertise. As Dag Johansen mentioned, this culture is perhaps changing with a new generation of young people that are motivated by getting such inventions to the market.

8.3.3 Effects of international acquisitions in the Norwegian IT industry

As mentioned in the findings there are both negative and positive effects of international acquisitions in Norway. International ownership in Norwegian companies will increase the link between the Norwegian industry and other important and large IT industries abroad.

When Norwegian IT founders sell their companies to international investors this can be an inspiration for other Norwegian founders. That these people also reinvest their profit into the IT industry and spread their knowledge makes the Norwegian IT industry stronger and richer. Together with good startup help through governmental organizations, research centers, start-up incubators and funding help, as well as legislation that make it attractive to invest in the industry, this will be a good foundation for creating new IT companies in Norway, further developing the industry and making up for the "losses" to the big international companies.

9.0 Conclusion

In this master thesis we wanted to identify the consequences of foreign acquisitions in the Norwegian IT industry, and the effect they have on the acquired companies and the Norwegian IT industry in general. The paper is based on the following research question:

What strategic and structural changes happen within Norwegian IT companies after they have been acquired by foreign investors?

This question then led to several research objectives in order to ensure that all aspects of the research question were addressed and answered. And a control group was established to compare our findings.

Based on the data we have collected we found that the two types of investors that have acquired Norwegian companies are industrial actors (IT companies) and private equity companies. Industrial acquisitions are by far the larger of the two, and there have only been four private equity acquisitions in the timespan we have studied.

When we compared the development of the companies acquired by industrial actors with the development of companies acquired by PE companies we found some clear differences. Industrial acquisitions led to the acquiring company becoming a small part of the acquirers' strategy, as opposed to the pre-acquisition situation when the company was responsible for all parts of the value chain. This finding coupled with the fact that many acquired companies were managed from the head quarter of the acquiring company meant that in some cases the Norwegian company lost some control and connection to the market. The sale of Norwegian IT companies to foreign investors often led to termination of sales employees, and in some cases leadership positions were taken over by the acquiring company. In some cases the R&D departments of the Norwegian companies were made into a center of expertise in their respective field, which further supports our finding regarding technology being one of the main motives behind the acquisition of Norwegian companies.

In the case of PE acquisitions however we found that the companies retained much more of their autonomy and the control over their own strategic decisions. The PE owners did not make any major changes, aside from some efforts towards increasing the effectiveness, mostly geared towards the administrative parts of the acquired companies.

The dominating motive we found for industrial acquisitions were access to the technology of the Norwegian company. In the case of private equity it is clear that profit was the major motive, which is to be expected. When Norwegian IT companies were not able to expand internationally they began the search for an acquirer to help them achieve this goal. When entering the international market experience is needed and big changes have to be made to adapt to the new market situation. For Norwegian companies this is challenging, and an acquisition is seen as a good alternative.

When comparing the performance of the international acquisitions with the national acquisitions we found that the national acquisitions tend to outperform the former by a fairly small margin. These findings, however, will only serve as an indication since we did not have sufficient data to generalize the findings.

One interesting aspect of the acquisitions that we studied was that cultural differences were reported to be very small, and did not significantly affect the integration processes. This is interesting to note since cultural differences are an important factor in many acquisitions in other industries, and that there have been cases where these differences threaten entire mergers.

If we take a look at the implications of foreign acquisitions in Norway we see that Norwegian IT companies have become more relevant acquisition targets and that the numbers of acquisitions has increased, which can be seen as a good sign for the industry. It shows that the Norwegian IT industry is attractive, up to date with the rest of the industry, and that the Norwegian industry is healthy. When Norwegian companies are acquired by foreign companies it increases the connection with big IT clusters in the world (e.g. Silicon Valley), and gives the Norwegian IT industry opportunities to learn and further develop.

The downside to these acquisitions, as we see them, is leadership positions and strategic development being moved out of Norway. This can make the industry less attractive for well educated people, who might refrain from taking these positions and specializing within IT leadership in Norway. Ultimately this will lead to a situation where we have good engineers and programmers lead by bad management, which will have a negative effect on the development of the industry.

As we discussed earlier the reduced contact with the market can affect the industry, and make the Norwegian IT industry less aware and able to detect and adapt to changes in the market.

The lack of capital for startup-companies and further development of established companies is one of the major challenges in the industry. Established companies are currently circumventing this challenge by looking for acquirers to help with the internationalization process. In cases where the owner of the established company is also the founder, they might contribute by reinvesting the capital they get by selling into startup-companies, and sharing their expertise with these companies. The disadvantage we face here is the low financial incentives to invest in the industry, compared to real-estate. Despite this mitigating factor, the challenge regarding lack of capital still remains.

To focus on developing big international IT companies in Norway might not be the best course of action, since the home market and human resources are too limited. Focusing on becoming an ideal entrepreneurial country for small IT companies is a more realistic goal and would strongly contribute to grow and further strength the industry. In relationship with less expensive, but highly educated employees, strong ties to other Norwegian industries, and long working relationships between employees and companies, the industry is well positioned for further development.

Our suggestions for developing and making the IT industry even more attractive are:

- Focus governmental and other support at companies in the start-up stage.
Make the Norwegian IT industry into a hotspot for new technology and

development. Develop good financial support programs and facilitate for more venture capital funds in Norway.

- Change the tax system to make investing in the IT industry more attractive, compared to alternatives such as real-estate. This will increase the incentives for investing in business and thus make capital more accessible for start-ups and growing companies.

The major challenge we found throughout this study was lack of capital and the inability of Norwegian companies to grow without the competence and support of international acquirers. We found that Norwegian IT industry has its strength in developing technology and is highly competent in this field. The Norwegian companies could benefit from developing their sales competence, and more aggressively selling their products internationally. If we look back at Steve Jobs, he was not only an excellent computer engineers but also a very good salesperson.

During our work on this thesis we have found the changes that happen in Norwegian companies acquired by foreign companies to be less problematic than initially expected. We consider international acquisitions to be necessary for Norwegian companies wanting to develop their operations further and become international companies. If international acquisitions are an integral part of the Norwegian IT industry it is important to focus on, and further improve, the conditions for startup companies, enabling them to create new and innovative products and services.

9.1 Limitations

There are several limitations that should be addressed in this paper:

- The sampling of acquisitions, both national and international, are mostly done by using the internet, articles and press releases, and the acquisitions reported to the Competition Authority. This means that it is possible that we may have overlooked some acquisition cases.
- There is lack of data (financial information) for all acquisition cases. This makes our calculations less significant since we were missing numbers for

several acquisitions. Additionally the financial numbers we have gathered from proff.no might not be 100% accurate.

- Most of our interviews were with CEO's or former CEO's of the respective companies, and as such there will most likely be some degree of bias since leaders may want to portray a positive image of the acquisition.
- There is a possibility that the interview subjects have withheld or embellished information in the interviews, which might have affected their answers.
- The calculations done in our thesis are not statistically significant, since our sample size is too small due to lack of data.
- Due to characteristics of our data set, we were not able to calculate accumulated sales, leading to a possible bias in our performance calculations.
- This is a case study and as such cannot be generalized for other IT industries or other industries.
- We have interviewed approximately 25% of the companies which means that there might be some issues that have not been mentioned in the interviews we have conducted.

9.2 Suggestions for further research

One suggestion for further research based on our thesis would be to go deeper into the issue of measuring the performance of the acquisition. This has been a point in our thesis that we have considered to be very interesting, but we have been unable to go deeper into this subject, since some of the acquisitions happened too recently for the necessary data to determine post-acquisition performance were available. And in some cases we have not been able to gather the needed data with the sources we have used.

The issue of choice of performance measurement could be evaluated. It could be interesting to see if different measurements had an impact on the number of successful acquisitions.

Also the possibility to make a more quantitative analysis of international acquisitions would be interesting. This would open up a possibility to test more factors around the acquisition and make it possible to find some significant

characteristics. Perhaps it would be possible to find success factors for successful international acquisition through the use of a more quantitative approach.

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Appendix

Appendix 1: List of foreign acquisitions

Acquisitions done by foreign investors in the Norwegian IT industry in the period 2003-2013

| code | Date | Acquiring firm | Acquired firm | Type of Comp | Country | Type of acquisition | Sector | Price millions |
|------|------|---|-------------------------|--------------|-------------|---------------------|--------------------|----------------|
| | 2010 | 3 Step It Group Oy/Leasebroker Holding AS | Fortis Lease Norway AS | AS | Finland | Consolidation | 77.330 | |
| | 2008 | Basware AS | Contempus AS | AS | Finland | Technology | | 85? |
| | 2008 | Logica Norge AS | Aureus Data AS | AS | Canada | Consolidation | | |
| | 2011 | Lumesse Holding AS | Edvantage Group AS | AS | UK | Technology | | |
| | 2012 | Micros Fidelio Norway AS | Torex Retail AS | AS | USA | Technology | | |
| | 2011 | UNIT4 Business Software Holding BV | Exie AS | AS | Netherlands | Technology | 62.010 | |
| | 2012 | Addnode AB | CAD Teknisk Hagesund AS | AS | Sweden | Technology | 58.290 | |
| | 2011 | EG A/S | ADB Team Norge AS | AS | Denmark | Technology | | |
| | 2011 | EG A/S | ASP AS | AS | Denmark | Technology | | |
| | 2012 | EG AS | NaviCom AS | AS | Denmark | Technology | Technology/Service | |
| | 2010 | Know IT AB | Reaktor AS | AS | Sweden | Technology | 62.010 | |
| | 2010 | Lagercrantz Group AB | Leteng AS | AS | Sweden | Consolidation | 46.52 | |

| | | | | | | | |
|------|--------------------------------|------------------------|--------|---------|--------------------------|------------|-------------|
| 2009 | Bluestar | ADC NORDIC | AS | USA | Consolidation | 46.51 | |
| 2012 | Abry Partners | Basefarm | AS | USA | PE | Technology | 700 |
| 2007 | JCE Group AB | Captura | ASA | Sweden | Technology | | 210 |
| 2007 | DIBS | Cardia | AS | Denmark | Technology | | 19,7 |
| 2006 | Texas Instruments | Chipcon | ASA/AS | USA | Technology | | 1,36?? |
| 2007 | Affecto Oyj | Component Software | ASA | Finland | Technology | | |
| 2012 | Via Venture Partners | Daidata | AS | Denmark | PE | | |
| 2009 | EG | Energyfront | AS | Denmark | Technology | | |
| 2008 | Microsoft | Fast Search & Transfer | ASA | USA | Technology | Technology | 6,6 mrd NOK |
| 2010 | Davoteam | Fornebu Consulting | AS | France | Consolidation | Service | |
| 2008 | Longman Group Limited/ Pearson | Frontier | AS | UK | Technology | Technology | 150 |
| 2005 | Køgun | Hands | AS | Iceland | Consolidation | | |
| 2011 | Finisar | Ignis | AS | USA | Technology | | 425 |
| 2006 | J.V. Capman and Segulah | InfoCare | AS | Finland | PE | | |
| 2008 | Jeeves Information Systems AB | LogIT Gruppen | AS | Sweden | Technology/consolidation | | |
| 2011 | Visma | Mamut | AS | USA | Consolidation | Technology | 782 |
| 2007 | SAP | Maxware | AS | Germany | Technology | | |

| | | | | | | | |
|------|---------------------------------|-----------------------------|-----|-------------|---------------|--------------|--|
| 2012 | Hexago AB | My Virtual Reality Software | AS | Sweden | Technology | | |
| 2007 | Bacou-Dalloz/Sperian Protection | Nacre | AS | USA | Technology | 25 m US | |
| 2012 | Brady plc | Navita Systems | AS | UK | Technology | 160 | |
| 2011 | Ceragon Networks | Nera Networks | AS | USA | Technology | 284 | |
| 2006 | Thrane & Thrane | Nera Satcom | AS | Denmark | Technology | | |
| 2007 | NTI/CADcenter Gruppen | Nestor | AS | Denmark | Technology | | |
| 2012 | Dustin Group AB | Norsk Data Senter | AS | USA | Consolidation | | |
| 2010 | Logitech | Paracial | AS | Switzerland | Technology | ? | |
| 2009 | Electronics Arts | Playfish | | USA | Technology | 2.4 | |
| 2008 | Compugroup | Profdoc | ASA | Germany | Technology | 795 | |
| 2003 | Infineon Technologies AG | Sensoror | AS | Germany | Technology | | |
| 2011 | Nokia | Smarterphone | AS | Finland | Technology | | |
| 2010 | Cisco | Tandberg | ASA | USA | Technology | 17,2 Mrd NOK | |
| 2007 | Ericsson | Tandberg Television | ASA | Sweden | Technology | 8,626 | |
| 2008 | Nokia | Trolltech | AS | Finland | Technology | 780 4,3 | |
| 2006 | HG Capital | Visma | AS | UK | PE | mrd NOK | |
| 2006 | ARM | Falanx | AS | UK | Technology | | |
| 2008 | Redpill | Linpro | AS | Sweden | Technology | | |

Appendix 2: Norwegian Acquisitions**Norwegian acquisitions in the period 2003-2012**

| code | Date | Acquiring firm | Acquired firm | Type of Com | Type of acquisition | Price millions |
|------|------------|---|--------------------------------|-------------|---------------------|----------------|
| | 21.11.2012 | Kongsberg Oil & Gas Technologies AS | Advali AS | AS | | |
| | 11.10.2012 | Inmeta Crayon AS | Norske Systemarkitekter AS | AS | | |
| | 14.09.2012 | Netshop AS | Hattelco AS | AS | | |
| | 11.07.2012 | Tekågel Invest AS | Abax AS | AS | | |
| | 01.06.2012 | Hjelp24 AS | HMS Kontoret AS | AS | | |
| | 23.05.2012 | Sharecat Holding AS (Borea Opportunity II AS) | Sharecat Solutions AS | AS | | |
| | 29.03.2012 | Maritech Systems AS | Timpex AS | AS | | |
| | 12.03.2012 | EDB Ergogroup | Pragma AS | AS | | |
| | 12.03.2012 | EDB Ergogroup | Pragma Drift AS | AS | | |
| | 11.01.2012 | Cegal Holding AS | Unitron AS | AS | | |
| | 22.12.2011 | Inceptum 592 AS | Easy Park AS | AS | | |
| | 12.12.2011 | Metallic Invest AS | Inmeta Crayon ASA | ASA | | |
| | 22.11.2011 | DigiSys AS | Multidata AS | AS | | |
| | 22.11.2011 | Funn IT AS | IT Partner Bodø AS | AS | Consolidation | |
| | 25.08.2011 | Braathe Gruppen AS | EDB ErgoGroup 13 AS | AS | | |
| | 23.08.2011 | Onsoft Computer Systems AS | Emisoft AS | AS | Technology | |
| | 18.08.2011 | Merit Globe AS | Capesso AS | AS | Consolidation | |
| | 15.06.2011 | Inmeta Crayon ASA | Workplace Consulting AS | AS | Consolidation | |
| | 03.06.2011 | Symfoni Software AS | Rubik Solutions Group AS | AS | | |
| | 05.05.2011 | Norsk Data Senter AS | Cirek AS | AS | | |
| | 29.04.2011 | Det Norske Veritas AS | Synergi Solutions AS | AS | | |
| | 13.04.2011 | Client Computing Europe AS | Compello Software AS | AS | | |
| | 11.04.2011 | Reiten & Co Capital Partners VII L.P | Webstep Holding AS | AS | | |
| | 09.02.2011 | Noratron AS | Elektronix AS | AS | | |
| | 27.01.2011 | Elis Holding AS | Popkorn AS | AS | | |
| | 22.12.2010 | Tekågel Invest 525 AS (Cegal Holding AS) | Cegal AS | AS | | |
| | 07.12.2010 | Abax AS | Electronic Tracking Systems AS | AS | | |

| | | | | | | |
|--|------------|---|--------------------------|-----|---------------|----------|
| | 30.11.2010 | Inmeta ASA | Crayon Group AS | AS | | |
| | 29.11.2010 | Elliott Holding AS | EET Nordic Group AS | AS | | |
| | 15.07.2010 | Embriq Holding AS | Integrate AS | AS | | |
| | 22.06.2010 | Inmeta ASA | Visiti AS | AS | | |
| | 03.06.2010 | AVEVA AS | ADB Systemer AS | AS | | |
| | 26.11.2009 | Reiten & Co Capital partners VII L.P. | Basefarm AS | AS | PE | |
| | 17.08.2009 | Inmeta ASA | Structurum AS | AS | | |
| | 09.07.2009 | Office Center AS | Aage MAS | AS | | |
| | 03.07.2009 | Amentio Holding AS | Datakjeden AS | AS | Consolidation | |
| | 03.07.2009 | Amesto Solutions Holding AS | Exense Software AS | AS | | |
| | 19.05.2009 | Arendals Fossekompagni ASA | Powel ASA | ASA | | |
| | 10.12.2008 | Borea Opportunity IV AS | Software Innovation ASA | ASA | | |
| | 07.11.2008 | Canica Invest AS | Komplett ASA | ASA | PE | |
| | 25.06.2008 | Inmeta ASA | Exense Consulting ASA | AS | | |
| | 19.05.2008 | Umoe IKT AS | iTet AS | AS | | |
| | 07.04.2008 | Visma Norge Holding AS | Notus Systems AS | AS | Consolidation | |
| | 27.03.2008 | Mamut | Klubbenonline | AS | | |
| | 13.02.2008 | Proact IT | Xperion | AS | | |
| | 23.01.2008 | Ementor AS | Tomato AS | AS | | |
| | 09.01.2008 | EDB Business Partner ASA | IS Partner AS | ASA | | |
| | 07.11.2007 | Creuna AS | Cobra AS | AS | | |
| | 18.10.2007 | Ementor Norge AS | Fønix Data AS | AS | | |
| | 19.09.2007 | ErgoGroup | BEKK Consulting AS | AS | Consolidation | 285 mill |
| | 29.08.2007 | Komplett ASA | Torp Computing Group ASA | | Consolidation | |
| | 05.07.2007 | Fast Search & Transfer ASA | bWise AS | ASA | Technology | |
| | 26.06.2007 | Bouvet ASA | Nordic Integrator | AS | Technology | |
| | 01.06.2007 | Daldata Oslo AS | Sarepta Software AS | | Technology | 7 mill |
| | 31.05.2007 | Telecomputing | Cegal | AS | Consolidation | 15 mill |
| | 31.05.2007 | Telecomputing | IT Arkitekten | AS | Consolidation | 21 mill |
| | 02.05.2007 | BitBuy Data AS | ASC Din Datapartner | AS | Consolidation | |
| | 01.04.2007 | Peritus AS | Andersen | AS | Consolidation | |
| | 12.01.2007 | Component Software Group ASA | Business Logic | AS | Consolidation | |
| | 2006 | Basefarm | Telecomputing IS AS | AS | Consolidation | |
| | 2006 | EMMA EDB | AvansIT | AS | Technology | |
| | 2007 | Bouvet ASA | Ontopia | AS | Consolidation | 26 mill |
| | 2009 | Ole Holding/FSN Capital III Limited Partnership | Norman | ASA | PE | 274,4 |

| | | | | | | |
|--|------|------------|-------------------------|-----|--|------------|
| | 2003 | Ementor | Nordic Voice Competence | AS | | |
| | 2007 | Atea ASA | Tre65 | AS | | 111 mill |
| | 2008 | Atea ASA | Kongsberg Systec | AS | | |
| | 2009 | Atea ASA | Uni Networks | AS | | 2,9 mill |
| | 2010 | Atea ASA | Dropzone | ASA | | 21,5 mill |
| | 2010 | Atea ASA | Umoe IKT | AS | | 155 mill |
| | 2006 | EDB | Avenir | AS | | 100,5 mill |
| | 2005 | EDB | Tag systems | AS | | 300 mill |
| | 2006 | EDB | STI | AS | | 12 mill |
| | 2006 | EDB | Spring | AS | | 259,5 mill |
| | 2008 | EDB | IS partner | AS | | 1192 mill |
| | 2005 | Ergo Group | Serve | ASA | | 30 mill |
| | 2005 | Ergo Group | Løsningsarkitektene | AS | | 8 mill |
| | 2005 | Ergo Group | Alliance | ASA | | 912 mill |
| | 2006 | Ergo Group | ConCentric | AS | | |
| | 2006 | Ergo Group | NorCargo Data | AS | | |

Appendix 3: KPI calculation

KPI Calculation

KPI = 2011

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 119,96 | 118,44 | 115,6 | 115,09 | 113,29 | 110,79 | 109,95 | 105,93 | 103,74 | 101,24 | 100 |
| | 1,1996 | 1,1844 | 1,156 | 1,1509 | 1,1329 | 1,1079 | 1,0995 | 1,0593 | 1,0374 | 1,0124 | 1 |
| | | 1,28 % | 2,46 % | 0,44 % | 1,59 % | 2,26 % | 0,76 % | 3,79 % | 2,11 % | 2,47 % | 1,24 % |

Average 1,84 %

| Average growth in the marked | |
|--|-----|
| Average yearly sales growth | 8 % |
| Average yearly growth in Human capital value added | 2 % |

| | |
|---|--------|
| Average sales growth (KPI and yearly market growth) | 9,84 % |
| Average HCAV growth (KPI and yearly market growth) | 3,84 % |

<http://www.ssb.no/priser-og-prisindekser/statistikker/kpi/maaned/2013-05-10?fane=tabell#content>

Appendix 4: Human capital value added calculations foreign acquisitions

Human Capital Value Added calculation

Konkuransesitzynet
Articles/ Internet

*Adjusted for KPI to acquisition year

| Code | Date | Acquiring firm | Acquired firm | Type of Comm. | Type of acquisition | Price in millions | Org. Number | HCVA 2 years before | HCVA 1 year before | HCVA acq. Ye | HCAV 1 year after | HCVA 2 years after | HCVA 3 years after | Average HCVA before acq. | Average HCVA after acq. | Performance |
|------|------------|--------------------------------------|--------------------------------|---------------|---------------------|-------------------|-------------|---------------------|--------------------|--------------|-------------------|--------------------|--------------------|--------------------------|-------------------------|-------------|
| | 07.12.2010 | Abav AS | Electronic Tracking Systems AS | AS | AS | | | -405 | 658 | 1219 | 752 | | | 127 | 752 | 1 |
| | 30.11.2010 | Inmeta ASA | Crayon Group AS | AS | AS | | | 311 | 1176 | 866 | 952 | | | 1044 | 952 | 0 |
| | 22.06.2010 | Inmeta ASA | Visit AS | AS | AS | | | 1073 | 1035 | 905 | 1099 | | | 1054 | 1099 | 1 |
| | 14.06.2010 | Inmeta ASA | Deire Data Holding AS | AS | AS | | | 895 | 864 | 2769 | 1018 | 1126 | | 879 | 1072 | 1 |
| | 11.06.2010 | EDB Business Partner ASA | Ergo Group AS | AS | AS | | | 1036 | 1001 | 912 | 891 | 660 | | 1019 | 775 | 0 |
| | 03.06.2010 | AVEVA AS | ADB System AS | AS | AS | | | 1155 | 955 | 1001 | 971 | 1059 | | 1055 | 1015 | 0 |
| | 12.05.2010 | Atas AS | Diozone ASA | ASA | ASA | | | 473 | 537 | 423 | 656 | 519 | | 535 | 588 | 1 |
| | 04.12.2009 | Guard Holding AS | Guard Systems Engineering AS | AS | AS | | | 402 | 1152 | 925 | 851 | 2720 | | 777 | 1785 | 1 |
| | 26.11.2009 | Reiten & Co Capital partners WILL P. | Baselair AS | AS | PE | | | 479 | 849 | 787 | 718 | 873 | | 664 | 796 | 1 |
| | 17.08.2009 | Inmeta ASA | Strukturum AS | AS | AS | | 977302390 | 428 | 594 | 643 | 408 | 863 | 883 | 511 | 718 | 1 |
| | 09.07.2009 | Office Center AS | Aage M AS | AS | AS | | 963130740 | 638 | 448 | 390 | 573 | 626 | | 543 | 641 | 1 |
| | 03.07.2009 | Ameritio Holding AS | DataKlied AS | AS | Consolidatio | | | 538 | 601 | 443 | 529 | 555 | 526 | 569 | 537 | 0 |
| | 03.07.2009 | Amesto Solutions Holding AS | Exense Software AS | AS | AS | | 886191782 | 791 | 761 | 734 | 859 | 885 | 925 | 776 | 889 | 1 |
| | 19.05.2009 | Arendals Fossekompagni ASA | Powel ASA | ASA | ASA | | | 997 | 1167 | 1196 | 1185 | 1267 | 1360 | 1082 | 1277 | 1 |
| | 07.11.2008 | Carica Invest AS | Komplet ASA | AS | AS | | 982410339 | 995 | 808 | 821 | 688 | 634 | 639 | 901 | 674 | 0 |
| | 07.04.2008 | Visma Norge Holding AS | Motus Systems AS | AS | AS | | | 647 | 662 | 469 | 418 | 613 | 596 | 654 | 542 | 0 |
| | 23.01.2008 | Emmentor AS | Tomato AS | AS | AS | | | 2498 | -1565 | -4682 | | | | 466 | | 1 |
| | 09.01.2008 | EDB Business Partner ASA | IS Partner AS | ASA | ASA | | 933012867 | 4300 | 549 | 622 | 672 | 773 | 696 | 489 | 714 | 1 |
| | 16.10.2007 | Emmentor Norge AS | Femik Data AS | AS | AS | 15 mill | | 781 | 956 | 1044 | 925 | 894 | 814 | 869 | 878 | 1 |
| | 31.05.2007 | Telecomputing | Legal | AS | Consolidatio | | | 445 | 326 | 1581 | -125 | -192 | -116 | 386 | -144 | 0 |
| | 02.05.2007 | BitBuy Data AS | ASC Din Datapartner | AS | Consolidatio | | | 872 | 1042 | 1201 | 745 | 663 | | 957 | 704 | 0 |
| | 01.04.2007 | Peritus AS | Andorsen | AS | Consolidatio | | | | | | | | | | | 0 |

Appendix 5: Sales performance foreign acquisitions

Acquisitions done by foreign investors in the Norwegian IT industry in the period 2003-2013

| Code | Date | Acquiring firm | Acquired firm | Type of Cd | Country | Type of acquisition | Org. Number | Sales 2 years before | Sales 1 years before | Sales acquisition | Sales 1 year after | Sales 2 year after | Sales 3 year after | Average before | Average after | Perf. mand. |
|------|------------|---------------------------------|------------------------|------------|---------------------|---------------------------|-------------|----------------------|----------------------|-------------------|--------------------|--------------------|--------------------|----------------|---------------|-------------|
| | | | | | | | | | | | | | | | | |
| | 03.02.2010 | 3 Step It Group Oyj/Learsteiner | Ferit Lease Norway AS | AS | Finland/Norway?? | Generalization | | | | | 48907 | 48066 | | 41282 | 48487 | 1 |
| | 05.09.2008 | Bazuno AS | Contempur AS | AS | Finland | Technology | 923829644 | 74495 | 72915 | 71935 | 107520 | 91401 | 80374 | 75082 | 93198 | 1 |
| | 17.09.2008 | Leasys Norge AS | Arcor Data AS | AS | Canada | Generalization | 919562390 | 396721 | 820653 | 978191 | 935221 | 793591 | 721285 | 339974 | 816732 | 1 |
| | 21.04.2010 | Knauf IT AB | Reaktor AS | AS | Sweden | Generalization | | | | | 156280 | | | 131656 | 156280 | 1 |
| | 02.07.2010 | Laperevents Group AB | Livnet AS | AS | Sweden | Generalization | | | | | 69001 | 5926 | | 66770 | 60464 | 0 |
| | 2009 | Bluetar | ADC NORDIC | AS | ? | Technology ?? | | | | | 15345 | 16636 | | 20736 | 16016 | 0 |
| | 2007 | JCE Group AB | Captura | ASA | Sweden | | | | | | 84540 | 86764 | 54280 | 232319 | 75201 | 0 |
| | 2007 | DIES | Cardia | AS | Scandinavian | Generalization | 989509750 | | 315 | 1389 | 10831 | 10831 | 12758 | 3339 | 11132 | 1 |
| | 2006 | Tosar Instrumenter | Chipsan | AS/AS | USA | Technology | | | | | 240471 | 247249 | 146954 | 211754 | 218558 | 0 |
| | 2007 | Affecta Oyj | Component Software | ASA | Finland | Generalization | 987166620 | 12361 | 126778 | 161463 | 162248 | 149999 | 158729 | 226078 | 158994 | 0 |
| | 2009 | EG | Energyfront | AS | Denmark | Generalization | | | | | 59558 | 67151 | | 35657 | 64654 | 1 |
| | 2008 | Micrafit | Fart Search & Transfer | ASA | USA | Technology | 959642824 | 50657 | 52007 | 44864 | 429117 | 204164 | 167092 | 536997 | 300124 | 0 |
| | 2010 | Devoteam | Farnoka Consulting | AS | France | Generalization | | | | | 68702 | | | 89774 | 63702 | 0 |
| | 2008 | Lanqam Group Limited | Franker | AS | England | Generalization | | | | | 129525 | 134919 | 142071 | 72317 | 135505 | 1 |
| | 2005 | Kaapu | Handi | AS | Iceland | Generalization | | | | | 160000 | 150110 | 139486 | 160255 | 149885 | 0 |
| | 2011 | Finur | Imir | AS | USA | Technology | | | | | 0 | | | 260384,85 | 0 | 0 |
| | 2006 | JVC, Capman and Sequah | InfCono | AS | Finland/Switzerland | PE | | | | | 1226241 | 1457942 | 1305019 | 461162 | 1329724 | 1 |
| | 2008 | Josoo Information Systems AB | Legit Gruppen | AS | Sweden | Generalization | | | | | 30552 | 31083 | 26200 | 5917 | 29312 | 1 |
| | 2007 | SAP | Massare | AS | Germany | Technology/Generalization | | | | | 0 | 0 | | 28423,962 | 0 | 0 |
| | 2007 | Escon Dallas | Nesro | AS | USA | Technology | | | | | 192104 | 57456 | 22657 | 10045 | 87406 | 1 |
| | 2006 | Throne & Throne | Nera Saksam | AS | Denmark | ? | | | | | 338634 | 73736 | 62127 | 509601 | 158166 | 0 |
| | 2007 | NTICADcenter Gruppen | Norstar | AS | Denmark | | | | | | 63209 | 49203 | 48008 | 62684 | 53506 | 0 |
| | 2010 | Leqtech | Paradial | AS | Denish | | | | | | 117 | | | 8376 | 117 | 0 |
| | 2009 | Electronic Arts | Playfish | AS | Switzerland | Technology | | | | | 9171 | | | 4677 | 9171 | 1 |
| | 2008 | CompuGroup | Profidac | ASA | Germany | Generalization | | | | | 10832 | 13545 | 6714 | 302512 | 10357 | 0 |
| | 2003 | Infinet Technology AG | Sonaren | AS | Germany | Generalization | | | | | 467689 | 367562 | 285416 | 39800 | 373556 | 1 |
| | 2007 | Erizzen | Tandberg Television | ASA | Sweden | Technology | | | | | 1621 | 0 | 0 | 1319672 | 540 | 0 |
| | 2008 | Nokia | Trailtech | AS | Finland | Technology | | | | | 89378 | 139154 | 131764 | 141391 | 146252 | 1 |
| | 2010 | Kahlberg Group Roberts | Virma | AS | USA | PE | | | | | 2479236 | 2524337 | 2551630 | 2051630 | 10172891 | 1 |
| | 2006 | ARM | Falans | AS | United Kingdom | Technology | | | | | 29857 | 34022 | 31197 | 6528 | 31692 | 1 |
| | 2008 | Redpill | Lingre | AS | Sweden | Generalization | | | | | 101748 | 97376 | 166410 | 76079 | 121845 | 1 |

XYZ adjusted to the acquisition year with a average X/Y and the average market growth

Appendix 6: Human capital value added calculation - national acquisitions

Human Capital Value Added calculation

Konkurrenztätigkeit
Articles/ Internet

*Adjusted for RPA acquisition year

| Code | Date | Acquiring firm | Acquired firm | Type of Comp. | Type of acquisition | Price min. | Org. Number | HCVA 2 years before | HCVA year before | HCVA acq. Year | HCAV 1 year after | HCVA 2 years after | HCVA 3 years after | Average HCVA before | Average HCVA after | Performance |
|------|------------|-------------------------------------|-------------------------------|---------------|---------------------|------------|-------------|---------------------|------------------|----------------|-------------------|--------------------|--------------------|---------------------|--------------------|-------------|
| | 07.12.2010 | Abax AS | Electronic Trading Systems AS | AS | | | | -405 | 658 | 1219 | 752 | | | 127 | 752 | 1 |
| | 30.11.2010 | Immeta ASA | Crayon Group AS | AS | | | | 311 | 1116 | 366 | 352 | | | 1044 | 952 | 0 |
| | 22.06.2010 | Immeta ASA | Visitr AS | AS | | | | 1073 | 1035 | 305 | 1039 | | | 1054 | 1039 | 1 |
| | 14.06.2010 | Immeta ASA | Omni Data Holding AS | AS | | | | 895 | 864 | 2763 | 1018 | 1126 | | 879 | 1072 | 1 |
| | 11.06.2010 | EDB Business Partner ASA | ErgoGroup AS | AS | | | | 1036 | 1001 | 312 | 831 | 660 | | 1019 | 775 | 0 |
| | 03.06.2010 | AVEVA AS | ADE System AS | AS | | | | 1155 | 955 | 1001 | 371 | 1059 | | 1055 | 1015 | 0 |
| | 12.05.2010 | Abax AS | Dropzone ASA | ASA | | | | 473 | 537 | 423 | 656 | 519 | | 535 | 588 | 1 |
| | 04.12.2009 | Guard Holding AS | Guard Systems Engineering AS | AS | | | | 402 | 152 | 325 | 851 | 2720 | | 777 | 1785 | 1 |
| | 26.11.2009 | Rakten & Co Capital partners VII LP | Buzform AS | AS | PE | | | 479 | 843 | 787 | 718 | 873 | | 664 | 796 | 1 |
| | 17.08.2009 | Immeta ASA | Structum AS | AS | | | | 428 | 534 | 643 | 408 | 863 | 863 | 511 | 718 | 1 |
| | 03.07.2009 | Offices Center AS | Avge IM AS | AS | | | | 638 | 448 | 380 | 573 | 626 | 723 | 543 | 641 | 1 |
| | 03.07.2009 | Amestio Holding AS | Databjodan AS | AS | Consolidation | | | 538 | 601 | 443 | 539 | 555 | 526 | 569 | 537 | 0 |
| | 03.07.2009 | Amestio Solutions Holding AS | Excense Software AS | AS | | | | 791 | 761 | 734 | 859 | 885 | 385 | 776 | 869 | 0 |
| | 19.05.2009 | Arendsliz Fosekempant ASA | Powal ASA | ASA | | | | 997 | 1167 | 1196 | 1185 | 1267 | 1380 | 1062 | 1277 | 1 |
| | 07.11.2008 | Canica Invest AS | Komplatt ASA | ASA | | | | 395 | 808 | 821 | 688 | 634 | 639 | 901 | 674 | 1 |
| | 07.04.2008 | Visma Merce Holding AS | Notus Systems AS | AS | | | | 647 | 662 | 469 | 418 | 613 | 536 | 654 | 542 | 0 |
| | 23.01.2008 | Ementor AS | Tomato AS | AS | | | | 2436 | -1565 | -4682 | | | | 466 | 466 | 1 |
| | 03.01.2008 | EDB Business Partner ASA | IS Partner AS | ASA | | | | 430 | 549 | 662 | 672 | 773 | 636 | 469 | 714 | 1 |
| | 18.10.2007 | Ementor Merce AS | Fenix Data AS | AS | | | | 781 | 366 | 1044 | 325 | 834 | 814 | 869 | 878 | 1 |
| | 31.05.2007 | Telecomping | Cogal | AS | Consolidation | 15 mill | | 445 | 326 | 1581 | -125 | -192 | -116 | 386 | -144 | 0 |
| | 02.05.2007 | BitBuy Data AS | ASC Din Davospartner | AS | Consolidation | | | 872 | 1042 | 1201 | 745 | 663 | | 957 | 704 | 0 |
| | 01.04.2007 | Perfus AS | Anderson | AS | Consolidation | | | | | | | | | | | 0 |

Appendix 7: Sales performance national acquisitions

Sales performance

Konkuransettilyynet
Articles/ Internet

**KPI adjusted to the acquisition year with a average KPI and the average market growth*

| Code | Date | Acquiring firm | Acquired firm | Type of p. | Type of acquisition | Price milli | Org. Number | Sales 2 years before acq. | Sales 1 years before acq. | Sales acquisition n year | Sales 1 year after acq. | Sales 2 year after acq. | Sales 3 year after acq. | Average sales before | Average sales after | Performance |
|------|------------|-------------------------------------|--------------------------------|------------|---------------------|-------------|-------------|---------------------------|---------------------------|--------------------------|-------------------------|-------------------------|-------------------------|----------------------|---------------------|-------------|
| | 07.12.2010 | Abax AS | Electronic Tracking Systems AS | AS | | | 993098736 | 0 | 4792,82885 | 88743 | 116229 | 0 | 0 | 24527 | 38743 | 1 |
| | 30.11.2010 | Immeta ASA | Crayon Group AS | AS | | | 9773022390 | 83352,263 | 75802,23189 | 113355 | 322038 | 0 | 0 | 282915 | 107346 | 0 |
| | 22.06.2010 | Immeta ASA | Visit AS | AS | | | 9773022390 | 83352,263 | 75802,23189 | 113355 | 170462 | 0 | 0 | 57048 | 56821 | 0 |
| | 03.06.2010 | AVEVA AS | ADB Systemer AS | AS | | | 978611494 | 16206,915 | 16203,99993 | 17000 | 51262 | 37070 | 0 | 27415 | 49444 | 1 |
| | 26.11.2009 | Reiten & Co Capital partners WLLP | Basefarm AS | AS | PE | | | 0 | 0 | 251703 | 275245 | 0 | 0 | 89529 | 175643 | 1 |
| | 17.08.2009 | Immeta ASA | Structurum AS | AS | | | 9773022390 | 81953,371 | 75889,61249 | 63011 | 103199 | 165190 | 0 | 54006 | 86130 | 1 |
| | 09.07.2009 | Office Center AS | Aage M AS | AS | | | 963107240 | 70511,483 | 67069,68859 | 105826 | 117909 | 106034 | 0 | 7586 | 74648 | 0 |
| | 03.07.2009 | Amesto Solutions Holding AS | Etense Software AS | AS | | | 938473617 | 3000,1424 | 12775,56301 | 6511 | 46352 | 30371 | 0 | 18578 | 25774 | 1 |
| | 19.05.2009 | Arendals Fossekompagni ASA | Powel ASA | ASA | Technology | | | 0 | 0 | 0 | 231650 | 260327 | 0 | 195100 | 163992 | 1 |
| | 10.12.2008 | Borea Opportunitiv AS | Software Innovation ASA | ASA | PE | | | 0 | 0 | 0 | 174163 | 160419 | 168543 | 233289 | 167712 | 0 |
| | 07.11.2008 | Canica Invest AS | Komplet AS | ASA | PE | | | 0 | 0 | 0 | 4324087 | 3986996 | 3028815 | 1613874 | 3779966 | 1 |
| | 19.05.2008 | Umoe IKT AS | ITet AS | AS | Consolidation | | | 887562602 | 0 | 0 | 158651 | 193222 | 159624 | 95654 | 167265 | 1 |
| | 07.04.2008 | Visma Norge Holding AS | Notus Systems AS | AS | Consolidation | | | 982410339 | 206786,87 | 214705,8044 | 220620 | 241290 | 240275 | 116562 | 239898 | 1 |
| | 13.02.2008 | Proact IT | Xperion | AS | Consolidation | | | 971210737 | 198521,14 | 207628,6721 | 217664 | 206835 | 195771 | 244637 | 107284 | 1 |
| | 07.11.2007 | Creuna AS | Cobra AS | AS | Consolidation | | | 877505982 | 31647,703 | 37271,7898 | 42264 | 99009 | 82046 | 78539 | 36250 | 86531 |
| | 29.08.2007 | Komplet ASA | Top Computing Group ASA | AS | Consolidation | | | 980212350 | 2381485,8 | 2470738,113 | 3405339 | 3953916 | 3623795 | 1308902 | 3840099 | 1 |
| | 05.07.2007 | Fast Search & Transfer ASA | Bwise AS | ASA | Technology | | | 979168831 | 121971,12 | 586719,0067 | 391054 | 354122 | 240275 | 116562 | 239898 | 1 |
| | 01.06.2007 | Dadata Oslo AS | Sarepta Software AS | ASA | Technology | 7 mill | | 990684529 | 0 | 0 | 21363 | 19609 | 17914 | 14871 | 19631 | 1 |
| | 2006 | Basefarm | Telecomputing IS AS | AS | Consolidation | | | 982211743 | 77310,11 | 78761,34284 | 107154 | 134284 | 18714 | 51986 | 152448 | 1 |
| | 2007 | Bouvet ASA | Ontopia | AS | Consolidation | 26 mill | | 0 | 0 | 1620 | 739 | 279 | 0 | 3242 | 879 | 0 |
| | 2009 | Ole Holding/FSN Capital III Limited | Norman | ASA | PE | 274,4 | | 0 | 0 | 0 | 109621 | 97420 | 0 | 159064 | 69014 | 0 |

Appendix 8: T-test quantitative data**Sales growth**

Will International acquisition outperform the national acquisitions in sales growth post acquisition?

H0: Sales international acquisitions = sales national acquisitions

H1: Sales international acquisitions. \neq sales national acquisitions

| t-Test: To utvalg med antatt ulike varianser | | |
|--|------------|------------|
| | Variabel 1 | Variabel 2 |
| Gjennomsnitt | 0,71428571 | 0,51612903 |
| Varians | 0,21428571 | 0,25806452 |
| Observasjon | 21 | 31 |
| Antatt avvik | 0 | |
| fg | 46 | |
| t-Stat | 1,45574644 | |
| P(T<=t) ensid | 0,07612709 | |
| T-kritisk, ens | 1,67866041 | |
| P(T<=t) tosid | 0,15225418 | |
| T-kritisk, tosi | 2,0128956 | |

We cannot reject H0. There is no different in the sales growth of national compared to international acquisitions

Human capital value added

Will International acquisition outperform the national acquisitions in human capital value added growth post acquisition?

H0: HCVA international acquisitions = HCVA national acquisitions

H1: HCVA international acquisitions \neq HCVA national acquisitions

| t-Test: To utvalg med antatt ulike varianser | | |
|--|------------|------------|
| | Variabel 1 | Variabel 2 |
| Gjennomsnitt | 0,59090909 | 0,47619048 |
| Varians | 0,25324675 | 0,26190476 |
| Observasjon | 22 | 21 |
| Antatt avvik | 0 | |
| fg | 41 | |
| t-Stat | 0,74076986 | |
| P(T<=t) ensid | 0,23152729 | |
| T-kritisk, ens | 1,682878 | |
| P(T<=t) tosid | 0,46305458 | |
| T-kritisk, tos | 2,01954097 | |

We cannot reject H0. There is no different in human capital value added growth of national compared to international acquisitions.

Appendix 9: Increase in number of employees after a foreign acquisition

Acquisitions done by foreign investors in the Norwegian IT industry in the period 2003-2013

| code | Date | Acquiring firm | Acquired firm | Numbers of employees | | | | | | | | | | | |
|------|------|-----------------------------------|------------------------|----------------------|---------------------|-------------------|---------------------|---------------------|---------------------|--------------------|--------------------|-------|--------|-------|--|
| | | | | FTE 2 gr befi | FTE 1 gr befi | FTE acq gea | FTE 1 gr afte | FTE 2 gr afte | FTE 3 gr afte | Avera ge FTE | Avera ge FTE | | | | |
| | 2010 | 3 Step It Group Oy / Leasebroker | Fortiz Lease Norway AS | | | | 15 | 14,6 | | | | 15 | 14,8 | USAMN | |
| | 2008 | Bazware AS | Contempus AS | 41 | 42 | 43 | 65 | 60 | 53 | | | 78,05 | 59,333 | USAMN | |
| | 2008 | Logica Morge AS | Aureus Data AS | 309 | 455 | 555 | 555 | 554 | 575 | | | 423 | 561,33 | 1 | |
| | 2010 | Know IT AB | Reaktor AS | | | | 143 | | | | | 88,5 | 143 | 1 | |
| | 2010 | Lagerantz Group AB | Leteng AS | | | | 16 | 16 | | | | 16 | 16 | USAMN | |
| | 2007 | DIBS | Cardia | 2 | 2 | 3 | 11 | 10 | 10 | | | 7,5 | 10,333 | 1 | |
| | 2006 | Texas Instruments | Chipcon | | | | 79 | 88 | 82 | | | 88,5 | 83 | USAMN | |
| | 2007 | Affecto Oyj | Component Software | | 57 | 78 | 98 | 104 | 120 | | | 180,5 | 107,33 | USAMN | |
| | 2009 | EG | Energyfront | 30 | 30 | 30 | 46 | 63 | | | | 48,5 | 54,5 | 1 | |
| | 2010 | Davoteam | Fornebu Consulting | | | | 26 | | | | | 26 | 26 | USAMN | |
| | 2008 | Longman Group Limited/ Pearson | Frontier | | | | 127 | 129 | 129 | | | 43 | 128,33 | 1 | |
| | 2005 | Kegun | Hands | | | | 186 | 186 | 184 | | | 174,5 | 185,33 | 1 | |
| | 2006 | JV: Capman and Segulah | InfoCare | | | | 2008 | 2562 | 2346 | | | 563,5 | 2305,3 | 1 | |
| | 2007 | SAP | Maxware | | | | 0 | 1 | | | | 32 | 0,5 | USAMN | |
| | 2007 | Bacou-Dalloz / Sperian Protection | Nacre | | | | 19 | 17 | 18 | | | 3,5 | 18 | 1 | |
| | 2007 | MTI C-A-Dcenter Gruppen | Nestor | | | | 34 | 34 | 34 | | | 21 | 34 | 1 | |
| | 2010 | Logitech | Paradial | | | | 0 | | | | | 10,5 | 0 | USAMN | |
| | 2009 | Electronics Arts | Playfish | | | | 13 | | | | | 2,5 | 13 | 1 | |
| | 2008 | CompuGroup | Profdoc | | | | 3 | 3 | 3 | | | 254 | 3 | USAMN | |
| | 2007 | Ericsson | Tandberg Television | | | | 1 | 0 | 0 | | | 397,7 | 0,3333 | USAMN | |
| | 2008 | Mohis | Trolltech | 41 | 41 | 117 | 122 | 122 | 105 | | | 250 | 116,33 | USAMN | |
| | 2006 | HG Capital | Visma | | | | 2843 | 3092 | 3488 | | | 2062 | 3141 | 1 | |
| | 2008 | Redpill | Linpro | | | | 105 | 104 | | | | 83 | 104,5 | 1 | |

Appendix 10: Increase in number of employees after a national acquisition

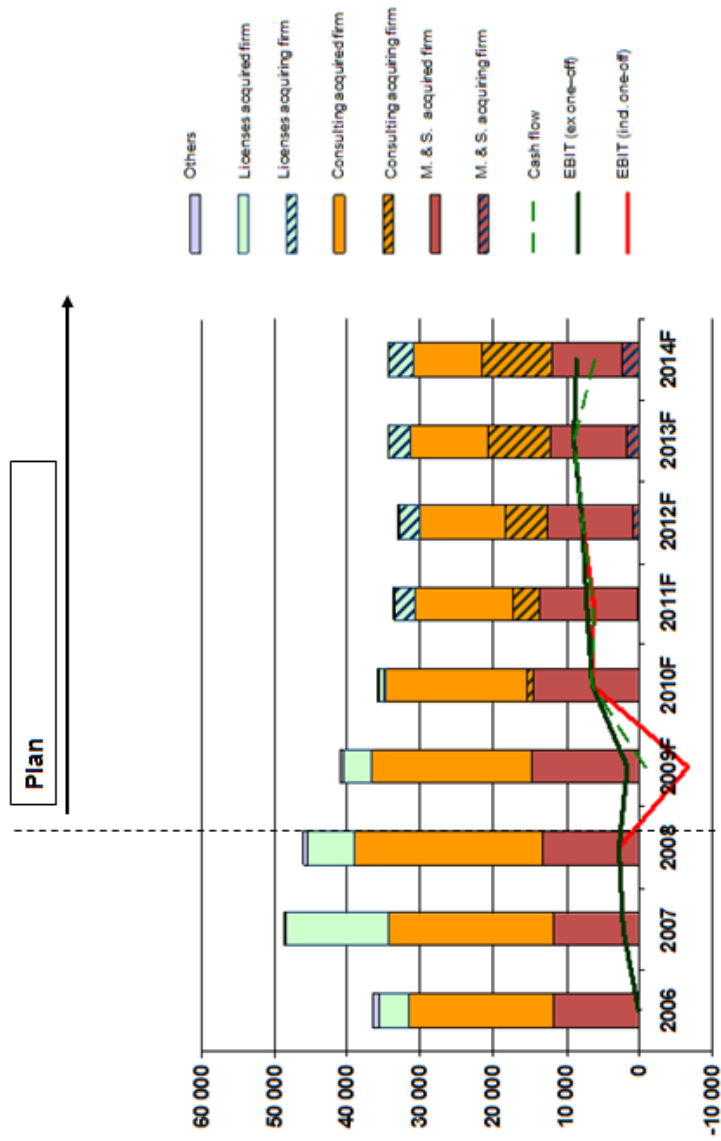
Norwegian acquisitions in the period 2003-2012

Konkurransetilsynet
Articles/ Internet

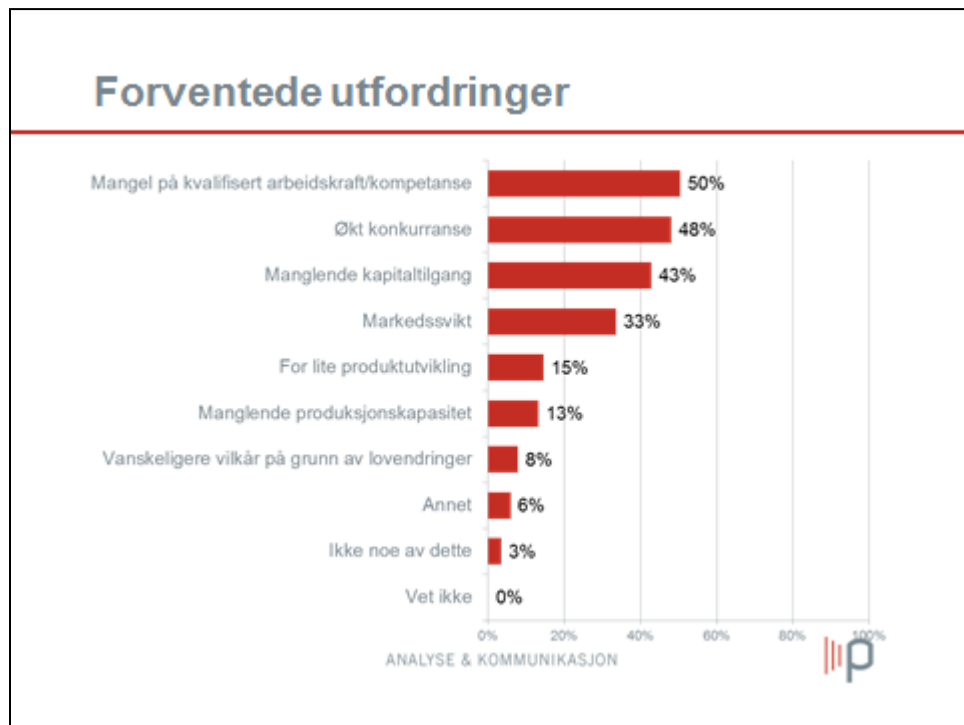
| code | Date | Acquiring firm | Acquired firm | Numbers of employees | | | | | | | | | | | | |
|------|------------|-------------------------------------|--------------------------------|----------------------|-----------------|----------------|--------------------|----------------|----------------|----------------|--------------------|-------------------|-------------|--|--|---|
| | | | | FTE 2 yr before | FTE 1 yr before | FTE 1 yr after | FTE 1 yr acc. year | FTE 1 yr after | FTE 2 yr after | FTE 3 yr after | Average FTE before | Average FTE after | Performance | | | |
| | 07.12.2010 | Abax AS | Electronic Tracking Systems AS | | 23 | 34 | 70 | | | | | | 18 | | | 1 |
| | 30.11.2010 | Inmeta ASA | Crayon Group AS | 49 | 49 | 89 | 579 | | | | | | 175 | | | 1 |
| | 22.06.2010 | Inmeta ASA | Visiti AS | 49 | 49 | 89 | 121 | | | | | | 72 | | | 1 |
| | 03.06.2010 | AVEVA AS | ADB Systemer AS | 9 | 11 | 11 | 31 | | | | | | 37 | | | 0 |
| | 26.11.2009 | Reiten & Co Capital partners VILLP. | Basefarm AS | | | | 182 | | | | | | 98 | | | 1 |
| | 17.08.2009 | Inmeta ASA | Structurum AS | 48 | 49 | 49 | 89 | | | | | | 73 | | | 1 |
| | 09.07.2009 | Office Center AS | Alage M AS | 30 | 23 | 50 | 45 | | | | | | 57 | | | 0 |
| | 03.07.2009 | Amentio Holding AS | Datakjeden AS | 5 | 11 | 16 | 0 | | | | | | 100 | | | 0 |
| | 03.07.2009 | Arnesto Solutions Holding AS | Evensen Software AS | 0.5 | 1 | 1 | 35.5 | | | | | | 26 | | | 0 |
| | 19.05.2009 | Arendals Fossekompagni ASA | Powel ASA | | | | 239 | | | | | | 228 | | | 1 |
| | 10.12.2008 | Borea Opportunity IV AS | Software Innovation ASA | | | | 244 | | | | | | 552 | | | 0 |
| | 07.11.2008 | Canica Invest AS | Komplett ASA | | | | 510 | | | | | | 506 | | | 0 |
| | 19.05.2008 | Umco IKT AS | iTet AS | | | | 111 | | | | | | 110 | | | 1 |
| | 07.04.2008 | Visma Norge Holding AS | Notus Systems AS | 171 | 193 | 215 | 222 | | | | | | 201 | | | 1 |
| | 13.02.2008 | Proact IT | Xperion | 59 | 54 | 66 | 67 | | | | | | 63 | | | 1 |
| | 07.11.2007 | Creuna AS | Cobra AS | 16 | 32 | 33 | 93 | | | | | | 48 | | | 1 |
| | 29.08.2007 | Komplett ASA | Torp Computing Group ASA | 310 | 350 | 609 | 506 | | | | | | 440 | | | 1 |
| | 01.06.2007 | Daldata Oslo AS | Sarepta Software AS | | | | 18 | | | | | | 25 | | | 0 |
| | 2006 | Basefarm | Telecomputing IS AS | 47 | 50 | 60 | 91 | | | | | | 67 | | | 1 |
| | 2007 | Bouvet ASA | Ontopia | | | | 1 | | | | | | 8 | | | 0 |
| | 2009 | Ole Holding/FSN Capital III Limited | Norman | | | | 94 | | | | | | 168 | | | 0 |

Appendix 11 Business case

Acquisition year 2008



| Headcount (Year end) | Modelled | | | | | 2014 |
|-----------------------------------|-----------|------------|------------|------------|------------|------------|
| | 2008 | 2009 | 2010 | 2011 | 2012 | |
| Norway | | | | | | |
| Consulting /Support / Product Dev | 25 | 22 | 22 | 20 | 20 | 20 |
| Sales | 2 | 1 | 1 | 1 | 1 | 1 |
| G & A | 3 | 3 | 3 | 1 | 1 | 1 |
| Total | 30 | 26 | 26 | 22 | 22 | 22 |
| Denmark | | | | | | |
| Consulting /Support / Product Dev | 3 | 0 | 0 | 0 | 0 | 0 |
| Sales | 0 | 0 | 0 | 0 | 0 | 0 |
| G & A | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 3 | 0 | 0 | 0 | 0 | 0 |
| China | | | | | | |
| Consulting /Support / Product Dev | 6 | 6 | 2 | 2 | 2 | 2 |
| Sales | 1 | 1 | 1 | 1 | 1 | 1 |
| G & A | 3 | 3 | 0 | 0 | 0 | 0 |
| Total | 10 | 10 | 3 | 3 | 3 | 3 |
| Total | 43 | 36 | 29 | 25 | 25 | 25 |
| <i>Decrease on 2008 (%)</i> | | <i>16%</i> | <i>33%</i> | <i>42%</i> | <i>42%</i> | <i>42%</i> |

Appendix 12: Survey IKT Norge

Source: IKT Norge

David Bjerke
Morten Maurer Klauer

BI Norwegian Business School - Preliminary
Thesis Report

Foreign acquisitions in the
Norwegian IT industry: What
happens with the acquired
company?

Hand-in date:
15.01.2013

Campus:
BI Oslo

Examination code and name:
E.g. **GRA 19002 Preliminary thesis report**

Programme:
Master of Science in Business and Economics

Supervisor
Espen Andersen

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Summary

This preliminary thesis report will form the basis for our master thesis. The aim of the thesis is to investigate the consequences of foreign investor/companies acquiring Norwegian firms in the IT industry from the acquiring firm's viewpoint.

Our research question is:

What strategic and structural changes happen within Norwegian IT firms after they have been acquired by foreign investors?

The main objectives within this research question are:

- What kinds of investors have acquired Norwegian IT firms in the last 10 years?
- What are the motives/strategies for acquisition for the different investors?
- What has happened with the acquired firms after the acquisition?
- Compare the results for the different types of investors with each other
- What are the implications for the Norwegian IT industry?

We will be using a mix between quantitative and qualitative research design, due to the different nature of our research objectives. We will use a quantitative design when mapping the acquisitions that have occurred in the industry, while we will use a qualitative design when analyzing what has happened with the acquired firm post-acquisition.

The first step in our thesis will be to gather information about acquisitions in the industry during the last 10 years in. This will be done mainly through the use of secondary sources. After mapping and analyzing the data we will go on to achieve a better understanding of the motives for the relevant acquisitions. This will be followed by interviews with key persons in the acquisitions, in order to get information about what have happened to the acquired companies, and what effects this might have on the industry.

To our knowledge, similar studies have not been conducted in the Norwegian IT industry. Lack of previous research in the field gives us no direct theory to use, instead we will focus on the underlying theories that affect the structure of acquired firms.

1. Research background

The Norwegian IT industry is comprised of two different sub sectors, the equipment and software sector, and the consulting and infrastructure sector. The equipment and software sector is focused on developing stand-alone software or software that acts as an add-on for existing software, while the consulting and infrastructure sector is more geared towards customizing existing software and solutions to the needs of the customers (Andersen, 2011).

The size of the Norwegian IT industry is hard to determine due to problems with defining what the industry is comprised of. For the purpose of this section we will rely on the numbers published by others, without going in depth on how these numbers are calculated. The number of employees in the ICT (Information and communication technology) industry is reported by Statistics Norway to be 72.776 in 2009 and 73.871 in 2010, revenues are reported to be 190,1 bn NOK in 2009 and 201,7 bn NOK in 2010, and the value creation were reported to be 75,4 bn NOK in 2009 and 78,6 bn NOK in 2010).

1 Informasjonssektoren. Sysselsatte personer. 2009-2010

| | 2009 | 2010 |
|---|---------------|---------------|
| Informasjonssektoren | 99 654 | 99 922 |
| IKT-sektoren | 72 776 | 73 871 |
| IKT-Industri | 4 012 | 3 911 |
| Engroshandel med IKT-utstyr | 9 937 | 9 675 |
| IKT-Tjenester | 58 827 | 60 285 |
| Innholds- og mediesektoren | 26 878 | 26 051 |
| Utgivelse av bøker, tidsskrifter og annen forlagsvirksomhet | 16 089 | 15 184 |
| Virksomhet innenfor film, video og fjernsynsprogrammer | 3 749 | 3 889 |
| Produksjon og utgivelse av musikk- og lydopptak | 469 | 489 |
| Radio- og fjernsynskringkasting | 5 824 | 5 813 |
| Andre informasjonstjenester | 747 | 676 |

Standardtegn i tabeller

Figure 1: Employment in the information sector 2009-2010

Source: Statistics Norway¹

The Norwegian IT industry was established in the 1950's in conjunction with the IT industry in the rest of the world. Norwegian contributions to the development

¹ <http://www.ssb.no/emner/10/03/iktoms/tab-2012-08-30-01.html> - 05.01.2013

of the global IT industry have been centralized around areas such as cellular standards (NMT), and to some extent search technology (FAST)². The Norwegian IT sector is mostly located in and around Oslo, while Trondheim have a strong position as well due to NTNU's position as a strong university.

When comparing the Norwegian IT industry with neighbors such as Sweden, Finland, and Denmark, Norway are lagging somewhat behind. Norway is lacking when it comes to large multinational corporations, such as Finland's Nokia and Sweden's Ericsson. Even Denmark, that is a lot closer to Norway in terms of overall size of the IT industry, have Bang & Olufsen with a strong international presence. It should be noted however that while the Norwegian IT industry does not have companies such as Nokia and Ericsson, it has contributed strongly in the success story of the Norwegian oil sector, which have resulted in a very strong *oil service* cluster developing in Norway (Reve and Sasson, 2012, 60-61).

Even though Norway is small in the global IT scale, it does have a fairly sizeable cluster of IT businesses located in and around Oslo. The trend in the recent years however is that Norwegian software companies are sold out to foreign investors/companies once they reach a certain size. This can most likely be attributed to lack of competent capital in the Norwegian market, and that Norwegian investors do not value intellectual property as high as foreign investors such as investors from the United States (Andersen, 2011).

The high cost levels in Norway, coupled with a tendency of Norwegian companies to prefer outsourcing of certain activities, leads to a situation where ambitious employees in the IT industry looks for work in countries where they are more willing to pay for their skills. This could be detrimental to the Norwegian IT industry, especially since Espen Andersen discovered that recruitment of talented individuals was a major concern for most IT companies when conducting an analysis of the viability and future prospect of the Norwegian IT industry (Andersen, 2011).

²<http://web.archive.org/web/20070213045903/http://telemuseum.no/mambo/content/view/29/1/> - 07.01.2013

2. Research issues

Different types of IT firms

As mentioned above the IT industry can be divided in two; technology providers and Service providers. Technology providers are driven by technology and the competition is often global. Service providers are driven by the needs of the customer and the competition is mostly local (Andersen, 2011).

These differences in the industry will also impact the kind of acquisitions and post-acquisition issues that will occur when a company is acquired .

Fast moving business environment

The IT industry is known for being an industry that moves fast and where it is of high importance for firms to always stay in the lead to survive. This results in a dynamic and fast moving environment, which again leads to an industry that is characterized by merger and acquisitions. Andersen (2011) mention that most exits in this industry happens through acquisitions by unrelated firms or consolidation/absorption by similar firms.

Valuation of intellectual property

A lot of Norwegian IT companies are sold out to foreign investors. This is often a result of higher offers from foreigners than domestic firms. Andersen (2011) proposes that this is a result of Norwegian investors not evaluating intellectual property in the same way as foreign investors. They often undervalue the intellectual property and thereby offer a too low bid to compete with foreign investors.

3. Research statement

In our thesis we want to examine what happens with the firms in the Norwegian IT industry when they become acquired by foreign investors. Does the type of investor (e.g. private equity funds or firms in the IT industry) affect what will happen with an acquired firm? Are there some differences between the strategic issues behind the acquisition due to the type of company acquiring the firm?

We will gather historical data dating back, the last 10 years (beginning of 2003) and analyze all the acquisitions done in Norway until today.

3.1 Research question

In foundation of this thesis lies a problem statement, or research question.

Through this paper will we answer this question and analyze the issues behind the findings.

Taken into account the above discussed questions we have formulated a research question that will be the foundation for our thesis.

What strategic and structural changes happen within Norwegian IT firms after they have been acquired by foreign investors?

The purpose is to investigate what happened with the acquired firm after being acquired by a foreign investor/company. We will investigate the changes in the structure of the firm, such as changes in the location of the firm, amount of workers, what kind of task or work the firm does, and what products they are producing or service's they are offering.

3.2 Research objectives

To be able to answer the research question we have a number of objectives we will investigate, and these are:

- What types of investors have acquired Norwegian IT firms in the last 10 years?
- What are the motives/strategies for acquisition for the different investors?
- What has happened with the acquired firms after the acquisition?
- Compare the results for the different types of investors with each other
- What are the implications for the Norwegian IT industry?

These objectives will help us when trying to answer our research question, and collect relevant information for our analysis.

3.3 Relevance of the topic

We will generate an overview over which firms have been sold out of Norway and what has happened to them, since (to our knowledge) this has not been done previously. Does the type of investor have something to say in regards to what happen with a firm after the acquisition? Thereto we will provide an

understanding of existing issues and issues that might occur in the IT industry in Norway caused by foreign acquisitions. What consequences does this have for the industry as a whole?

4. Literature overview

4.1 Introduction

In this literature review we will focus on the theories and concepts that is relevant to our research question and the research objectives following the research question. We will also define some concepts that are central to the paper, in order to avoid uncertainty in regards to different meanings of these concepts. Our literature overview will be focused on the theory regarding acquisitions and will entail motives for acquisitions, performance in acquisitions (specifically performance of the acquired firm), and structural changes in acquired companies. Acquisition motives will help us in understanding the aim and reasoning behind the different acquisition types, while performance and structural changes in the acquired company is at the core of our research question as we are trying to develop an understanding of what happens to companies that are acquired with differing motivations and acquisition types.

In general there is a lot of theory around the performance of the acquiring/combined firm, but there is a distinct lack of studies on the targets perspective (Feys and Manigart, 2010). As a result we are focusing on factors that could have an impact on the acquired firm, with the intent of testing whether or not these factors do indeed impact the acquired firm post-acquisition, in our final thesis.

We will distinguish between literature regarding acquisitions made by investment companies (e.g. private equity firms) and horizontal acquisitions (e.g. acquisitions of intellectual property or with the aim of consolidating), since the motives behind the acquisitions are different.

4.2 Motives for acquisitions

Williamson (1975 p. 176-207) divided innovation into three categories or stages: The first was invention, second development, and finally supply. Thereto he

argued that small firms have advantages in the early stage and larger firms in the following stages. He argued that it was not possible for a single firm to have advantages in all stages. This leads to the possibility of two sided motivation from both buyers and sellers to get advantages in stages they do not currently have an advantage in.

Sellers motives

Williamson (1975, p. 183-184) state that the owner of small firms are able to see the benefits of selling to larger firms when the firm enters the later stages in this innovation trajectory. Hence, the small firm will get access to resources from the larger firm, which enables them to transfer the product to the later stages successfully. (Granstrand and Sjölander.1990)

Granstrand and Sjölander (1990) found that a major reason for owners of small firms to sell their firm, is the need for capital for private consumption. A lot of times the situation is that small niche firms have a sort of monopolistic power, and the market is described as the sellers' market. This, in turn, gives the owners the possibility to make an advantageous deal.

Buyers motives

As innovation often happens in smaller firms the buyers, here referred to as large firms, have motives for acquiring smaller firms grounded in technical reasons and learning. These acquisitions are resource based or knowledge based, and will be a stage in integrating the resources or knowledge for a smaller firm into the acquiring firm (Barney, 1986)

There are also non-technological acquisitions with other intentions than learning or acquisition of intellectual property. Cloudt et. al (2005) mention access to market and infrastructure in specific markets. Thereto profitable growth can be a motive to acquire firms, if the acquirer sees a possibility to achieve greater profit by supporting the acquired firm with resources of different kinds (e.g. management skills) (Hitt et al. 1996).

Berkovitch and Narayanan (1993) developed three categories of motives for acquisitions and three types of gains (total, target, and acquirer gain) . The first motive is synergy, which can be achieved through economical gain (e.g. scale

economics) both for the acquiring firm and acquired firm's shareholder. This will imply that target, total and acquirers gain will be positive.

Secondly, agency motives imply that the acquirer management makes a decision based on personal benefits and not based on what is best for the firm/shareholders. An example of this might be managers making the firm more dependent on their skills. The last motive is the Hubris motive, and is based on the managements mistake/ lack of competence in estimating which synergies they are able to realize, and will not show any total gain.

Different types of acquirers/investors will have different motives for acquisitions. To differentiate between Technological and non-technological acquisitions will be easy to distinguish as they are very different in nature.

4.3 Structure of the acquired firm post acquisition

The factors mentioned below are factors we have found to determine the structure of the company after the acquisition.

4.3.1 Company similarities

Cloodt et. al (2005) describe the difficulties for integration of firms that have a low degree of similarities to each other. There is a higher possibility for failure to occur when integrating with a different firm than in integration of similar firms. It has been shown that innovation in the acquired firm will decrease to a certain degree after the integration. This can imply that a low degree of integration is more preferable for acquisitions between different firms.

4.3.2 Cultural differences in cross-border acquisitions

Morosini et al. (1998) found that cultural differences had a positive impact on performance of acquisitions. This was based on the possibility to learn and adapt to cultural differences and routines among other issues. Datta (1991) suggested that a high degree of integration will most likely wipe out these advantages, since the acquiring firm often implements new routines and procedures in the target firm. A low degree of integration, which will preserve much of the pre-acquisition structure, can enable the company to exploit these cultural advantages.

4.3.3 Stand alone or component technology acquisitions

The amount of changes in the acquired company and structural integration into the acquiring company is also affected by the nature of the technology acquired. The different types of technology acquisitions referred to here is; standalone technology and component technology. Puranham, Singh, and Chaudhuri (2009) found that the acquisition of component technology, which entails a higher degree of interdependence, tends to result in a higher level of structural integration. Conversely, the acquisition of standalone technology, which tends to mean somewhat lower interdependence, will result in a lower degree of structural integration.

4.3.4 Development stage of acquired firm

The stage of development in the target firm will have an impact on the post-acquisition innovation. Firms in early stages that has only developed products but never launched them to the market will struggle more with innovation after an integration process, compared to firms that has innovated *and* launched innovations before (Puranam et al. 2006). This implies that acquisitions of firms in early stages will benefit more from a low degree of integration, compared to firms in later development stages.

4.3.5 Specialization

Sharing of resources and economies of scale can make the acquired firm more specialized and focus on some specific tasks instead of all parts of a value chain (Nayyar, 1993). By letting the acquired firm focus on a specific task (e.g. innovation) the larger acquiring firm can use its existing distribution channel to get the product on the market. This will streamline the process and take advantage of synergies and economies of scale.

In non-technological acquisitions investors will in some situations reorganize the acquired company in an effort to make them focus more on their core activities (Kaplan and Strömber, 2008). This reorganization will make the acquired firm more specialized and rather outsource the activities that is not a part of the company's mission statement.

4.3.6 Downsizing

Downsizing is a tool regularly used by acquiring firm for a multitude of reasons. In horizontal acquisitions, where the firms are very similar, a reduction in the

workforce is often necessary to reduce redundancies (Conyon et. al. 2002). An effect that is similar to downsizing is that employees of the acquired firm might want to leave due to changes such as lowered incentives (small companies often offer high-powered incentives to counteract the increased risk), and lowered autonomy (Puranam, Singh, and Chaudhuri, 2009). In the case that the founder of the company exits after being acquired, it may lead to the loss of customers, as well as tacit knowledge (Feys and Manigart, 2010)

If the acquirers strategy is to acquire intellectual property there is a possibility for discontinuation of the acquired company, since the only goal is to get access to some specific resources (Feys and Manigart, 2010; Schweizer, 2005)

4.4 Performance of the acquired company

In most papers and articles it is the acquiring firm that is analyzed for changes in performance post-acquisition (Datta, Narayanan, and Pinches, 1992), mostly due to the acquired firm being integrated into the acquiring firm. In this paper we will focus on changes in the acquired firm, one of those changes being changes in the performance.

In the case of private equity buyouts the performance of the acquired company is fairly easy to measure, and has been reported to be above the market average in most situations (Phan and Hill, 1995). Since private equity investments are focused on short to medium term gain of the investing company, and this gain is directly tied up to the performance of the acquired company, it is no surprise that the acquired company show signs of above average returns. Private equity investors focus on improving the existing company structure, without making too large changes to the company (Kaplan and Strömber, 2008). This enables the changes in performance to be observed without issue, since the general structure of the company remains intact.

Performance changes in technology acquisitions (Intellectual property acquisitions) are somewhat harder to observe and measure. As mentioned above, the main motivation for acquiring technology is the desire to obtain and transfer knowledge from the acquired firm to the acquiring firm (Grant, 1996).

Technology acquisitions will mostly result in the acquired company being integrated into the acquiring company, which means that one has to measure the

performance of the acquiring company before and after the integration process to see how successful the acquisition was. It has also been noted that the integration of the acquired companies may ultimately lead to the destruction of the integrated firm's knowledge based resources (Graebner, 2004).

5. Research design

We will use a mix between quantitative and qualitative research methods. A quantitative approach, we believe, is necessary as a starting point for identifying the different actors in the Norwegian IT sector, and how they have been acquired. In addition to the information gathering, we will identify what has happened with the firms after the acquisition.

After we have identified/mapped the industry and what has happened we will employ qualitative research. Bryman & Bell (2011, 27) illustrates "it is common to describe qualitative research as concerned with the generation rather than testing of theories". We will try to get in contact with key persons that were central at the point of acquisition, to get a deeper understanding of what has happened post-acquisition.

The final chapter of this preliminary thesis report contains a discussion of the method and design that the authors aim to use for the final thesis. Now that the framework has been established we feel that it would be beneficial to have a walkthrough of "how we are actually going to do it".

5.1 Secondary data

The secondary data we will collect is mostly public data from the companies or data published by the authorities such as the Norwegian register for company data (Brønnøysundregistrene) and the Norwegian competition authority (Konkurransetilsynet). Examples of such numbers might be revenue, numbers of employees, names of the actors, what company they have been acquired by, and time of acquisition. The benefits of using secondary data are that it is less cost and time consuming than primary data collection. Additionally secondary data is often of a higher quality, and might be the only option if it is practically impossible to get access to the primary source. Contrarily, it is also important to be aware of the complexity, lack of familiarity, and low control over data quality and research methods and variables in secondary data (Bryman and Bell 2011, 313-322).

To gather information about the different firms and what has happened to them,

we will also collect information in Norwegian and international press and other information sources.

5.2 Primary data

To obtain all the needed information we will not be able to rely solely on secondary data. We will need primary data to get increased insight into the different acquisitions and gather additional information and confirm secondary data. In this stage we will be using semi-structured interviews where we let the interviewee speak freely. We will however be creating some questions to help us structure the interviews, and lead the interview towards the direction we want increased knowledge of. Structuring the interviews through interview guides, we believe, will be make the interviews more efficient, interesting, and minimizing the possibility to forget important questions (Bryman and Bell 2011, 467-480). We have chosen semi-structured interviews due to the possibility of obtaining information on specific topics, and generating a deeper understanding of the topics at the same time (Bryman and Bell 2011, 465-468).

To get access to the right information we have to approach the “right” people. The optimal solution is that we can interview people that had a key role during the acquisition and post-acquisition in the different firms. If this is not possible other involved people, such as previous owners or managers, can help us further.

5.3 Method

Based on our explorative design we will go through the stages mentioned below:

1. Get familiarized with the IT industry in Norway
2. Gathering information about and analyzing the past acquisitions of Norwegian firms by foreign investors in the period between 2003-2013
3. Uncover what has happened with the Norwegian companies post-acquisition by foreign investors
4. Examine the underlying strategies the acquiring firm/investors had with the acquisition
5. Compare the acquisitions and results of the acquisitions done by the same type of investors and between different types of investors
6. Use the information to analyze the underlying consequences for the Norwegian IT industry

In the first two steps where we want to get more insights into the industry and gather relevant data, we will contact the authorities that collect firm specific data. When we have gathered the data we have to sort it and filter out what has relevance for us, namely data about which company that has been acquired by foreign investors/firms in the last ten years in the IT industry in Norway. This will be the foundation for our research and be essential for the next steps.

In step three we will use a combination of secondary and primary data. We will start by using firm's homepages, official investor information, public media (newspapers and industry journals) to uncover what has happened with the firms after the acquisition. If there is no available information we will use primary sources to gather the data needed. Together with gathering information about the underlying strategy in step four we will interview people that had a key position during the acquisition. Triangulation gives us the possibility to confirm the secondary data, secure and/ or increase validity within the research (Bryman and Bell, 2011)

In the last steps we will use the information collected in the previous steps to compare the different types of investors strategic decisions and implementation, and subsequently using this to analyze what consequences this has for the industry in Norway. In this stage we will also try to discuss the implications for Norway with key people in the industry (e.g. in industry organizations such as Dataforeningen, IKT Norge, Abelia). This will give us a specialist opinion that can help us to make an informed prediction in regards to the impact of our findings.

5.4 Validity and reliability

According to Bryman and Bell (2011), reliability, is the degree to which a measure of a concept is stable. We have no intentions of generalizing our findings, as our goal is to uncover what has happened with the Norwegian IT industry and the firms that have been sold out of Norway in the last 10 years, and what impact this have on the industry.

Guba and Lincoln (1985, 1994) propose two criterions for evaluating qualitative

research, namely trustworthiness and authenticity. In order to increase the level of the aforementioned criteria we will be recording the interviews, even though we recognize that this might drag the interviewee out of their comfort-zone. We will of course ask the interviewee for permission and remove the recorder on request. However, we believe the nature of our questions will not frighten the interviewee to the extent that it will influence their response. When the interview is transcribed and summed up, we will be providing a copy to the interviewee in order to create the option for dialog. This will ensure that our perception of the collected data correlates with the interviewee's own perception, which leads to respondent validation, and increased level of credibility.

According to Bryman and Bell (2011), validity is concerned with the integrity of the conclusions generated from a piece of research. As we do not intend to generalize our findings, external validity is not of high concern. However, internal validity is important. In order to be sure that we are measuring what we intend to measure we will have increased focus towards construct validity as well as causal effects in question one. Informing what was measured and what was not, in addition to transparency of how things were done, will enlighten the reader.

6. Motivation

Both authors study Master of Science in business, with a major in strategy at BI Norwegian Business School. Through our studies we have both become interested in the IT industry, and particularly the fast paced nature of the industry. We have observed that there is a high number of acquisitions happening, a lot of them being acquisitions made by foreign companies. As this is a large industry that is still growing, we became curious about what happened with the companies that were sold out of the country. After speaking with our supervisor about the subject, he confirmed that there were limited studies into what happened with the companies after they were sold, which lead us to decide that this was a topic we wanted to explore further.

7. Timetable

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|------------------|--|
| January | <ul style="list-style-type: none"> • Hand in Preliminary thesis report 15th of January • Overview of acquisitions in Norway • Contacting Authorities in order to get access to data • Continue search for literature |
| February | <ul style="list-style-type: none"> • Analyze and filter the data collected' • Continue search for literature • Collecting secondary information about the relevant firms |
| March | <ul style="list-style-type: none"> • Finishing theoretical framework • Collecting secondary information about the relevant firms • Develop an interview guide for interviews with key persons in the relevant firms • Get in contact with relevant sources for qualitative data (ICT Norway, Dataforeningen, etc.) |
| April | <ul style="list-style-type: none"> • Primary data collection – Interviews • Write reports and systemize information gathered in interviews |
| May | <ul style="list-style-type: none"> • Based on information gathered in interviews, determine whether or not additional interviews should be conducted • Analyze data gathered |
| June | <ul style="list-style-type: none"> • Make conclusions based on analysis of data • Plan the structure of the paper • Start to write |
| July | <ul style="list-style-type: none"> • Writing the thesis |
| August | <ul style="list-style-type: none"> • Writing the thesis • Working on improvement, language and context • Complete the master thesis |
| September | <ul style="list-style-type: none"> • Hand in the Thesis before the 5 of September 2013 |

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