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Intellectual Capital at Dell Computer -From Box-Mover to Trusted Partner



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Abstract

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Key words: Intellectual Capital, Value Gap, Dell Computers, Strategic Shift, Cost Focus, Relational Focus, Triple-A supply chain.

Purpose:

We will understand and explain Dell's value gap through an extended intellectual capital theory. This will be done by deriving the value to the different parts of the intellectual capital value scheme. We will also use value scheme to describe the ongoing strategy shift.

Methodology:

The qualitative method and an abductive reasoning have been employed during the progress. The interview method has been of semi-structured character.

Theoretical Framework:

The theoretical framework has been dominated by the intellectual capital. The intellectual capital theory has been supported by classic strategy models such as industrial organization and the resource based view. In addition to former theories, the Triple-A supply chain theory has been applied

Empirical Foundation:

The empirical findings have covered several fields of Dell's organization. Dell has been a bold sales organization that has been resting on its fine business model. Dell 2.0 is changing the focus towards more soft aspects such as relations.

Results:

We have discovered that Dell is now in a changing state were they are starting to abandon the heavy cost focus to make way for longer and more profitable relations. The former business model is being imitated by so Dell is forced to create a more sustainable model for competition. The classic theories cannot explain this phenomenon with the same edge as the intellectual capital theory can. We have created a model that displays the origin of the value in the two competitive strategies.

Acknowledgements

This master thesis crowns our university studies, we have during this time developed the skills to make a difference in the world and we are proud of our progress and the results. We feel we now are ready to move on and make an impact in the professional world.

During our journey we have passed several interesting sidetracks, went down some, and also had to face some obstacles. The obstacles have all been overcome with assistance from our wise tutors Leif Edvinsson, Professor of Intellectual Capital and Christer Kedström Associate Professor in Management. We want to take the chance to show our gratitude to them in this preface. You have been two north stars that guided us on our expedition.

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1 Introduction

In this chapter we aim to create an interest for the subject, at the reader. We discuss the background to the situation and show why the subject has caught our eyes. We are also trying to shed light on the problems with intellectual capital and its complex value creating processes. At last we display our purpose of the thesis.

1.1 Background

1.1.1 Shift of focus

During the past ten years business focus has moved from financial and tangible assets to more knowledge intensive assets. The human mind takes more space and creates more value than ever before. Even though the development suffered from the burst of the IT-bubble, the progress of total development is indisputable. One proof of the changed focus is the stock market, especially the American ones; the Dow Jones and NASDAQ. One indicator is the S&P 500 list where NASDAQ companies were quite rare a few years ago; less than 25 at 1993. In the end of 2003, the number had rose to 74, and counted for 16.7% of the index value.

Place of investments also show that we have had a shift of focus. From 1930 the ratio of investments in American companies have changed from 70% investments in tangible goods and 30% in intangible goods, and in 1990 the reversed ratio is a fact with 70% of all the investments going into intangibles (Baruch, 2000).

The fact that market value beats the book value is an other indicator, companies like Intel, Coca-Cola and Microsoft's market value are about ten times higher than their book value. Some IT-companies can have a ratio as high as 50 times (Edvinsson, 2002). What has caused this value shift?

The intellectual capital, which contains of human-, and structural capital and the business model, can explain the difference between book value and market value. When these parts are cooperating and are aligned, they are joined in a multiplier effect and trigger the company's value towards new heights. The alignment is important, you can have the best brains in the business and still not be successful because the structural capital is too weak to leverage from the human capital. The equation goes the other way too; you can have great supporting systems but you also need qualified people to use them efficiently to create company wealth.

The possibilities for human beings are unlimited and the key issue is to create an environment (the structural capital) that is both efficient and supports the process that creates value for the company. This does not happen by itself but has to be carefully designed by the people working there. It is a complicated task to develop processes that fits every individual person, but it is easy to understand the importance of structural capital when you think of all the tools a person is using in her daily work like computers, the importance of being able to find the right information and the ability to quickly get in touch with business partners and customers. This is of course important both for the company and the development of the employees. The structural capital is much more than what is mentioned here, but more about that in later chapters.

1.1.2 The results of the shift

All this has forced companies to make changes in their competition strategies. Firms, who used to run their businesses with a quantity focus, are now more focused on quality. The value of volume has stepped back and instead has products and services with higher margins taken

over the throne. It takes a lot of brain to create a sustainable system for this kind of business, the intellect is very important and needs support to be able to function properly and efficient. The business model has to be strong to stand up against the harsh competition on the market.

Innovation and intellectual capital has become the key resource in knowledge intensive firms. For these firms there has been a big gap between the booked value and the market value, and that gap will probably keep growing in the future. Up until now there been few models to explain how to account for these intangible assets. It has often been looked at as merely “goodwill” or vague speculations about upcoming products. Marketers have a different approach to this gap and use to ascribe it to the “brand value” of the company. Brand value and goodwill are very vague descriptions of the phenomena, and they show a too simplified view of the true essence of the gap. In the last ten years a new different approach has been emerging. The intellectual capital approach is looking forward at future earnings to give a better picture of the company in the financial reports.

1.1.3 Lessons from the burst of the bubble

We can again see a trend that the gap between the market value and the book value is increasing for IT and high-tech companies. The intellectual capital can better explain this inconsistency. We have seen these values differ greatly before; when the IT industry collapsed in 1999. The entry barriers were low; every person with some html-skills could set up a shop, making home pages for companies who just had discovered the need for Internet presence. The expectations for future earnings for the larger players were inflated and the cash burn rate was endorsed because it indicated that the company was growing fast. But the economy got overheated and busted where only the largest most cost efficient companies survived (Day, 1997).

We have learned a lot from the experience. We are now more careful in valuing a company, there has to be more detail and substance to the discrepancy between the book value and the

market value. This is where intellectual capital can become very helpful in defining what this discrepancy really consists of to better judge the substance of it.

1.1.4 Thesis approach

With history in mind and the current economic developments there are several questions to be asked. How aware are large successful companies of the intellectual capital? How can the intellectual capital be used to explain the high market value? Is the intellectual capital affected by a company's strategy?

We wanted to see for ourselves and picked Dell as the investigation object. Dell is and has been very successful almost from the beginning. They are mostly known for their revolutionary modular business model that left the integrated computer manufactures far behind. Dell can be described as a company with high market value but still with relative low fixed assets. The theory of intellectual capital explains that by assigning the value to a high intellectual capital, but is that true in the Dell case? Where are the value rooted? And how can they show such unprecedented success? Is it really the business model that is the root of the success and where does it fit into the intellectual capital approach? In this thesis we intend to give answers to these questions.

1.1.5 Positioning

There is quite a lot of material to be found about Dell. During the last decades there have been numerous cases, papers, research reports and even books written about Dell. They usually have one thing in common; they are analysing and describing the business model, a lot of attention is focused around the efficiency and supply chain topics. The intellectual capital is also a popular subject, especially at Lund's university. We differentiate ourselves among other reports by choosing to successfully marry these two subjects, something that, to our

knowledge, has not been done yet. Beside the effective supply chain and assembly process we are analysing Dell from an Intellectual Capital perspective.

1.2 Problem

The understanding of intellectual capital has not yet reached the broad audience. Few companies have realized how crucial the structural capital is for the development of the human capital. The link between structural capital and the development of the human capital and the effect that has on a company's success, profitability and value is something we are going to look deeper into.

We have chosen Dell as our investigation object because it does not seem to fit the message the intellectual capital's advocates are trying to communicate. From the outside, Dell looks very stiff and rigid, and can be called a "box moving company". Processes drive a large part of the work and everything is measured down to the smallest task. It seems to be following the old guidelines from when industrialization was the dominant methodology. There is also a practice of conformity in that the offices look the same all over the world. The similar large open office landscapes divided into cubicles can be found in Europe, Asia and North America. Efficiency seems to be the lead word and there are little room for innovation and creativity for the larger mass of employees. Still the company has been extremely successful for the past 20 years and has become the world's largest computer manufacturer (ref.!).

We are going to put on the intellectual capital glasses and find out where Dell's great market value really comes from. Does the structural capital boost the human capital or is the human capital an untapped pool of resources that can be released with adjustment of the structural capital? What role is the business model playing?

The intellectual capital can be used as method for company valuation before an upcoming auction. Then the theory is used to put an absolute value on the company. That approach did not fit on our agenda. Even if it had been interesting to dig into the accounting aspects of the

theory, we were more interested in the theory as some sort of “philosophic” view of companies and their value.

1.3 Purpose

We will understand and explain Dell’s value gap through an extended intellectual capital theory. This will be done by deriving the value to the different parts of the intellectual capital value scheme. We will also use value scheme to describe the ongoing strategy shift.

2 Method

This chapter will explain how the thesis work was conducted and why it was done in that way. The character of the thesis will be discussed and our choice of case study will be explained. The method for data collection will be displayed, and interview objects will shortly be described to create a picture of whom we have talked to. The chapter will hopefully help the reader to create an opinion about how the work have been carried out, and if the conclusions can be taken serious considered our purpose.

2.1 Character – Abductive and Exploratory

Our thesis will be of exploratory character because we want to learn more about the nature of intellectual capital and how a company can be valuated from it. Intellectual capital is a relatively new concept, so there is still little knowledge about it in the business world. The exploratory approach is well suited for a situation where the researcher will explore the complexity of a situation without any former understanding (Jacobsen, 2002).

There are two main processes of reasoning; inductive and deductive. The existing discussion about how to conduct research is broad and very philosophic. Our opinion is that we do not have to dig into that discussion so deep, but our arguments will shortly be explained. The discussion can be summarized as following: the deductive method starts in theory and tests hypothesis towards the empirical findings. The analysis will then decide to reject or accept the hypothesis. The inductive method starts out in the empirical work and tries to develop new theories without any former opinions related to theory (Bryman & Bell, 2003). Both methods are criticized, the deductive way is said to be lacking flexibility and there is a risk that

interesting connections and aspects will be overlooked. The result that comes out from the inductive way can be hard to generalize to other situations and research objects (Alvesson & Sköldböck, 1994). Since we only have a fragment of theory in our baggage it will be hard to choose the deductive reasoning. On the other hand, it is the theory that is interesting and it cannot be denied how important it is for the study. The inductive way would therefore be inappropriate because too little focus would be put on the theory.

Luckily, there is an approach that combines both ways in a third method called abductive reasoning. This method allows the researchers to move iteratively between theory and empirical data. That allows us to approach the subject inspired from our interest in the theory simultaneously as it puts the empirical findings in focus. More explaining theory can also be searched as more subjects are found that matters in the empirical data. This method will give the greatest opportunity to create a deeper understanding for the subject. It is quite hard to point out where the work really started, in the theory or in the empirical material. If a harsh line has to be drawn, we have to say that we started in the theory because it was the intellectual capital theory that caught our interest. The work began with a refreshment of memory and continued with a deepening of the knowledge about the intellectual capital. The empirical material came in a later stage, since that part was depending on Dell and when they were available for interviews.

2.2 Case Study – Dell Computer

The goal is to create a deeper understanding for the complexity in the situation surrounding the theory and the company; an understanding for what factors that have contributed to Dell's great market value and development over time. To do that, there needs to be an extended explanation from people with good insights into the situation. That demands a high quality on the data collected from the company, which in turn demands high quality in the oral interplay between researcher and interviewee. Focus will therefore lie on words collected from few people and not on numbers collected from a large group of people, which argues for a qualitative research (Bryman & Bell, 2003). A survey would only collect shallow opinions

from many people and that is not what is needed. What is needed is depth in the answers to help describe the situation. There are several strategies for making research and the research strategy is often based on the questions that will be asked in a special situation. When “how” and “why” questions are being asked about a contemporary set of events, over which the investigator has little or no control, a case study has advantages (Yin, 1994). Therefore a case study has been chosen for the research. By doing that a rich level of information will be collected and that will bring the researcher closer to the company, which will increase the chances to see important factors that influence the situation. One has to be aware about the problems of making general conclusions from this type of data. The analysis of the case data can probably only be applied on the single case company. Even if it is hard to use the conclusions on other companies it will not be an unnecessary study, since it will help us to understand the study object in a deeper way. That might also lead to a higher understanding for other companies in similar situations. The case study can possibly be used as an initial test and the same approach can then be expanded to other research objects.

Dell has been chosen because it is regarded as having one of the most successful business models in the industry and a great ratio between market value and book value, which is hard to explain with traditional models.

2.3 Choice of Theory – Intellectual Capital

To get a theoretical foundation for the work it was decided to work with the following theories; intellectual capital theory, business model theories for competition, and a theory for effective supply chains. These theories are the ones that best can explain the situation and help us understand it. As mentioned in the first chapter; the value gap cannot be explained with only “brand”. The intellectual capital is a contemporary way to explain how modern companies create value on the market, and feels very appropriate today.

Since the intellectual capital theories are quite new, a lot had to be read and we realized that a lot have been written on the subject. We started out with the pioneers work and assembled a

frame for understanding the subject. The intellectual capital theory includes several different variations of the theory that have the same main meaning. The work has not stuck to one single version, but has combined some of them to fit the study. The base is represented by Leif Edvinsson's model; the intellectual capital value scheme from the time in Skandia. The different parts of the scheme and their function will be explained in the theory chapter.

There was also a need to complement the current intellectual capital theories with theory about how companies are competing through their business models. The two main schools of strategy, namely the industrial organization and the resource-based view were chosen to give the study a competitive angle. There are a large number of publicized articles and theories around these subjects, so we will only include those parts we find indispensable and will contribute to the understanding process. These parts will be included as a part of the intellectual capital value scheme, under one of the main pillars; namely the business model. Another part will also be added; the Triple-A supply chain theory. This is considered necessary since Dell's name is associated with an effective supply chain. The Triple-A theory will be put as a part of the value scheme as well, in the structural pillar under the process capital.

2.4 Data collection

As our main source of information for primary data have several interviews been conducted, the interviewees comes from the Dell organization in EMEA (Europe/Middle-East/Africa). The persons are familiar to the subject within central human resources or have an upper management function that gives them a good overview of the company.

There are several techniques available for interviewing and they differ from each other mostly depending on how structured they are. A highly structured interview is well suited when many people are being interviewed with standardized answers to wait. The questionnaire are strictly designed and followed with little room for the interviewee to go outside the form. The opposite is when the interviewer does not have enough info to create good questions, nothing

is prepared and the interview is like a conversation. Most interviews lies in between these two extremes, with a few question that must be asked but with freedom to speak outside the form. In this thesis a semi-structured method has been used. A set of questions were prepared but left freedom in form of off-track discussions that were relevant to the subject, and could enrich the empirical material. With that approach the respondents were not caged in a questionnaire, but were instead just put on the right track and then developed the answers from there.

2.4.1 Presentation of respondents

All the interviews have been done in Dell Nordic's office in Ørestad, Copenhagen. A short presentation of the persons who were interview is given. The first person was Asbjörn Navrestad. He is a manager for the Solution Consultants in the Nordic Relations department. He has been in the company for nine years and has been very involved in the organizational change that will be described in later chapters. The second interview was made with two persons from the HR department; Selina Lomholdt who is a Nordic HR Generalist, and Marie-Louise Andersen who works as a HR Coordinator. They have not worked in the Dell organization as long as Asbjörn but have more insight in the HR activities. At last we spoke a bit more informally with Per-Christian Werenskiold who works as a Sales and Marketing Manager in the Home and Small Businesses department. Per-Christian has been at Dell for a long time and knows a lot about the company. He is also the one who has helped us to set up the contacts with the other interviewees.

As we mentioned before the interviews were held on the respondents' home turf. This got several motives. First, the time schedule was compressed so we were pleased to just get some interviews. Secondly, we felt that the interviews would be more comfortable around their office, but the interview was held in booked conference rooms. All the interviews were held in the respondents' native language to get rich answers, Norwegian and Danish are after all understandable with some effort. Since the respondents were quite busy, we tried to lower the number of interviews and optimise the few we got instead. One of the interview opportunities

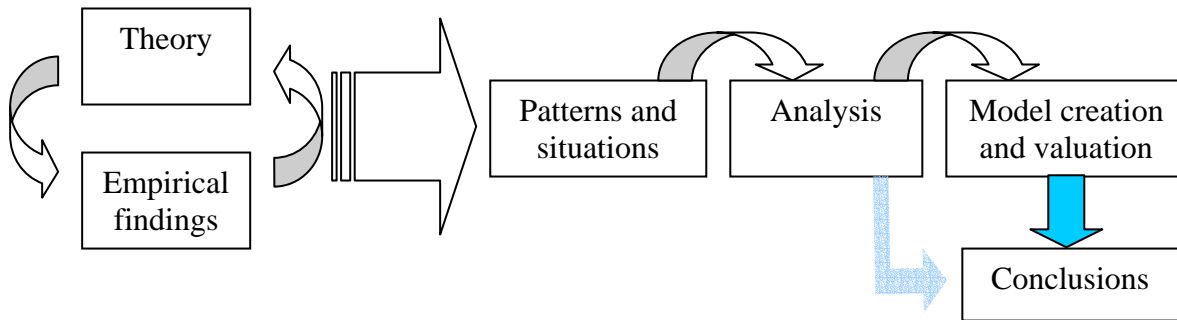
was held with two respondents at the same time. It was Selina and Marie-Louise who had to share our attention. Trying to optimise the occasions, the interviews were quite long; between one and a half, and two hours each. We think we managed to hold the interviews at a sufficient length, without letting the respondents getting tired or losing interest. We also used a small recorder to bring all oral material back with us. We could then focus on listening and understanding instead of taking notes. The recorded material was then transcribed to create an oversight of everything that had been said. That also made it easy to structure and analyse in a later stage.

2.4.2 Secondary data

Secondary data about the researched object were collected through published information material, both from the company itself and other sources. Internet sites and financial reports have also been important sources in the data collection. Since much of the interesting presentation of the problem derives from the financial development, with questions concerning how to explain the difference between total assets and market value, the secondary data were important for the beginning of the thesis. The rest of the thesis rested on the results that were found and the conclusions that could be drawn from the interviews.

2.5 Analysis Method

The analysis is crucial for a reports quality and contribution (Yin, 1994). Our analysis is made quite traditionally where our theoretical foundation is being applied on the empirical findings, both primary and secondary material. We are trying to find situations and patterns that can explain the situation in ways that would not be discovered without theories and our analysis. The analysis is facilitated by the structure, which also can be found in the theory chapter. After the analysis the results of our thesis will be displayed in the conclusion chapter.



(Wallquist, Edsälv, 2006)

2.6 Method criticism

2.6.1 Validity

Internal validity refers to if an event leads to a specific result, a causal effect. The question is if one really can be sure that it is “x” that causes the result “y”, it might be a third factor “z” that actually has the most impact on result “y” (Bryman & Bell, 2003). It is also important to know that no data speaks for itself; there must always be an interpreter that analyzes the data and comes to conclusions (Ratcliffe, 1983). Validity must be judged through interpretations of the researcher’s experiences instead of in terms of reality. The discussion about validity has shifted during the years and it is hard to say what validity really is, it has to be interpreted in each case (Ratcliffe, 1983). Our study consists of all the ambiguous aspects of validity since all that can be done is to interpret data and try to come to some kind of conclusion that might explain a certain result. It will be based on theory and empirical studies but can never be sure that the correct data were used.

External validity is concerned with the generalization of results (Bryman & Bell, 2003). One must ask the question if it is possible to do the same study on another object and come to the same conclusions. It would not be necessary to discuss external validity if the research did not have internal validity, because there is no need to generalize meaningless information (Guba & Lincoln, 1981). Our study could be hard to exactly generalize to other situations and companies with the same result, but there are probably some companies in comparable

situations where the result could be rather similar. Our goal was not to create a frame for studies like this, but to create an understanding for this interesting situation.

2.6.2 Reliability

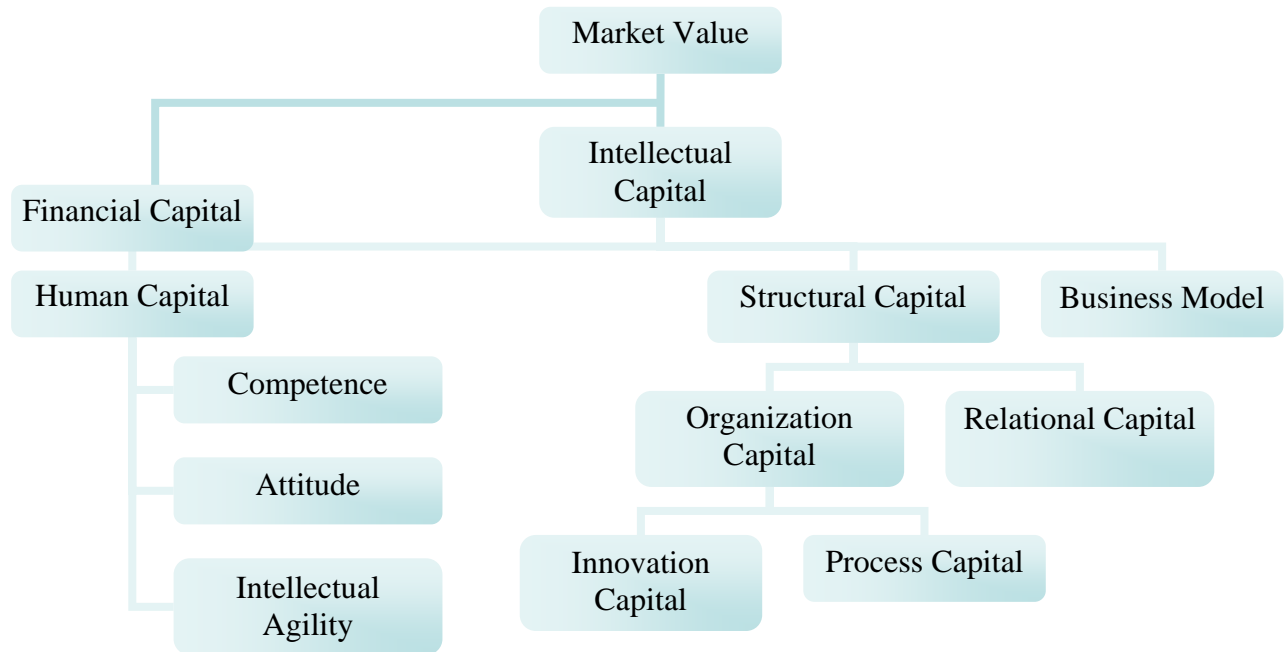
Reliability aims to measure the study by repetition. Would the research land in the same conclusions if it was made all over again? (Merriam, 1988). The goal of reliability is to minimize errors and biases in the study (Yin, 1994). One problem though is that humans and many situations are not static but dynamic, and tend to change behavior and opinions over time. That could lead to a different result. Our study is based on human experiences and conceptions of reality over time, and they do not usually change. So as long the study would be done with the same interviewees, logically the study would come to the same conclusions. Another aspect that could lead to a different conclusion is the researcher's competence. If the researchers develop new knowledge and methods to use it, it might lead to a better and different conclusion. One could say that we hope for a better and deeper study, if we would do the same one in the future. Otherwise or personal development would seem kind of vague.

3 Theory

In the theory chapter we will present the theories we think will be a help for the reader to understand the situation. We will explain the intellectual capital's value scheme to structure the different value creating parts and to put them into context. We will also describe some models for competition, which are based on the two traditional strategy perspectives; the industrial organization view and the resource based view. Last, we are describing a theory for an effective supply chain.

3.1 The Intellectual Capital

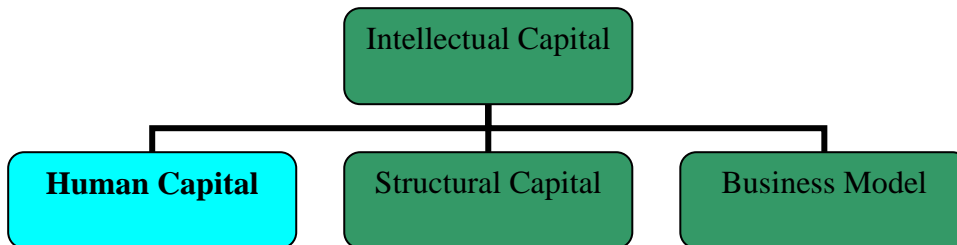
The intellectual capital has been known for quite a while but has not been adopted throughout the business world as one could have expected it to be done. One definition is that intellectual capital consists of all non-monetary and non-physical resources that are fully or partly controlled by the organization and contributes to the company's value creation (Roos, 2005). Intellectual capital can be divided in several parts, and there is many ways in doing that. We have chosen to do it with help of the Skandia value scheme.



(Compound of several IC models. Edvinsson, Roos, etc)

Market value consists of the traditional financial value and the IC. The latter has three parts; human capital, structural capital and the business model.

3.1.1 The Human Capital

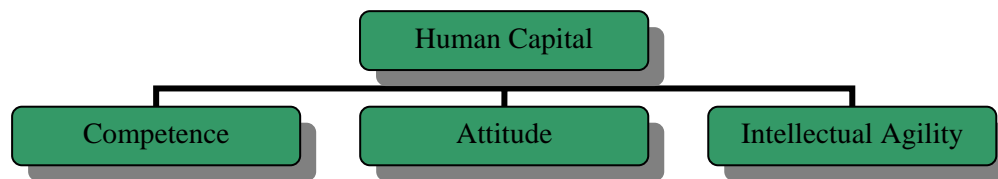


Human capital is the people in the organization, the brains, and they who goes home at the end of the day (Edvinsson, 2002). Human capital is a dynamic part of the company and it is difficult to control because the company cannot own the humans. They do rent them in a figure of speak. Human capital is a very essential part of the company, they are the ones who run the company and create value. Human capital is more than just the people onboard; it is their total knowledge, skills, and experiences. All this has to be managed in the right way to capture the dynamics of an intelligent organization in a changing competitive environment (Edvinsson & Malone, 1997). New skills and capabilities must constantly be added to the people within the organization. The company must appreciate these skills and people should be encouraged to develop themselves and their capacity. These skills must also be spread in the company so the whole team can gain from the development. This is up to the internal culture to regulate. It should be easy to attend to developing courses and it should not be any negative outcome of the further education. The culture and attitude towards innovation is also important, an innovative personnel can be creative in the right moment and solve problems that faces the firm. There are several measurements that can be used to help control these factors. Further education and number of courses taken per year and employee is a number that can give a hint about how the staff is developing their skills. Regarding the creativeness internal ideas can be measured. How many ideas are internally generated and how often do they get implemented?

Value is created in a human during her development and over time. The value is always increasing, which depends on the learning from experiences. A smart company realizes this

and work hard with their recruitment to acquire suitable people with a high development potential. Retention is another crucial part of the work, it is important to keep the good people within the organization so they do not leave with their value. This can be done with a good and healthy work environment and with a good reward system. There are ways of capturing these values and keep them in the organization so that the impact of people leaving will not be that hard. That will be discussed later in the chapter.

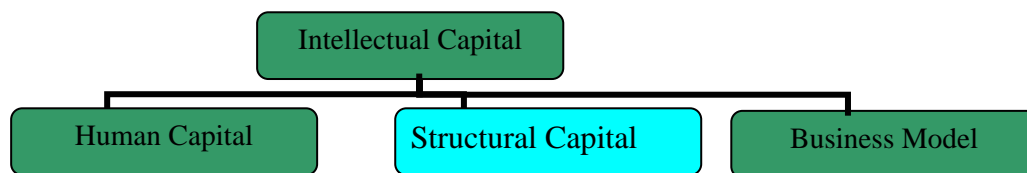
To understand what affects the human capital, it can be divided in three parts. The quality of different skills and knowledge in the firm is of course essential for the value of the human capital. That is called competence, and that is something we assimilate from education, both university's, further education and so on. Talent is something one can be born with, knowledge is not.



The second part of the human capital regards the human psychology of the mind, the attitude toward the work. That can be explained as the staff's willingness to use their competence in a good way to benefit the company. There is a very useful saying in sports that can be adapted here; "motivation beats class". This means that if a team has the most competence but is not willing to work hard while using it, a team with less competence but with a better hard working attitude can, and probably will, be more successful. This part is very hard for the company to affect, and the only thing that can be done is trying to make sure the personnel is highly motivated and committed to their work tasks. Individual performance sessions can help to make sure the employee is satisfied with their situation and then also motivated to do a good job.

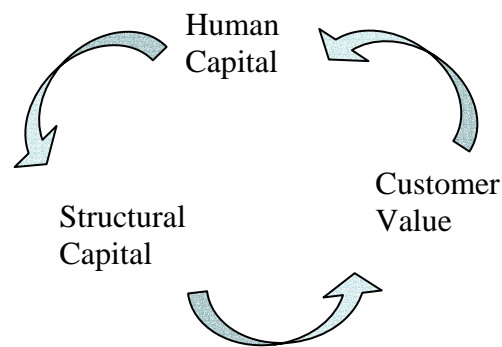
Last there is the intellectual agility which is about how well one can transfer knowledge between several different situations in a process of either imitation, packaging (the process for used to turn ideas into products and services), adaptation and innovation. It can also be how one uses skills and knowledge to develop new skills through learning (Roos et al, 1997). Agility is seen like an important factor since people need to be able to switch between different working environments without developing the needed skills again.

3.1.2 The Structural Capital



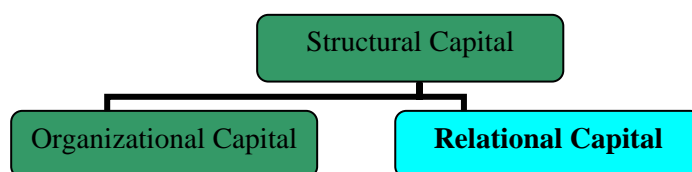
Structural capital is what is left in the company after the people go home – it can be owned (Edvinsson, 2002). It might also be described as the embodiment, empowerment, and supportive infrastructure of human capital. It includes factors as the quality and reach of information technology systems, company images, proprietary databases, organizational concepts, and documentation. It also contains intellectual properties such as; patents, trademarks and copyrights (Edvinsson & Malone, 1997). A common mistake have been to see human capital on its own, and neglecting the structural capital. The human capital needs the structural capital to develop people's abilities and competence. Structural capital can work as a method for knowledge storage where professionals can search for the necessary information they lack in a specific situation. It would be impossible to store all the needed information in a single person. One good example is the lawyer. When one consults a lawyer, one does not expect her to know all laws by heart, but to know how to find the correct information and apply her knowledge on the information; the law book. One would not be happy to just get the law book handed over either. It is when you put the two parts together you can score higher values.

When the human capital is good, the structural capital can be developed, which in turn develops the customer value further, and then it starts over. It becomes a virtuous circle (Knight, 1999).



The fact that the SC is a quite complex phenomenon makes it necessary to subdivide it into smaller pieces that might be easier to handle on its own. There is a few ways to do that and since we follow our “restructured” value scheme model it would be like this; structure capital contains of relational capital and organizational capital.

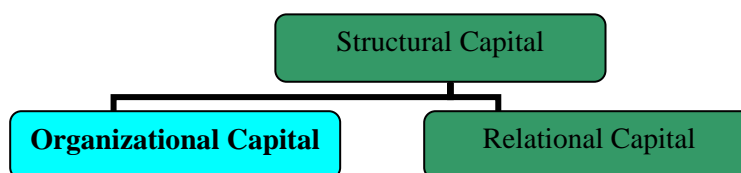
3.1.2.1 Relational Capital



The relational capital is the part that interacts externally and creates value by interplay with other. This part includes all relationships a firm has such as customers, consumers, intermediaries, representatives, suppliers, partners, owners, lenders, and so forth (Roos et al, 2005). As in the case with the human capital the relational capital cannot be owned, even though it is located under the structural capital pillar. The firm might be able to influence the relationships but they can be terminated anytime. Of course there might be contracts and

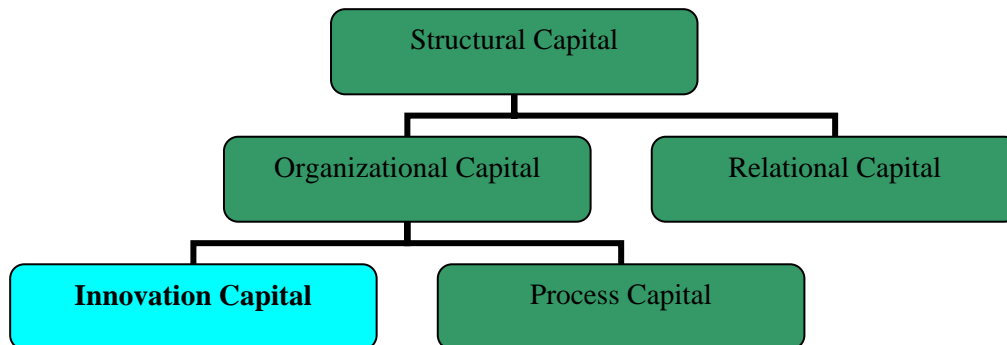
agreements but in the long run, the true success depends on a mutual commitment to the relation and its outcome. One could describe the value of the relational capital as the price on its contacts with external stakeholders. For example; a bank's relationship (with its customer) has a value, which any potential purchaser of the bank would have to pay for (Edvinsson & Malone, 1997). Relations are much about contacts and networks, so one can put value on a company's existing and potential connections with key stakeholders (Edvinsson, 2002). The value can be seen as a function of the network of connections a company makes. The position in the network is important since the contacts of your network have their own network, and access to those might be very valuable (Edvinsson, 2002). Relations contribute with knowledge and when you grow your contact net, you also grow your knowledge, (assumed that your contacts let you use her knowledge). Customer relations are one of the most common relations companies got. A good customer relation can work in many ways, for example it can boost brand loyalty, influence price elasticity, and create a better reputation for the company. Grade of innovation can also be influenced by healthy collaborations. Companies that cooperate to create unique values are much more likely to come up with smart solutions than the lonely working company. A great example is SonyEricsson and the work with the Bluetooth solution for wireless communication.

3.1.2.2 Organizational Capital



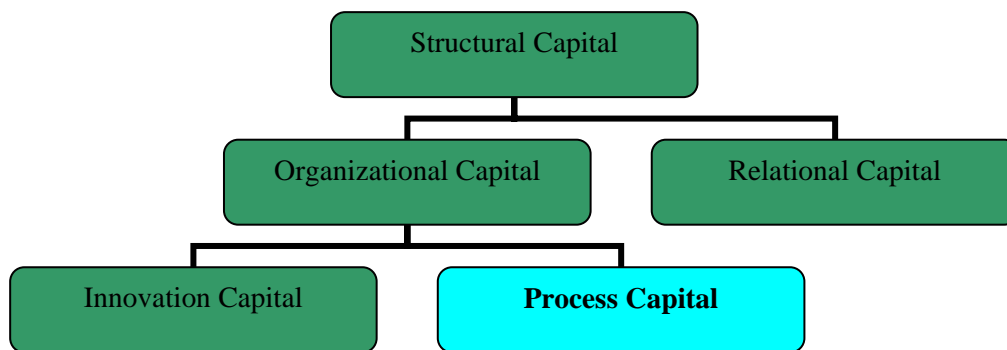
Organizational capital is the company's investments in systems, tools, and operating philosophy that speeds the flow of knowledge through the organization, as well as out to the supply and distributed channels. It is systemized, packaged, and codified competence of the organization as well as the systems for leveraging that capability (Edvinsson & Malone, 1997). This part is then divided into two subgroups: Innovation- and Process capital.

3.1.2.3 The Innovation Capital



Innovation capital refers to a company's ability of managing their innovations. It would be useless to be creative and innovative if you could not gain any value from it. The innovation capital contains aspects that can protect creativity in the forms of legally protected goods. That can be commercial rights, patents, intellectual property and so on (Edvinsson & Malone, 1997). When this is managed in the right manner, the renewal of the company, in forms of new products and services put on market, creates a developing company that goes with the market demand. "With the emerging community of innovation practice, it is understood that various practitioners throughout the value system can contribute. How they are engaged in a common mission determines how they are able to leverage their complementary competencies. Rather than competing for resources and spheres of influence, individuals, groups, organizations and nations can realize what they have to gain through collaborative versus competitive strategy" (Amidon, 2003). A company cannot only trust their legal rights, instead a process of innovativeness must appear. The company has to put new solutions on the market faster than the competitors (Ridderstråle & Nordström, 1999).

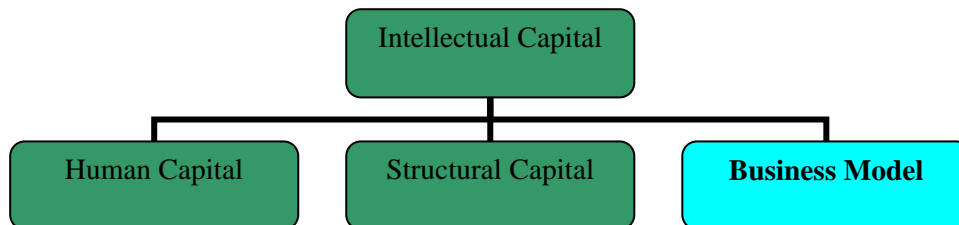
3.1.2.4 The Process Capital



The process capital is meant to help the employees to use their knowledge and competence in a way that increases their financial value. The processes should be configured in a way that makes it possible for the human capital to pay attention to their core-competences. (http://www.intellectualcapital.se/rating_more.htm, 061204).

Good working processes are necessary to incorporate all the knowledge that is created in the organization and spread it in the firm. Well-coordinated processes make work more efficient, communication is better, and teamwork flows when methods are well known. Classification of the process capital is not easy but some examples of process capital are well-developed work-processes and methods, IT-support, reusable competence and organizational effectiveness etc. It can boldly be said that it is any activity that helps the company create value.

3.1.3 The Business Model



The business model consists of the company's business idea and strategy in combination with the market conditions in the chosen business environment. One of the evaluations for strength of business recipe is for instance how well a company differentiates itself in its chosen business environment (http://www.intellectualcapital.se/rating_more.htm, 061204). This part will be further discussed later in the chapter, where we will go deep into some different approaches for competition.

3.1.4 The Multiplier Effect

“Intellectual capital is a combination of human capital – the brains, skills, insights and potential of those in an organisation – and structural capital – things like the processes wrapped up in customers, processes, databases, brands and systems. It is the ability to transform knowledge and intangible assets into wealth-creating resources, by multiplying human capital with structural capital. This is the intellectual capital multiplier effect”
(http://www.leadershipexpertise.com/measuring_intellectual_capital.php, 061204)

The answer to the question about how to create good value in company, will be found in the multiplier effect. If a great human capital can be supported by a great structure capital, then will the company value also be great.

During the machine age, leverage was all about diversification. More machines to make more products. Nowadays, the same competence can work in several markets and branches, without being a part of the production process. All because of good brain capacity.

The multiplier effect can be divided in three cooperating parts:

- Internal – regulates how well a company can transform individual knowledge into company knowledge and competence.
- Industrial – how well can the company use its core competences to compete on different markets. The industrial multiplier effect contains three different types of effects; attitude based, brand based, and competence based effect.
- International – it is quite obvious that an effective international company can gain more value than a national.

(Ridderstråle & Nordström, 1999)

3.2 Business Model Approaches

Explanations of firm performance offered in Strategic management during the past decades have varied across several different research paradigms. The two major paradigms are:

- Industrial Organization (IO)
- The Resource-based view (RBV)

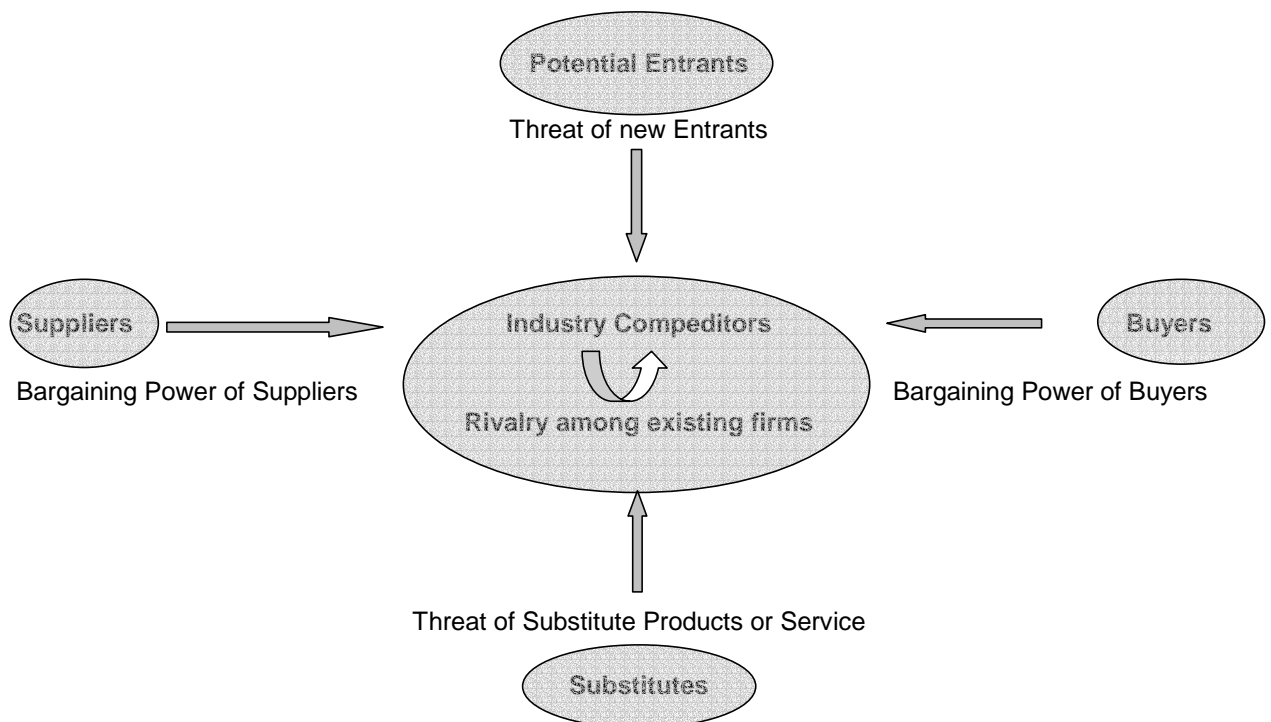
Both have the focus of creating superior value for the organization but their perspectives are different.

3.2.1 Industrial Organization

Industrial Organization is branch of microeconomics, it cover big business, corporate power and the monopoly problem (Shepherd, 1997). It can also be said that industrial organization is the study of competition and monopoly. But from the strategic perspective the industrial

organization addresses the inherent capacity of certain industry positions to capture value. This position is chosen strategically in terms of the price an organization can charge for its product or has to pay its suppliers, i.e. strategizing.

Michael Porter's "The 5 forces" is a model designed for industry analysis. An organization seeking an edge over rival companies can use this model to understand the industry context it is operating in.



3.2.1.1 Rivalry among existing firms

The degree of rivalry determines how much of the created value in the industry has to be shared among competitors. In an industry where there is many threats from substitute products the rivalry is intense, and profits have to be shared between competitors. This is also true for industries where there is high bargaining power for suppliers and buyers.

3.2.1.2 Threat of Substitute Products or Service

The threats from substitute products depend on the price-to-performance ratio different products have while fulfilling the same customer need. The threat is affected by the switching costs a customer have for changing to a competitor's product, if the costs are low the threat is more severe.

3.2.1.3 Bargaining power of Buyers

The most important determinant of buyer powers the size and concentration of customers. If an organization deals only with few, powerful buyers, they are often able to negotiate the price successfully. If the switching costs are low, the customer can easily choose another supplier if she believes the price is too high. Another factor is the differentiation of the product, if the supplier is offering a standardized product; the customer can easily find alternatives.

3.2.1.4 Bargaining power Suppliers

The bargaining power of suppliers is similar to the one of buyers. It focuses on the size and concentration of suppliers. The more differentiated product the supplier can offer, the higher is her bargaining power. In a market with high bargaining power of the suppliers, there are opportunities for the suppliers to charge different prices to different buyers, relative to how much value is added for the customer. This also means that the buyers bargaining power is low in this case. The bargaining power of the suppliers is high when the switching costs for the buyer are high. Suppliers also have a good position in setting the price when there are a very limited numbers of competitors on the market.

3.2.1.5 Threat of Entrants

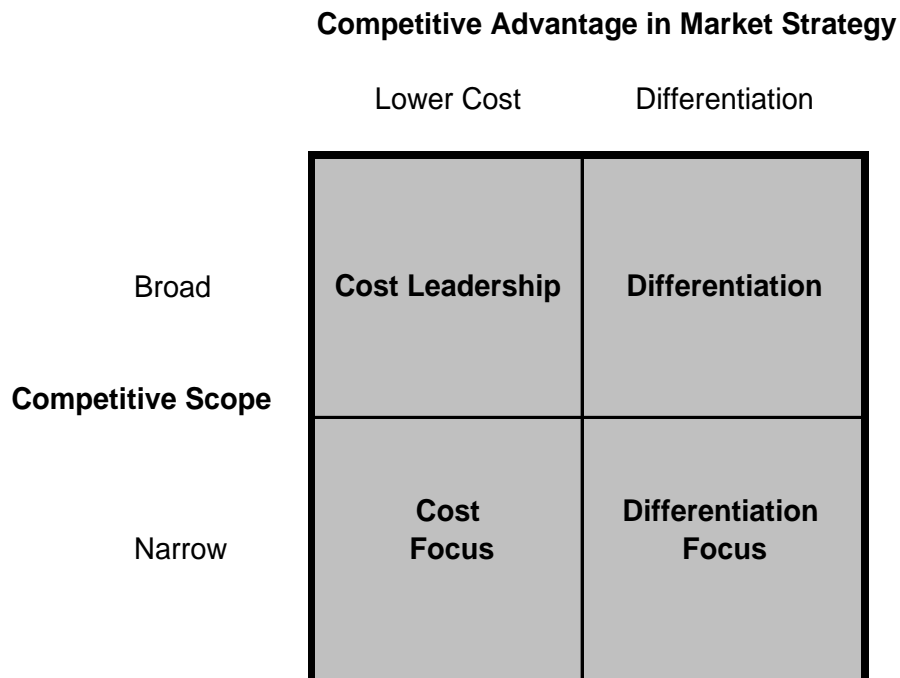
The threats from new entrants are often based on the markets entry barriers. Entry barriers exist when it is difficult or just not profitable for a new competitor to try to replicate another organizations position on the market. The reason for this can be e.g. economies of scale, high costs of entry or brands that cannot be copied.

3.2.2 The Generic Strategies

To counter the five forces, Porter has modeled three generic strategies that a company can take to avoid threatening competition. These are:

1. Cost Leadership
2. Differentiation
3. Focus.

The Focus strategy can be set on Cost or Differentiation so it can be separated in two parts making a total of four generic strategies. See model below.



3.2.2.1 Differentiation

This strategy means that the organization targets one or more criteria a buyer use on the market and the position the business to meet those criteria better than any other organization on the market. By following this strategy the organization can often charge a premium price for its product since it provides a unique value for the customer. In many cases the higher price is weighted against the higher costs of specialization.

3.2.2.2 Cost Leadership

This strategy aims towards the objective to become the lowest cost producer on the market. This strategy is common for organizations with large scale business offering a standard product with little differentiation. Inwards, the strategy focus on lowering production cost as far as possible.

3.2.2.3 Differentiation Focus

With this strategy the organization targets just one or very few market segments. The opportunities exist in customers with special needs for unique products. The threats from competitors are not as present since they are mainly focusing on a broader group of customers.

3.2.2.4 Cost Focus

With this strategy the organization is aiming for a lower cost advantage in just one or very few market segments. The product offered is standard, often similar to the market leaders but with less features or quality. The customer gets almost the same value from buying the product, but a lesser price.

3.2.2.5 Stuck in the middle

The strategies are created for an organization to tackle the competition, but the organization has to choose at least one of the four directions and stick to it to make them efficient (Porter, Michael E, Competitive Strategy, 1980). Organizations that do a little bit of everything get stuck in the middle and will have to deal with meager profits. The firm stuck in the middle will probably also suffers from confused business visions and a blurred company culture. On the other hand is not a feasible strategy to choose three or four of the strategies above. The strategies demands different resources and management, so dispersed focus really means no focus at all.

3.2.3 The Resource-based view

The resource based view of strategic management finds its roots all the way back to 1959 and Edith Penrose's work where she characterizes the organization as a set of productive resources (Penrose, 1959). These resources are all assets, capabilities, competencies that belong to the organization and every organization possesses a different set of resources. This is the assumption of resource heterogeneity. The other crucial assumption is that some resources are costly to imitate or have a limited supply; this is the assumption of resource immobility. If an organization has valuable immobile resources it may give them an edge towards competitors, this gives the organization a competitive advantage.

The resource-based view is interested in what strategic measures managers can take to shape the future of the firm. Penrose observed that some organizations are more ambitious and exercised better judgment than others (Barney 1979). The main difference from industrial organization is that the theory sees performance differences across firms as the result of differences in efficiency, not just the difference in market position. While the industrial organization focuses on evaluating the attractiveness of an industry position, the resource-based view focus on evaluating the strengths and weaknesses of an organization.

The resourced based view focus on the ability of organizations to create value by either lower economic costs or higher perceived benefit, i.e. economizing. The resourced based view focus on the internal resources that either delivers superior products at average cost or average products at lower cost. The emphasis is on internal strengths and weaknesses relative to the external opportunities the industrial organization focus on. The goal is to create a sustainable competitive advantage that gives long-term profitability that is not easily replicated.

3.2.3.1 The VRIO/VRIS framework

The questions of value, rarity, imitability and organization have been structured in the VRIO framework. With this framework an organization can visualize its strength and weaknesses. With this insight the organization can see which resources to exploit to get the best financial performance. The key is to identify the organizations potential key resources and evaluate whether these resources fulfill the following criteria:

3.2.3.2 Valuable

An organizations resources and capabilities are valuable if they improve the organizations efficiency and effectiveness. The resources and capabilities have to be able to react to external changes as well as to leverage on internal strengths. These are not permanent but have to be continuously updated and improved to continue being a competitive advantage.

3.2.3.3 Rare

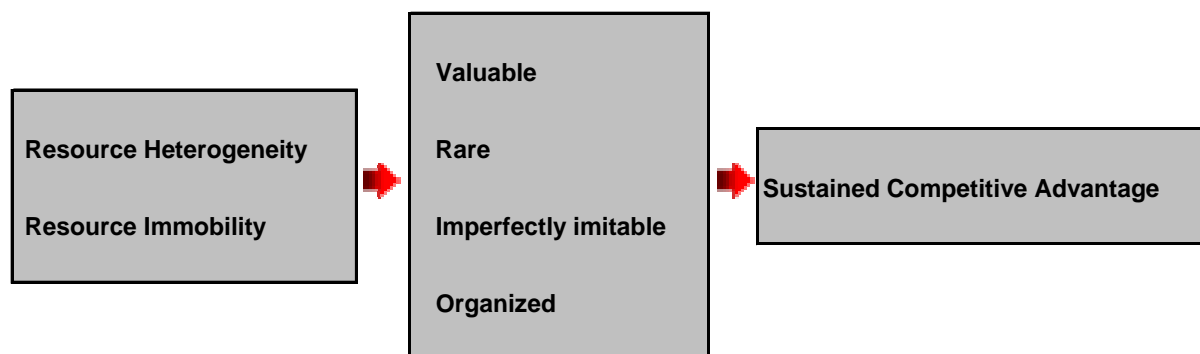
An organizations resources and capabilities are rare if they are not easily available to other competitors. If resources or capabilities are common between lots of actors on the market, it is unlikely to be a competitive advantage for any of them. A resource can be valuable and common, but it has to be both valuable and rare to become a competitive advantage.

3.2.3.4 Imperfectly imitable

An organizations resources and capabilities are imperfectly imitable if they are hard to imitate by competitors. We have already stated that valuable and rare resources can be competitive advantages, but the advantages are only temporary if another company easily can imitate them. To make the competitive advantage sustainable there has to be difficulties like e.g. cost disadvantages for competitors attaining them.

3.2.3.5 Organized

Even if an organization possesses all of the resources above, they need to be organized to be able to exploit them. These resources are usually not part of the primary value chain, but of the supporting functions. On their own they can create a competitive advantage, but in combination with the other resources and capabilities they are crucial for overall success in competing on the market.



In some literature the VRIO framework is named the VRIS model and the Organized parameter is replaced by:

3.2.3.6 Non-substitutable

An organization's resources and capabilities are non-substitutable if they cannot be replaced by another non-rare resource.

3.3 The Triple-A Supply Chain

Traditionally the companies have been aiming at improving two things regarding their supply chains, either to increase speed or to become more cost efficient. But recent studies have proven that this is not enough for attaining a competitive advantage (Lee, H.L, 2004). There are other factors that are as important for delivering goods in an optimal way. Efficiency is still important but it has to be in harmony with the market demands. The Triple-A supply chain suggests that agility, adaptability and the capacity to align the suppliers are becoming

the key factors for successful supply chain management. Companies with the agility to react to changes in supply and demand, the adaptability to market structures and the knowledge on how to align the supply chains incitements will get competitive advantages over rivals.

3.3.1 Agility

To be agile means in this case to be able to adapt to changes on the market when supply and demand fluctuates. It also means that a company can deal with any external disruptions by rearranging its resources and taking the necessary actions from a contingency plan. The Triple-A supply chain recommend six rules of thumb a company can adopt to become agile:

1. Set up information systems to rapidly inform partners in the supply chain of any fluctuations on the market. This will give them a chance to react accordingly.
2. Work together with the partners in the supply chain with improving products and processes.
3. Specialize the product in the very last end of the production process. By doing this the products can easily be changed to fill the needs of a different market segment when the demand decrease for the initially intended target group.
4. Small inexpensive components can become a crucial bottleneck if these supply systems break down. By keeping a supply of these, production can go on even if these seemingly trivial components are missing from a supplier.
5. When demand fluctuates, the company needs to have logistics systems that can be reorganized according to changes in market preferences.
6. Create backup and contingency plans so the organization is prepared to tackle any crises.

3.3.2 Adaptability

To be adaptable means that the company can change their supply network according to changes in market needs. The market changes can be triggered by a number of different factors; changes of customer preferences, demographic trends or technological advances etc. When the market structure changes, the company has to adapt and change the supply chain accordingly. To be able to react fast enough, the organization has to continuously scan for identifiers for that these changes are about to happen. When they have identified that a change is about to happen, they must change their supply sources, relocate facilities or outsource the production before the competitors can to stay ahead.

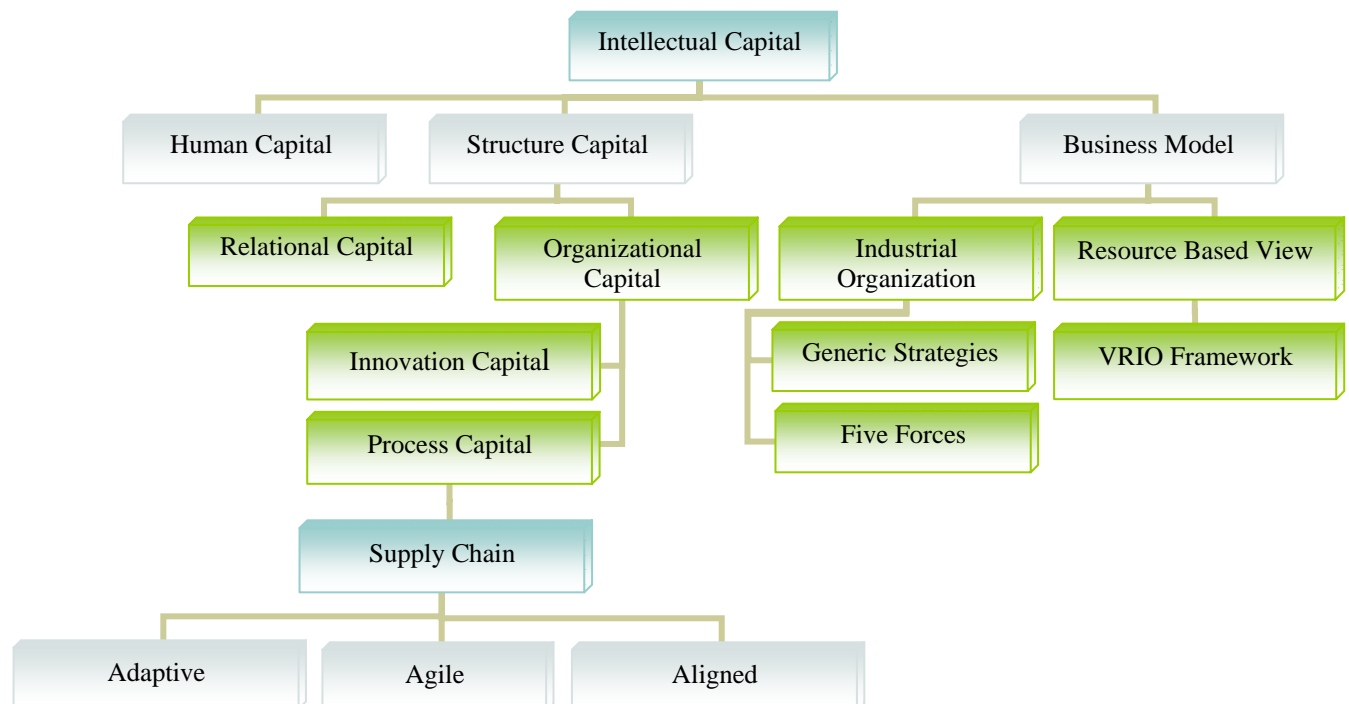
In the current age of globalization, it is important to keep a watchful eye on the new and developing economies, especially China. There can be a lot of cost saving opportunities here if the organization is willing to take the risks. Outsourcing is definitely a step on the way to become adaptable since you can change vendors according to the business strategies. To speed up the communication and reduce the risks for misunderstandings, it is advisable to build communications systems to share information with both customers and vendors.

3.3.3 Alignment

Every part of a supply chain tries to maximize its interests. If these interests differ from the others in the supply chain, the overall performance will suffer severely. This is why organizations have to make sure that everyone in the supply chain is striving for the same goals. To be able to achieve this there are several things that need to align. Firstly information has to be shared, all links in the chain should have access to crucial information like business plans, sales figures etc. in order to align the top level business plans. Secondly identities have to be aligned, there should be no doubt what role the different actors have in a supply chain to optimize the performance and align expectations. When the incentives are aligned, all parts of the supply chain will in their quest to maximize their own interests also maximize the interests of the supply chain and thus its performance.

3.4 Theoretical Framework

Our main theoretical base is in Intellectual Capital. To cover the competitive aspects of the company and the industry we have also used both models deriving from the theories of the industrial organization, mainly the works of Michael Porter. The industrial organization theories are looking at how a company can take market shares by strategically taking profitable industry positions. The industrial organization does not look into how a company can organize internally to create superior value. This is needed to get the full picture of the company and its surroundings. Therefore we have brought in the Resource Based View theories, mainly the works of Jay Barney to analyze the strengths of the company and to find the real competitive advantages that have brought Dell to the status it has today. Below is a figure how these additional models fit into the theoretical framework of Intellectual capital. Part of the intellectual capital is the business model. With the help of industrial organization theories and the resource based view we can analyze the business model a bit further.



When we were doing research about Dell it was obvious that we needed models to help us understand and explain the efficiency in their supply chains. It was obvious that there have been a lot of attention to making the supply chains as efficient as possible. Both in the very start of the value chain, where the factory receives its components and in the end where the consumer gets her computer, the distribution, delivery and logistics are optimized. Since Dell is partly a virtual company, a lot of effort has been put into making the cooperation with the suppliers as smooth as possible. Since so much work has been done on decreasing the time of the assembly process, it is natural to optimize even the last part of the chain to get an efficient flow the whole way.

4 Empirical Study

In this chapter we present our empirical findings. We are starting with a description of the Dell Nordic organization and their segmentation. We are then walking through Dell with focus on the parts that are of interest for our thesis. We will show the parts of Dell that will build the foundation for the theory application and then result in the analysis.

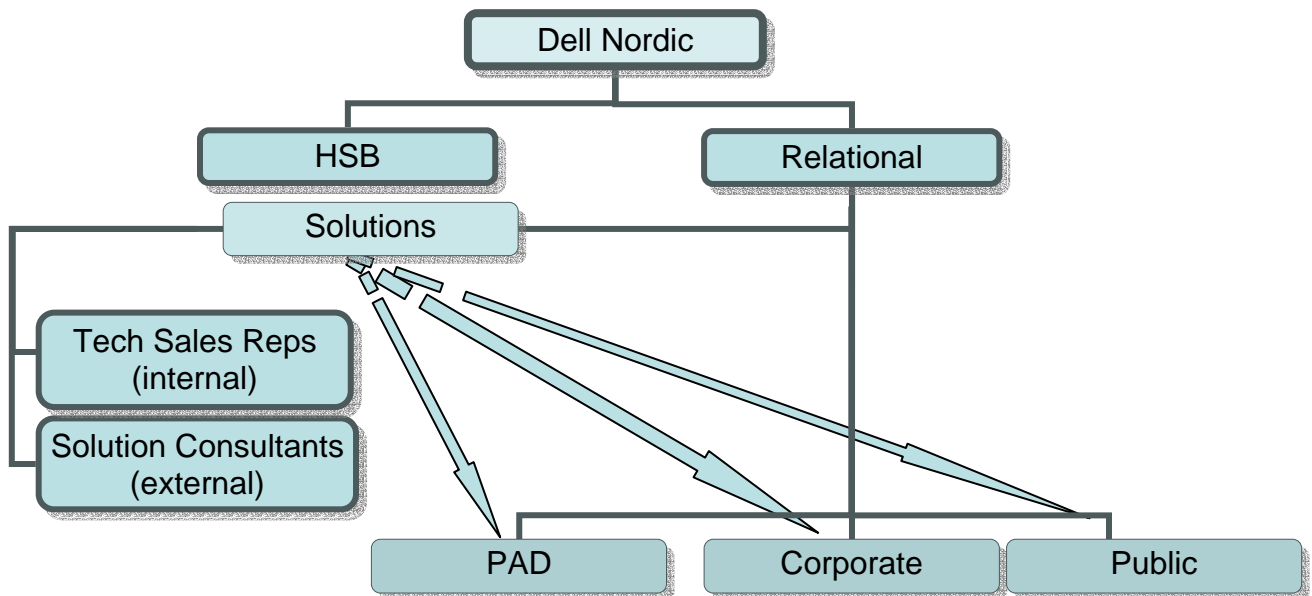
“No other technology company listens to customers, collaborates with partners, adds its own significant layer of innovation and delivers relevant technology more efficiently and effectively than Dell”
(Michael Dell, Dell’s Annual Report 2005).

4.1 Organization

The Dell organization for the Nordic countries is mostly centered to the Copenhagen location. There are also smaller offices in Sweden and Norway, but they are only serving the local larger corporate customers. All sales to private persons and small businesses are taken care of from Copenhagen.

There are three major departments at the Copenhagen location. Home and Small Business (HSB) is the largest department, where 400 of the 600 employed persons are located. 240 of these are working directly with sales and the remaining are working with support functions like IT, Marketing, and Finance.

Then there is the Relational division, which works with larger organizations from 500 employees and up. The “Solutions” unit is a part of the Relational division, this is where a lot of the more complex knowledge is centered. This is also the part where a lot of changes have been made recently, and more changes are currently being implemented.



(Personal illustration; Wallquist, Edsälv, 2006)

As shown above in the organisational chart, Relation is divided in three additional parts; Preferred Account Division, Corporate, and a division for the public sector. All customers to Dell are having a double point access to Dell; two account managers, one internal and one external. The Relational department is supported by Solutions. Solutions have exactly the same organization as Dell as a whole; with internal and external account managers. The internal ones at Solutions are called TSR, which stands for Technical Sales Representatives and the external is called SC, which stands for Solution Consultants. There is a sales person out talking to the customer about what needs the customer have and how different technologies can help them in their business. At the same time there is an internal representative who works to collect the different parts from suppliers, both hardware and software, needed to create that unique solution. Basically, Dell wants to find out if they can help a client to reduce costs or increase revenues. That is what it always boils down to.

The Solution division is not older than a year, so all of this is achieved in one year, all over Europe and it originates from Europe. Even the skills matrix, which we will present later in the chapter, is something that has been developed in Europe.

Of course the organization consists of other departments too. There is the Human Resources department, finance department, hiring and staffing, and marketing, but we are focusing on the sales department and Relational division, because these are the more knowledge intensive parts of the organization, and thus the most relevant for our thesis.

4.2 Market segmentation

Dell uses a segmentation model called RAD. The customers are divided into nine different segments according to buyer power and the share of Dell's wallet. "A" stands for acquisition, "D" for development and "R" for retention. Acquisition is new customers, customers they would like to have and recently have acquired who spends 0-10% of their IT-budget on Dell and their products. Development is customers who spend 10-50% of their budget on Dell, those are supposed to be developed and buy more from Dell. Retention customers are the ones Dell wants to keep and are trying to lock in to keep competitors away from them. They spend more than 50% of their budget on Dell. On the other axis is there a 1-3 scale that divides the customers by buying power. Buying power means how much money the customer has to spend on the type of products and services Dell is offering. By doing this, Dell can segment the whole market into these segment A1, A2, A3, D1, D2, D3, R1, R2 and R3.

| Segmentation | | <i>Buying power</i> | | |
|---------------------|--------------------|---------------------|----------|----------|
| | | <i>1</i> | <i>2</i> | <i>3</i> |
| <i>Wallet Share</i> | <i>Retention</i> | R1 | R2 | R3 |
| | <i>Development</i> | D1 | D2 | D3 |
| | <i>Acquisition</i> | A1 | A2 | A3 |

This system is used all over the world within the company, and that means there is a common vocabulary within Dell on the global level and all Dell's employees' know the different labels. All the divisions in Dell Nordic have two teams; one acquisition team, and one development and retention team. The development and retention team goes together since acquisition is so different from those two.

4.3 Market Value

Dell's market value was on the 5th of December estimated to \$ 61,106,416,600.

Dell's stock prize development during the last ten years:



NASDAQ Index, 061206)

4.4 Financial Value

Dell's financial value is good with a fine development. One interesting detail is that for the fiscal year of 2006, total assets have actually decreased the last year.

FINANCIAL POSITION (in millions)

| Fiscal Year Ended | Feb. 3, 2006 | Jan. 28, 2005 | Jan. 30, 2004 | Jan. 31, 2003 | Feb. 1, 2002 |
|---|--------------|---------------|---------------|---------------|--------------|
| Total cash and investments | \$ 11 749 | \$ 14 101 | \$ 11 922 | \$ 9 905 | \$ 8 287 |
| Total current assets | \$ 17 706 | \$ 16 897 | \$ 10 633 | \$ 8 924 | \$ 7 877 |
| Property, plant, and equipment, net | \$ 2 005 | \$ 1 691 | \$ 1 517 | \$ 913 | \$ 826 |
| Total assets | \$ 23 109 | \$ 23 215 | \$ 19 311 | \$ 15 470 | \$ 13 535 |
| Total current liabilities | \$ 15 927 | \$ 14 136 | \$ 10 896 | \$ 8 933 | \$ 7 519 |
| Long-term debt | \$ 504 | \$ 505 | \$ 505 | \$ 506 | \$ 520 |
| Stockholders' equity | \$ 4 129 | \$ 6 485 | \$ 6 280 | \$ 4 873 | \$ 4 694 |
| Total liabilities and stockholders equity | \$ 23 109 | \$ 23 215 | \$ 19 311 | \$ 15 470 | \$ 13 535 |

(Dell annual report 2006)

OTHER DATA *(in millions)

| Fiscal Year Ended | Feb. 3, 06 | Jan. 28, 05 | Jan. 30, 04 | Jan. 31, 03 | Feb. 1, 02 |
|-------------------|------------|-------------|-------------|-------------|------------|
| Employees | 65 200 | 55 200 | 46 000 | 39 100 | 34 600 |

(Dell annual report 2006)

2006 did not continue the growth trend from previous years. According to Dell there were several combined factors that caused the poor results:

"A variety of factors, including the timing of continued investments in [the company's new customer service program], global expansion and new product introductions, as well as a muted seasonal uplift due to changes in the mix of product and regional profit,"

(Dell Q3 FY 07 Preliminary financial statements, Texas Rock, November 21, 2006)

4.5 Human Resources

4.5.1 Human Capital

Dell has a lot of focus on performance and is continuously evaluating the employees on their performance. As a sales person you get measured on a very detailed level, how long you are logged on to your telephone, how many calls you make, how long the calls are etc. This is measured on a daily basis and reviewed on a weekly basis. If any of these factors are unsatisfactory, Dell offers the employee help. The help can be in form of training and Dell has also set up a personal development plan for each employee to get the employee to where they would want her to go. After these measures have been taken, Dell evaluates the plan to see if the measures had the intended effect. If not the HR resources start looking at alternative solutions like e.g. relocating the employee within the organization

There are six people working at the HR department in Copenhagen. Then there is another department called staffing that is separated from HR who handles all things related to recruiting. They are three full time employees and approximately eight student helpers. The concept with student helper has been very successful and they are planning to export that concept to other Dell sites like Holland and Finland. There three different HR roles at a Dell location, there is the HR Coordinator, HR Generalist and the HR Manager. The HR Manager is the leader of the HR team and focusing on the overview of HR related activities. The HR Generalist is making sure the EMEA level HR strategies are being implemented on the local level. The HR coordinator deals with practical issues. It is mostly ad-hoc tasks that employees needs help with. It can be answering salary questions or general questions from newly recruited. The tasks also include writing different types of permissions for the bank regarding house loans etc. The HR Coordinator also teaches Dell managers in the supporting software systems.

4.5.2 HR Strategy

The Dell EMEA (Europe/Middle-East/Africa) headquarters are based in Cherrywood, Ireland. This is where they create the general HR strategies and focus areas. These EMEA-wide or sometimes even Global (world-wide) strategies are the parts of the strategy that offers the least flexibility for the local HR teams. Some topics in the strategy are very broad and general while other topics are very detailed and explicit and the local HR team is informed on what actions they are expected to take, and there may be deadlines for the action points. These can e.g. be regarding pay planning and other processes that run throughout the whole year. The local offices task is to align it with the local needs and activity plans.

In some areas Dell Nordics HR are restricted to keep activities within the general strategy outlines and there can be some policies Dell Nordics just have to implement even though they has not been a part of the design. But there is some flexibility to adapt to local needs, let's say Dell Nordics should have a very high staff turnover time in Copenhagen, this means they have a need for extra local activities to deal with the situation. The level of these extra activities can be turned up or down by the local office, so in some areas there is lot of flexibility and in other areas there is less flexibility. It can also be about changes to the process around the HR and staff software systems they are using. In these systems, Dell has all the Individual Development Plans (*IDP*) that has been set up for each employee. This will be described in detail later in this chapter. The processes for how to work with these systems are well documented and can also be found in the system. Dell does not have a fixed HR strategy, Selina Lomholdt believes it is due to that the business is moving very quickly and the HR initiatives must try to keep up.

“Dell cannot only compete on price anymore as Dell has done in the past. This is why Dell now is focusing on the personal relationships in the sales process. This will get a lot of attention at Dell in the coming year, not only for the sales personnel but also for HR. How will the HR department make their relationship with the employees more personal?”
(Selina Lomholdt, 061215)

Dell are in the middle of rolling out what they call “Dell 2.0”, which apart from a lot of new product lines also is and attempt to become much more personal in their relations. So the philosophy behind this marketing message must also be aligned in HR department. So right now there are several things that are directly related to the Dell 2.0 strategy in the new HR strategy. In the new strategy there are guidelines for the new year, they main topics are “HR effectiveness”, “People Development” and “Resourcing”. Selina believes that with the pace business is changing, there a little possibility to set a general HR strategy that will stand for more that a couple of months.

But there are some values that are communicated to the employees. It has always been what they call a “Winning culture” in Dell. This means that the employees always should try to do their best. There is a bold sales culture and that is also how the employees are being evaluated. Dell also has a saying going “Winning with integrity”. But there are no big posters on the walls or screensavers with these messages; it is communicated through other softer channels.

Dell has been fairly pressured during this fiscal year. The sales have not been looking as good as Dell had forecasted. Thus has not Dell Nordic been able to get as much freedom with the benefits as they would have liked to have. There has been a lot of focus on cutting costs, but now is the budget for the next year being laid out and they are making sure that there is headroom for team building activities and such to boost the morale.

The staff has noticed that it has been cut downs this year and it is not appreciated. It has been de-motivating for some, and maybe it even has weakened the culture”
(Marie-Louise Andersen, 061215)

There is a lot of continuity in Dell processes. There are things that always take place the same time every year, there are some things that always happen in February and there are things that always happen in April and so on. The employee satisfaction survey always take place two times per year, pay planning also twice a year, the individual development plan and the

performance plan is also updated once a year. If the HR headquarters sends a rollout plan for new processes Dell have to follow the given dates.

Dell has usually detailed process descriptions on how to handle different situations. E.g. HR has a process to handle the situation that appears if an employee chooses to resign. The idea of this is that anybody should be able to come in from the outside and know how to handle certain tasks right away. When a new sales person starts she is sent on an introduction course where she gets training in all different parts of the job. This is done internally and gets scheduled when Dell can see the need for it.

4.5.3 Reward systems

The reward systems at Dell are based on thoughts of a meritocracy. A sales person is very carefully monitored, when she logs on to her telephone, how long the calls last and so on, everything is measured. She has to log off when she goes to lunch so calls are redirected and not lost in a busy tone. In that way Dell can see exactly how long time per day the employee has been available for calls. This goes back to the performance Review because if she has not been logged on, she can't receive many calls either.

The managers make forecasts for every week. All results get a quick feedback. The manager is using this data to brief the employee on their performance, week by week. The employee gets evaluated on the same parameters every week. So there will be no surprises if the performance is not good enough.

“The power in a company resides in the people who go to work every day, clear about their objectives, and committed to achieving them in the right way.”
(Kevin Rollins, CEO Dell, 2006)

If the employee are over-performing at Dell she can make good money, but if she is underperforming she is not going to make that much. If the performance is graded as “well”

there will be the monthly salary plus a bonus. The ratio between the fixed salary and the bonus salary is different depending in which segment and department the employee is located. Selling to private person's means that the fixed part is higher and than if selling to large organizations. Selling to larger organizations means that the fixed part is lower but that the provision part is larger. The salary structure at the sales department at Dell is put together so that the employee has a fixed salary and a target salary. She can also get more than the target salary if she is performing well. The fixed salary can even be doubled if the employee sells over target. You also reach certain specific goals called "Stacks" and "Spiffs" to get different bonuses. This is all part of the "SCP"; the Sales Commission Plan. This is very complex and could be a study object in itself, so it will not be explained in detail here, only mentioned. The employee usually starts at 80/20 in fixed/provision salary to be guaranteed a high fixed salary. From there she goes to 70/30 and later on to 60/40. 60/40 is the highest provision part one can get; there is no 50/50 deal at Dell what so ever. Dell knows that one motivational factor is the work tasks, especially for the technology-based tasks. Dell lets people's interest control some of the work tasks. If people are allowed to work with a technology that interests them and they know they CV will gain from it, it works as a good motive. Dell offers a great opportunity to move around the company, to develop the employees' CV and competences. (Asbjörn Navrestad, 061212)

Most of the rewards are on individual basis. But employees can also win e.g. a team dinner or team event like movie tickets. These are bonuses they can win as a team if the team reaches a certain average on the targets. The teams are competing with each other so everyone does what she can to help the team reach good results. Dell is not only rating the technical sales skills. Dell is also measuring the soft skills, how are the employee's cooperation skills within the team, to other teams and towards the customers. Dell is evaluating social competence. A person can be having really good sales statistics, but if she is difficult to work with and split up the team she is of course not as useful. The employee can get a good grade by just being a good team player even if the sales are average. These persons are wanted in the organization because they can raise the team spirit and increase the motivation. This is all explicit in the performance plan, there are 12 or 16 different competencies and some of them are based on softer cooperation skills.

Dell is mapping all the internal skills. They have 150 different types of skills that have been defined in levels from 1 to 5. Then every employee makes a self-assessment and maps their own competences. This becomes a color-coded matrix that goes from red to green. The different skills are grouped into 10 main areas of expertise, with additional sub-areas. So for example Microsoft is one main area, with subgroups such as MOM, SMS, Exchange, SQL and so on. The different subgroups of expertise delegated to different persons who become responsible for that certain area, e.g. one person can become responsible for i.e. Microsoft Exchange or Altiris. This is duplicated throughout the organization so there is one Solution Consultant and one Technical Sales Representative responsible for each area of expertise. This will then be added to each persons IDP. The individual skills matrix does not directly affect the reward and bonus systems but indirectly it does via the IDP.

The Performance Plan is connected to the reward system. It is updated once a year and the employee can influence what the plan will consist of. Generally there are a number of goals to reach and a description on how to get there. Then the employee gets evaluated on the Performance plan at midyear and end of year. So if you have 10 separate points in your Performance Plan, it is also these you get evaluated on twice a year. The IDP is also updated once a year, in the IDP Dell asks the employee what they would like to do the next 0-12 months and what they would like to do in 2-3 years, so it is looking a bit further ahead. But both of them are actually the base for evaluating an employee. The IDP is created 3 months after you start at Dell.

One-on-one meetings take place every week with all employees and their supervisors. The main topic on these meetings is the employees' self-development. Questions like; how far they have come with their solution responsibility and what courses would be suitable now, are common. There is also a commitment, to get the highest grade (5), there is have a special criterion. What differentiates the 4 from the 5 is the capability of teaching others what one has learned. The employee has to gather the team and spread the knowledge to get the grade "Exceptional". This will have affect on the salary, if the employee has a "Below" grade, it

will limit the reward possibilities, but if the employee gets the grade “Valued” or “Exceptional” the chances will increase.

The Performance Plans are partly set from what the customers are requesting. Dell has something called a “Customer Advisory Board” where the customers can suggest what skills Dell need to improve. The subjects discussed there will then be implemented in the employees’ development plans.

4.5.4 Internal mobility

Many employees start at the HSB sales division. HSB recruits either from the support functions or directly from the external job market. Then the usual career path is to go to the relational division for more personal customer contact. The further up the employee comes, the more complex is the sales function and she needs more experience and knowledge. The employee usually stays longer in positions higher up in the organization as well. Dell is trying to extend the time persons stays at each position to lower the turnover rate. Dell also wants to move people from Customer care to HSB or the other way around. The reason for having a person for a longer time at each position is to make better use of the knowledge they build up during this time.

Dell is not afraid to trade local talents between the different departments. Local stars in HSB can be used for tasks within the Relational department, as an example. There are also management programs to develop leaders in different areas. There is no system for this kind of job rotation, but it is up to the individual’s wants and needs. It is a very open organization and no walls for a person who wants to move around. In the IDP, the career is planned, so one can see what you are supposed to work with in the next 12 months and what one should develop up to 5 years from now.

Dell wants people to move within the organization and tries to inform personnel that these opportunities exists, but Dell can’t do that as long as they have this high staff turnover

because the people are not long enough at their positions at the moment. This causes a lot of knowledge losses. If people are moving too fast upwards in the organization, it will be harder to motivate the employee because the ways to develop will be limited when she reaches a certain level. But on the other hand Dell has to make sure that employees do not feel stuck in a position. Dell has some guidelines for how fast people can transfer between positions internally. Dell has tried to make people stay for a year in each position but that has just not been possible. There has been a history in Dell of expecting people to move up quickly in the organization, one does not stay 3 years in HSB. But this is what Dell is trying to change now, it is getting accepted to stay at a position if the job is satisfying. There is not much choice now when people are not coming in to Dell in the same way they used to. Dell has started a cross departmental group to work with these issues called "A great place to work", this will be a chance for the employees to make their voices heard. This group will try to find out what Dell can do to make Dell a place where everyone enjoys their work.

4.5.5 Recruiting

There is no big need for any super special competence since the industry is based on standard parts, at least when it comes to hardware. Dell does not search extensively for competence but it is more a question about finding the right people who can handle the Dell culture and develop within it.

Dell is planning to hire a hundred Solution architects in Europe in the nearest future. They are aiming at having 60% of their time spent with the customer billable, the rest of time counts to sales activities and alike. Up until now partners have been used for this type of work and that will continue, but Dell wants to increase their intellectual capital on the consulting part in-house.

4.5.6 Retention

In Dell's internal statistics, they can see that during their first year Dell lose a lot of employees. But after that first year, people tend to stay longer. It can be a hard culture to assimilate to during the first year. Part of it is probably due to the performance management, it is with no doubt a very competitive environment. If the employees are not used to a culture where they continuously have to perform and get measured and evaluated all the time, they may perceive it as a disturbing control tool. Some people just can't stand it or does not have the skills that are needed. Dell need more senior profiles in HSB to teach newly recruited about the job. (Per-Christian Werenskiöld 061212)

Right now there is high demand of sales persons on the Danish market so Dell have lost quite a few persons to other companies who could give them a more attractive offer. Dell has even lost some sales persons that have been with them for a long time. So right now, Dell believes that they also lost some senior profiles that they would not have lost if the external job environment were not so competitive.

The situation on the labor market is of course an important factor. But it can also be that the person applied for the wrong job or applied for the wrong reasons. Dell's ambitions are though to get people to stay longer in the company than they are doing now. That is probably the most important topic on the [HR] agenda right now. Dell has just had an EMEA meeting where the Nordic location reported on what measures they have taken on this issue to resolve it and what they are planning to do about it in the future. Their goal is to decrease the turnover by 15% per year from now on. The HR department in Copenhagen believes they have a lot of work to do because there is a substantial gap there. But they have no other choice but to succeed in this, if they can't decrease these numbers Dell will not be able to support their business (Selina Lomholdt, 061212). To achieve this, they will work on several fronts, The Sales Commission Plan (SCP) will be redesigned to make it more attractive and they will change the way goals are set up. There will also be changes to the benefits system. Dell has already made some improvements there, but there will be more changes and Dell will make more flexible. The situation right now for an employee is that after 6 months she will

automatically is signed up for the retirement funding plan. A year after that, she will get an extra vacation day per year, and after two years she will get another additional vacation day. Dell also offers free psychological help, physio-therapy and other treatments for employees. The employees will also get free medical care in all countries where health care is less or as expensive as in Denmark.

There are three areas where Dell will make improvements. The benefits are one big area, another is the business culture and the third is that Dell will look through their procedures for communication and information sharing. Dell can see in their surveys that they have to share more information on how the targets are set. What do the targets come from and how are they derived? Sometimes they might just get some figures to live up to without understanding where the figures come from and how they are calculated. Why is it this much higher than last year?

Dell Nordics has grown from 60 persons to 600 persons during the past 8 years. So the company has been growing fast and has been having a high staff turnover at the same time. During these years there have been a lot of persons passing through the system. This is one reason to why it is difficult to keep a stable culture. Dell has also been shifting locations from Amager Strandvej to Ørestad. Some things might get lost in a culture when the company changes location. Some people liked it and others thought it was a negative thing. Dell has gone from a very small and personal organization to become a large and corporate organization. This is hard and demands more from the organization to drive a culture when it grows rapidly like it has done. This is something the management has acknowledged.

The turnover can often tell if the employees are satisfied with the employer, but it is hard in this case since the organization is relatively new. So far ten persons have been employed and only one has quit, that was a failure in the recruitment. Overall turnover is also hard to say. It varies a lot; depending on what department you look at. Sales does have naturally shorter intervals. It is often younger and foreigners who work in sales. For example are Norwegians here for a shorter time, since they are getting more paid in Norway. Swedes are getting better paid here and they can also stay in Sweden and commute, between Malmö and Copenhagen. The age does a lot to it too; young people are more likely to move quickly. The solution team

is more mature with people around their forties, more stable and not so likely to move away. Dell wants to keep people for a longer time in the organization to gain from the employees' competence since it is a large investment in knowledge they do. In a perfect world, it would be best if people could have a horizon of three to five years according to Asbjörn.

4.5.7 Employee development

Dell has education guidelines regarding who is eligible for an education and who's not. The student helpers are for example not eligible for further education. Employees have to live up to certain criteria and the employee cannot be graded below average in her evaluation. But it is up to the local manager to choose how she wants to use the budget. When a need for a special skill or competence appears, Dell will send the responsible persons on courses to develop the necessary skills. The next step for the responsible person is to teach the rest of the employees. This is an important step because it will increase the knowledge level across the whole organization.

These solution responsibility areas are built into the Performance Plan. Dell has a "Solution Academy" for giving these courses to train the employee in certain applications or technologies. The Solution Academy is based in Amsterdam in Holland. Theoretical training is one part of the academy, but there is also access to all the products and software so the employee can get some real hands-on experience. The hands-on experience is important during customer contacts. There has to be some weight behind the arguments that the Dell associate presents. The customer requires that the Dell salesman has the obligatory expertise and experience in that certain field. According to Asbjörn Navrestad; "Dell wants to be a trusted advisor".

Dell has picked up some good ideas that originates from the employees. Dell started to use structured telephone interviews for the first filtering in the recruitment process. This has saved a lot of time and money in the initial screening process of applicants. During these interviews Dell ask the applicant why they think they are a good sales person and what is important to a

customer, what is important for the employee to know about a customer and so on. The good sales men gives the answers Dell wants to have, and it is pretty easy to spot the less suitable. Dell also has something called “Brownbag” sessions where they do sessions with groups of employees for brainstorming around improvement areas. This is done to catch any employee’s views and ideas before taking important decisions.

4.6 IT-support

Dell has a Human Resource software support system called “HR Direct”. In this system they keep profiles of all employees. There is also a system called “Performance Direct” where Dell keeps all the employees skills matrixes. The systems are connected, so one can access data from one system from the other. These systems are used globally and can be accessed from across all Dell computer locations.

The local managers make the Individual Development Plans (IDP) and Performance Plans (PP) for each employee and upload them to the system, they also grade them and enter reviews, and the managers can also enter pay increases through the system. But if the manager needs assistance or if something should go wrong, HR will step in and try to sort the situation out. The Dell employees have different setups of tools on their computers, depending on what role they have in the organization, but all have a profile in the HR Direct system.

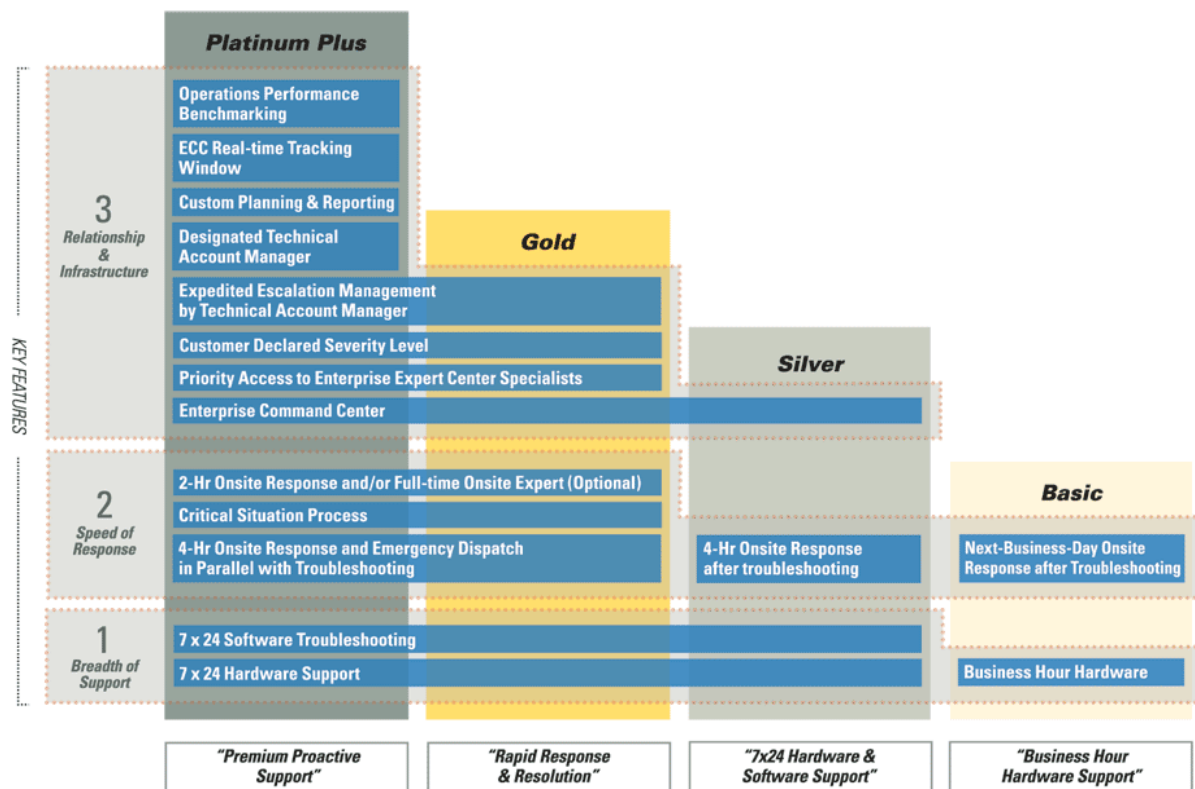
Dell is systematically collecting relevant information about customers and enters it into the IT systems. The files contain a lot of information; what the customers needs are, contact information etc. The employee is responsible for the correct information to be entered. But everything cannot be written down and codified so there is of course still a lot of knowledge that gets lost when a person decides to leave the company or move on. As long as the person stays within the company, it is not a problem because the knowledge stays within Dell, but if she moves outside Dell; a lot of knowledge can be lost. When a person with a customer portfolio leaves the organization, there are rules about how to hand over the portfolio

information properly, because it is the relation that Dell values the most. Dell tries to keep the sales contact as long as possible to grow a good relation, since customers often prefer long time contacts. This is more relevant for the relational division than for HSB because the relations are usually longer and HSB are not working with the portfolio approach. As a general rule, portfolios do not move with the employee, they stay in the segment they belong to.

The Internet solution is also top notch and can be said to be the heart of, at least on the consumer side, Dell's order process. The contacts are direct between customer and Dell but it does not have to be in person. Many contacts and contracts are initiated and closed with no personal contact; it has all been done via Internet and phone. This is a cost effective way of doing business and allows Dell to concentrate on other value creating factors of the business.

In their enterprise support, Dell offers several different packages depending on customer needs. The options are "Basic", "Silver", "Gold" and "Platinum Plus", of which Platinum Plus is the most comprehensive. ("Dell Power Solutions", August 2006). With the Platinum package customers get benchmarking tools for optimizing their server setup, it compares current performance with historical data and industry benchmarks, and if the performance is not satisfactory a Dell Technical Account Manager will be called in to give advice on how to resolve the situation.

As a Platinum Plus customer the service is also including online real-time tracking for service dispatches. Dell uses the Google Earth Pro application for tracking, so the customer can see exactly what street corner the services representative is turning on his way to assist. The customer can in the same window see when the service representative started his journey, what status the issue is in, and the estimated time until the issue is resolved. This is in the very technological forefront of what can be done today with computer-aided support systems.



(Internet Image source: <http://www.dell.com> -> "Medium/Large Business" -> "Introducing Next Generation Enterprise Support" http://i.dell.com/images/global/services/stack_full.gif, 070122)

The model above is so far only implemented in North America but our best guess is that it only a matter of time before it also will be offered first in EMEA and APJ and then other parts of the world. The focus of the services model is that Dell wants to build solid relationships with key customers. Not only reactive support, but to be part of their entire business as proactive support.

4.7 Patents

Dell is extremely efficient in its assembly processes of computers. The computers are put together in a short time and with high quality. There are factories in Europe, the Americas and in Asia supplying the local markets. The computers are built from standard platforms but are individualized in the later parts of the production process with requirements from the customer. The assembly processes are optimized in every detail. Dell counts how many times

a computer has to be touched by human hands before being packaged for delivery and continuously tries to decrease that number. Dell Computer has over a staggering 200 patents on the assembly processes. Dell's skills in this area are part of the success formula that has led them to the dominant market position they have had for the last decade. Most of all these patents and processes are based in the manufacturing area but some of them come from areas of more administrative form (Barney, 1997).

4.8 Relations

“Here is our strength, direct relation and single point of contact, no confusion and expensive middleman between the lines. We produce and negotiate at the same time”
Asbjörn Navrestad 061212

The same type of color-coded skills matrixes that are made for employees are made for the external partners. With help of these matrixes, the gaps in competence are visualised. When the partners matrixes are put on top of the internal matrix, it is possible to see where it have transparency, where the partner's skills are compensating the internal ones, and where it does not, and then shows where there is a need for improvement. Dell has two types of partner contracts; one is the “Dell Professional Service Partners” (DPSP) that is the physical operating partner, for example; Unisys, WM-data, and Syscon. There are also the “Dell Alliance Partners” which are Dell's technology partners, for example; Microsoft, Intel, AMD, Linux, Oracle and Symantec. Dell works very close with their partners. The DPS goes out and physically set-up and install the Dell hardware, this is where the success is created according to Asbjörn. Every partner is at the Dell location at least once a week. The technical partners are even closer and often visit Dell 2-3 times per week. They have their own “drop-down” work spaces, which are desks they can use to dock their computers and get internet connection while they are working from Dell.

Dell has special alliance managers for these partners who work with training, sales activities, etc; they are also giving lectures in different technologies. Both kinds of partners have fixed

visiting times at the Dell location in Ørestad. There are seven DPS partners in Denmark. These services are about everything from client management to Microsoft and Citrix, Altiris, Vmware, Legato and Symantec. With the help of the internal skill matrix, business decisions can be taken regarding what partners Dell should cooperate with. So when certain skill is requested on the market Dell makes a judgement whether that is a skill that should be built up internally or if it should be sourced on an external partner. When a supplier is found; a Master Supplier Agreement (MSA), is developed. All the things the partner has to fulfil to be a DPSP are regulated in this document.

Since Dell is selling directly without intermediates they use to gather customers in group sessions. In these group sessions the customers are directly asked what kind of technical support in form of software, hardware and services they will need in the future to optimize their business. Simply put, what do they want Dell to develop? This information goes later into the skills matrix so managers can see what skills Dell has and where there is a need for more skills.

“By doing it this way we can make sure that the employees are developing in the directions of where the client needs will be.”
Asbjörn Navrestad 061212

The Solutions teams are linked to primary customer segments and in-house sales persons. As an example; Jens, who is IT manager at Ericsson, thinks that Morten at Dell is very competent and helpful. He do not want to talk to Mads next time, he wants to talk to Morten again. Because Morten now knows his infrastructure and has understood the deeper purpose of what Jens wants to achieve. But no one knows everything, and if a project comes up with a specific technology i.e. an Oracle project, Linux project or SAP project. That type of competence may not exist in that team. In these situations, Dell has developed their own model where they can pull the right competence into that specific project. The specialist may not become the lead of the project even though that person will be very important for the project, due to Dell's high valuation of the relationship.

4.9 Supplier Principles

Since Dell is such a strong operator on the market, they have recognized an opportunity to affect other players in a positive way in the industry. They try to use their strength to make an impact on the environment, communities and on people. When a company so large and operating on many markets as Dell does, they will interact with many other businesses, different cultures, countries and levels of economic development. These other businesses are not always as good with standards, rules and regulations as companies in the west are used to. The supply chain is one of the means for Dell, not just to create higher values as in profit, but also to create higher human and environmental values. Some of the standards cross borders and are being applied no matter the economical development. Included among these are the United Nations Declaration of Human Rights, the U.N. Convention on the Rights of the Child, fundamental conventions of the International Labour Organization (ILO), International Organization for Standardization (ISO14001) and Occupational Health and Safety Assessment Series (OHSAS 18001), as well as the experience of other corporations across the globe.

Dell is committed to communicating these requirements to the suppliers and wants to work collaboratively with the suppliers to promote higher standards of work and behaviour. These principles are equal to every supplier, regardless of the level or profitability that comes with the supplier. With such an extended network of suppliers, certain control problems comes along. The focus of controlling these standards lies at the first-tier supplier level. Even though the focal point is on the closest suppliers, a violation of the rules is unacceptable for Dell. The global supplier management approach is built on four key areas:

- *The Soul of Dell*
- *The Dell Code of Conduct*
- *Supplier Commitment*
- *Supply Chain Management System*

4.9.1 The Soul of Dell

The Soul of Dell is a declaration of the corporate philosophy that shows what Dell is and what Dell is trying to become. It also works as a guide for actions around the globe. The key to the success of the Dell Direct model is a Winning Culture - the basic philosophy that influences the teamwork of Dell. Crucial to the culture is the commitment to:

1. Customers

Every team member's goal is to provide a superior customer experience through efficiency and operational excellence.

2. Direct Relationships

They believe strongly in treating people—customers, partners, suppliers, and each other—fairly, openly, and respectfully.

3. Global Citizenship

They believe in participating responsibly in the global marketplace; they are committed to understanding and respecting national laws, values and cultures; promoting a healthy business climate globally and contributing positively in every community they call home.

4. Team Success

They believe their highly-skilled team is their greatest asset, and they cultivate and reward leadership, diversity, and contributions to the success of the entire team

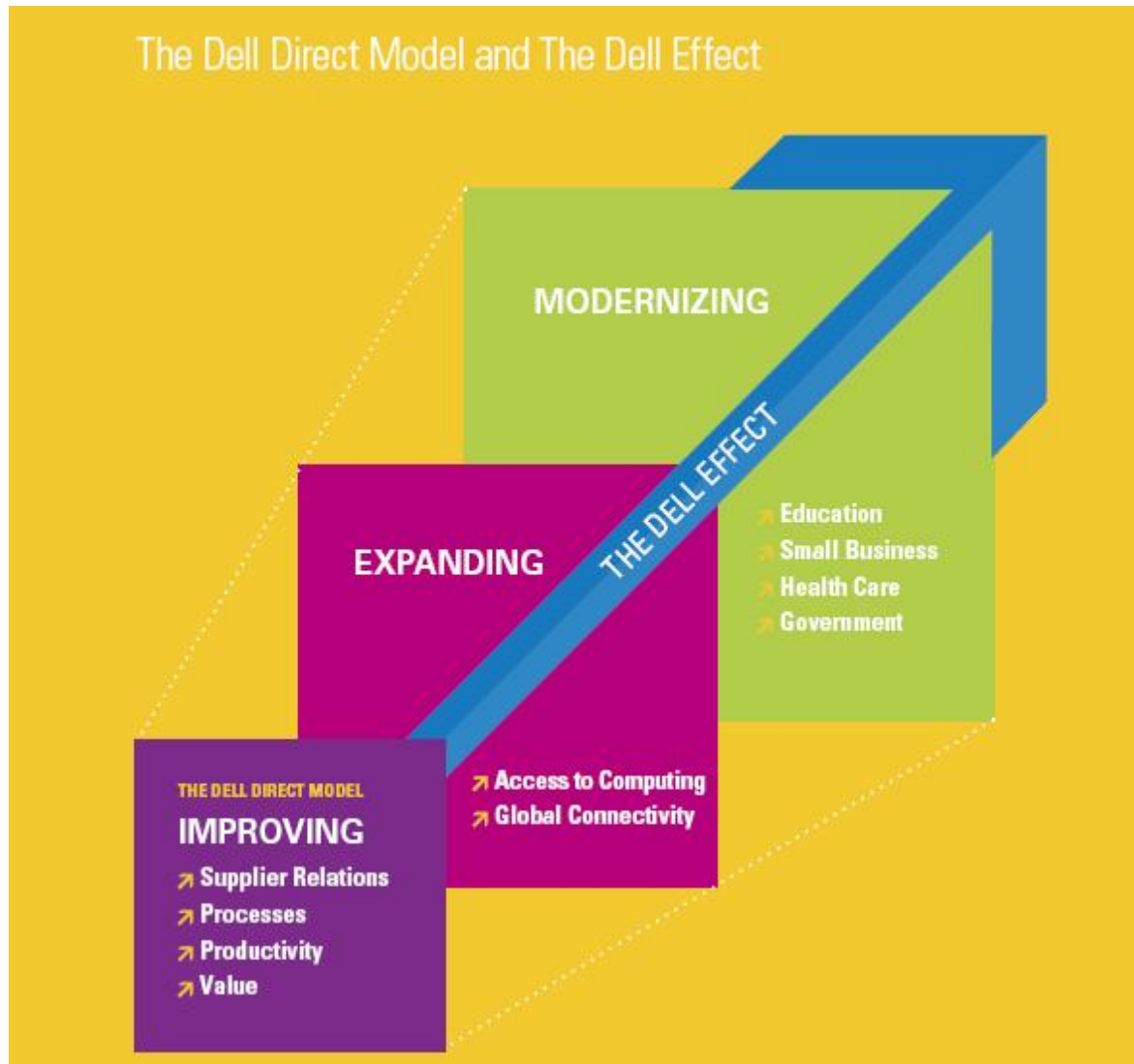
5. Winning

They have a passion for excellence, leading the markets they serve, and providing superior shareholder return over time.

(<http://www.dell.com>; Commitment, 061211)

The Winning Culture has been one of the reasons that have made Dell so successful and now counts as a leader in the technology industry. This leadership has decreased the cost of the technology and that effect has been called the Dell Effect and will be described further down the chapter.

4.9.2 The Dell Effect



(The Dell Effect, <http://www.dell.com>; Company, 061209)

4.9.3 The Dell Direct Model

The focal point of the leadership is the Dell Direct Model. The model is relatively well known to the public; computers built after customers specifications and shipped immediately. This model is of course essential to Dell's financial success but it also gains the customer, and giving the consumer many benefits:

1. Customers get leading-edge technology

The computing industry innovates so quickly that computers sitting in warehouses or on retail shelves can become outdated even before they are sold.

2. Customers only pay for what they need

Working at the Web site or with Dell's order specialists, customers can choose from thousands of possible configurations to ensure that their computers will meet their needs, without paying for extra storage, devices, or software that will not be used.

3. Customers know where to get help

Dell provides an efficient single point of access for any hardware assistance because they maintain records on the configuration of every computer they build.

4. Customers reap the benefits of innovation

The Dell Direct model represents a revolution in supply-chain management. Collaborative research and development and improved efficiency enables Dell to make computers—and its suppliers to make computer components—faster and more powerful, while driving down costs. (The Dell Effect, company material 2006)

The Dell Direct model has brought a new way of computer shopping to the consumer world. This has been achieved with five basic principles:

1. Stay close to the customer
2. Provide a single point of accountability
3. Empower consumers with customization
4. Drive down costs through continual improvement
5. Deliver standards-based technology that is easy to use

(<http://www.dell.com>; Company, 2006)

4.9.4 Code of Conduct

Another factor that has been important for the shaping of the supply management approach is the code of conduct. This code goes beyond corporate philosophy and tries to affect the direct behaviour. The code has announcements connected to the environment, human rights, and employee health and safety. (<http://www.dell.com>; Company, 2006)

4.9.5 Supplier Commitment

Dell only works with suppliers that can meet certain standards for how they are conducting their businesses. The standards cover environment, safety, and ethic and moral aspects. Some of the rules seems quite obvious to us in the west, but they appear to be a problem in some countries. Dell's suppliers are required by contract to comply with all applicable laws and regulations where they conduct their business. (<http://www.dell.com>; Principles of globalization and global citizenship 061211)

Two of examples of regulations that appear in the Supplier Commitment:

- Every employee must be of working age. Employees must meet appropriate legal age requirements or be at least 15 years of age, whichever is greater.
- Every employee must be allowed to work in a safe and healthy work environment and, where company housing is provided, have clean, safe living facilities. Suppliers are expected to comply with all appropriate laws regarding working conditions, provide protection from fire, ensure regular access to bathrooms and potable water, and take steps to prevent injuries and exposure to health risks. Dell also expects suppliers to ensure appropriate health and safety training for employees, consistent with the requirements of achieving OHSAS 18001 certification.

(<http://www.dell.com>; Principles of globalisation and global citizenship 061211)

4.9.6 Supply Chain Management

At the centre of Dell's global supplier management program is the supply chain management system. The core components are the following:

Certification and Standards

ISO 14001 certification, requires the suppliers to be compliant with ISO 14001, the most widely recognized standard for environmental management systems. OHSAS 18001 certification, requires the suppliers to be compliant with OHSAS 18001, a prominent European standard for workplace health and safety management systems.

Training and Communication

Dell offers training to the suppliers during the annual supplier conferences that are arranged by Dell. Dell is also using magazines to update their supplier on important issues; these business reviews are distributed once every quarter. As part of every new supplier contracting process, Dell requires suppliers to sign an agreement acknowledging the supplier are aware of and will abide by Dell requirements and principles of supplier social responsibility and environmental responsibility.

Reviews and Compliance

Business reviews - In order to embed socially responsible behavior into business activities, Dell includes a review of requirements and principles in quarterly business reviews that are held with key suppliers.

Self audits - Dell asks key suppliers to conduct a self-audit to review with Dell management on an annual basis, using a standard scorecard format. These audits are required to be signed by a member of the senior management of the supplier.

Dell executive oversight and review - Dell's supply-chain management system is overseen by chief procurement officers and senior vice presidents of Dell. Issues of concern related to supply chain practices are raised in regular operations reviews with these executives and, if

appropriate, also raised in Dell's business conduct committee and to the chief executive officer.

Board of Directors oversight - Issues of concern related to supply-chain practices will, as appropriate, be raised with the Dell Board of Directors and/or its various committees.

Engagement with third parties and non-governmental organizations (NGOs) - Dell will engage with third parties and NGOs as it deems necessary in order to ensure the effective implementation and oversight of its supplier principles.

Correction and Enforcement

Correction - When suppliers fail to meet these principles, Dell and the supplier will create an action plan to ensure future compliance. Performing against the plan to adhere to Dell's standards is not allowed to take more than one year.

Enforcement - Dell reserves the right to terminate at any time, even before corrective plans are developed and implemented, agreements with suppliers that fail to comply with the Supplier Commitment Policy or our Supply Chain Management Requirements.

(<http://www.dell.com>; Commitment, 061211)

4.10 BPI – the Business Improvement Program

The key to the Dell Direct Model and the Dell Effect is constant innovation throughout the company. Every division must work to improve efficiency and reduce costs at all times. The only way to keep giving students, businesses, and consumers the benefits of the Dell Effect - affordable access to more kinds of technology - is to harness the creativity of every member of the Dell team.

The Business Process Improvement program is Dell's way of getting every team member working to create the Dell Effect. Every employee is eligible for BPI training, which is

offered in advancing levels represented by the martial arts-inspired “belts” awarded for completing a course, from yellow belts for a basic BPI training to black belts for high-level engineers. While the training varies by level, the underlying goals of BPI are the same across the board:

1. Engage the team members in contributing to making the business more efficient and responsive to customers, and
2. Give the team control over their idea implementation within the company.

(Per-Christian Werenskiold, 061212)

One example of BPI in action took recently place at a Texas manufacturing facility. The team responsible for putting completed systems into boxes for shipment undertook, at their own initiative, a reorganization of their work area to make frequently used parts easier to reach. The result of their project: they boosted the number of systems boxed from 300 to 350 per hour, an astonishing 17 percent productivity increase. It is initiatives like this that keeps up the efficiency in the company. As many modern companies, Dell has recognised that there is a lot of good ideas floating around in the minds of their employees, and they need a good process to turn something good out of it in reality.

The color of an employee’s belt does not matter; the important thing is that all employees know where to go when they have come up with an idea. The results speak for themselves year after year; Dell posts productivity improvements many times greater than the economy as a whole. The BPI program has earned rewards several times. Dell believes that if a company can give their employees the right tools, they will be able to make a difference through innovation (“The Dell effect”, Company material, 2006).

4.11 Future - Public Policy for a Better Future

In the coming years, Dell looks forward to being an active partner in building a public policy agenda that adapts the innovative practices of the technology industries to the needs and goals of people and governments worldwide (“The Dell effect”, company material, 2006).

4.11.1 Build a highly-skilled workforce

To be able to compete on an international stage the companies need employees who can use the advantages that come with information technology. The need is bigger than just to know how to use a computer, students must learn how to communicate and to develop their skills with help from IT. The school system must be modernized and teach students how to create a life long process of skill development and learning, that will be necessary if a society wants to remain competitive in the future. It is the governments job to give every person that opportunity to gather these learning's and skills. ("The Dell effect", Company material, 2006)

4.11.2 Create a climate in which innovative business models can grow and succeed

Business models also need constant innovation to compete internationally. The business environments must be nourished by governments who creates policies and regulations that helps companies and do not set limits for the competition, this is crucial for success. Dell's entire worldwide team stands ready to help: "We reaffirm our commitment not only to make Dell a continuing American success story, but to partner with government to ensure that the benefits of the networked world are brought to every human being around the globe. Working together, we must strive to achieve this important goal". ("The Dell Effect", promotional company material, 2006)

5 Analysis

In this chapter the theories are applied on the empirical data that is gathered. The presentation structure follows the same form as the theory chapter; starts with the intellectual capital, strategic management theories and ends with the Triple-A theory. We have tried to find patterns and situations that can be explained through the different theories’.

5.1 The Intellectual Capital

5.1.1 The Human Capital

The Dell Nordics office is mainly a sales office and sales offices are generally known to be very data driven. But it became clear from our empirical studies that Dell Nordics have a special business culture. From a Scandinavian perspective, it can appear to be very bold and result oriented, which may derive from the American business culture in Dell. The management is very focused on performance; the employees are evaluated on a weekly basis. If an employee is not performing as expected an action plan is deployed to get the figures back on track. This means, as an employee, you are always closely monitored. There is a constant pressure reaching the goals the management has set up. It is not a culture that suits everyone, for some people this constant pressure can be stressful and too demanding. Dell is trying to affect the staff’s willingness to use their competence in a productive way to benefit the company through all this measurement and rewards. The incentives must fit the people to get a good result. Simply put, the incentives are meant to influence the human attitude so it fits the organizational goals.

The culture is probably one crucial cause to why Dell Nordics is struggling with a high staff turnover. The culture is suitable only for a certain kind of people who enjoy a competitive environment, so they are used to lose a number of people during their first year of employment. But this number has been increasing during the recent years and it has become a problem. Dell has also started to lose the employees that have been hired for a longer time already; this is a completely new and worrying trend. According to Dell this is due to a boom in the economy and the supply shortages on qualified workforce. Experienced staff gets better offers elsewhere.

The situation described above may paint a gloomy picture of the Dell culture. But from our point of view this cannot be dismissed as solely negative characteristics. It works very well in the right surroundings. This is a key aspect, because in the wrong setting it can become a severe problem. If we look at America, where Dell originates from, we can see that they have a very dynamic labor market compared to Europe, it is easy to lose a job, but is also easy to get a new job. The unemployment rate is almost half compared to France and of the unemployed there are three times as many longtime (more than a year) unemployed (OECD, World Bank, 2004). In such a labor climate as the American, the right person will probably end up in the right position. If you are not the right person you will get fired or quit, but there will be plenty of other opportunities to re-enter the market since employers are comfortable and feel secure when hiring new staff, because it is less of a commitment than in Europe. In most of Europe the employers are hesitant to hiring staff since a mistake in the hiring process can become very costly. The general approach from Dell when growing globally is to clone itself to new locations with practically everything included, terminology, business culture and all. You can be in any Dell office in the world and you would not be able to see what continent you are on, everything looks the same.

Their labor laws and local culture are the “rules of the game”; you have to pay them attention. You can be the greatest player in the world, but if you do not know the rules of the game, you will lose anyway. Dell is without a doubt a world-class player, their business model have made them number one in selling computer hardware. The Dell approach is to export its

culture because it has been proved to work. But will it prove to be sustainable in all another settings too? Or do they need to adopt more to local culture to stay an attractive workplace for gifted staff? It just might be so.

In order to relieve the high turnover situation, there could be an idea to try and adapt the business culture to European circumstances. Maybe build a larger part of the work around project teams. Make reward systems and evaluations to a greater extent on team level instead of individual level. This has of course to be done with great consideration since the sales work itself is very focused on individuals. We are not certain that this would have the intended effect if implemented. Some people just do not like to work in project form or in teams. They want themselves only to be the cause of their successor or failure.

From our empirical material we also learned that a lot could be gained from sharing more information. The sales force needs more information on what lies behind the target figures that are presented for them. If they knew and understood the formulas and calculations behind these, it will give a stronger commitment for achieving the goals. Information sharing is important when it comes to the intellectual agility.

When an employee faces new challenging situation, information is crucial to be able to do get something positive out of it. The competence of the employee plays an important role as well, and even if people learn by meeting and working in new environments, it is important to have the right skills when entering a situation. Dell has a responsibility to give their employees a chance to be prepared for new environments. It is done by recruiting people with suitable education, and continuously keeps on training them in new skills.

As the human capital is increased is important that this is supported by the structural capital to achieve a multiplier effect. The multiplier effect will get a more important role as the strategic focus shifts. The former business model was developed from a few persons, who then could implement the updated processes over the whole organization without any trouble. That was possible because manuals and processes easily can be spread and adapted. When the new situation shall be met, processes and manuals cannot handle the situation in the same way

they used to. It is a new and more human focus now, and humans cannot be regulated by manuals in the same way a machine can. The Dell employee must be able to use the competence and skills in a new way. This demands that the structural capital develops to be capable to spread knowledge about how to handle the new situation. The upcoming time will show how well Dell's internal multiplier effect works. The future will answer the questions about if Dell is capable of adapting to the new situation, and if they can transform the new knowledge that will appear into structural capital. The insecurities regarding the market's reception of the new model will affect the industrial multiplier effect.

The Human Capital in Dell is directed by a process framework and structural capital, like performance measurements and development plans. There are some initiatives to foster innovation and creativity from the employees, but we believe that much more can be done in this area. If more attention was given to the knowledge that exists in the relations between employees, maybe by evaluating on team level, the innovation force and assets in form human capital could increase.

5.1.2 The Structural Capital

The majority of Dell's intellectual capital comes from the structural capital, but it is very difficult to describe it in absolute numbers. The understanding for the weight of relations can be easier understood when discussed from the intellectual capital perspective.

5.1.2.1 Relations

Relations are important for any company since it is often this part that generates the profits. Relations are spreading out from the company in all directions; inward, outward, up and down. All of Dell's relations count, from the biggest corporate external customer to the newest internal employee. Dell is working hard to get closer to its customer all the time. All the intermediaries are cut, which allows Dell to set up a direct contact with its customers. This

goes for all the segments at Dell, from the smallest consumer to the largest corporation. Even if there are some major differences in the procedures around the different relations, so the basic idea is still to have a relation with each customer that is perceived as personal. The consumer is negotiating directly via Internet or telephone with the salespeople of Dell.

The business relations generate bigger affairs and demand a different approach. The RAD segmentation helps Dell to create a suitable relation with the customer. Dell divides their customers by share of the IT-budget that is spent on Dell and how much buying power that specific company has. The hardest part is to gain new customers, to get firms that currently are spending less than 10% of their IT-budget on Dell to increase their commitment. When a new customer is attained, Dell will work be focused on developing that customer. Dell wants to have as large part of that company's IT-budget as possible, and the larger budget the better. This is crucial for Dell since it stands for the revenue, and nurtures the whole body of Dell. This could be one way to measure the value of the relations to the customer. The relations generate the profit for any privately held company.

Dell is well aware about that there is no real possibility to own its relations, even though it is labeled as structural capital. Relations can be regulated to a certain level by agreements and contracts but no contract will lead to a successful relation if one of the parts is not satisfied with the conditions. Dell works to satisfy the customers on several levels. To make sure as much of customer demands as possible comes to Dell's awareness, Dell holds special group customer sessions where they can describe their specific need in form of hardware, software and support. The results of these sessions lead later on to updated solution packages and also developed staff skills among Dell's employees. This means Dell changes their internal structures and improves their employees' skills matrixes after the customer need, all to gain in trust in the relationship. Dell has also chosen to give every business customer two account managers, one internal and one external. The external handles all the contacts with the customer and has to be aware about the needs and demands of the customer to be able to offer the right solution. The internal account manager is more of a technical profile that handles all the necessary contacts to put together the solution for the customer.

The important relations go in the other direction as well, into the supplier line. Since Dell is depending on a good flow from its suppliers, it is necessary to hold a good relation with the suppliers too. Otherwise, no value can be passed on to the customer side. Offering a win-win situation that keeps both parts satisfied can achieve this. Dell is very large company that buys large quantities and is of course a wanted client among the suppliers. Because of this, Dell can pressure the prices of the suppliers. This is a natural effect in the business world. Dell has some effective processes in use to make sure the supplier relations are kept in a healthy atmosphere. These processes will be further described in the part about processes later in the chapter.

Another important factor is the company's relation to its employees. Dell is a pretty bold employer with a tough culture and the staff turnover the first year is high. Dell is trying to find the right persons that will fit in to this culture and is also creating relations based on that; they want performance and gives rewards for it. For a person who is not suitable for this culture, it might appear a bit intimidating, and Dell does not prefer these people as staff. But a suitable person will probably think that Dell is great place to work. They like to work hard and under pressure, and they will also be rewarded for it.

An aspect that has not been very apparent in the work so far is the relations towards the public authorities and the national laws. That depends on our single country focus, but the picture could look different if the study had included several offices in different countries. The rules for employment are different in different parts of the world, and Dell benefits from looser labour rules, where the staff turnover can be allowed to be higher. This is one of the reasons the Scandinavian HQ is located in Denmark, a country with less restrictive labour laws than its Nordic neighbours.

Customer relations have always been seen as very important, and they still are, but a broader understanding for the value of relations is growing within the company. Good relations to customer are needed for revenue and competition, and partner relations are needed to be able to offer good solutions.

5.1.2.2 Innovation

A company can get great advantages if they have the possibility to protect their innovations and procedures. It can be commercial rights, patents, intellectual property and so forth. Dell has more than two hundred patents for different kinds of processes, most of them are connected to manufacturing, but there is also some for the other functions. All these patents make it easier for Dell to compete since it is harder for a competitor to imitate that specific process if it is protected by a patent. Dell has been very dependent on their effective and cheap supply chain, and the patents have facilitated that development. It is very valuable for a company if they effectively can take advantage of the innovations that emerge from inside the company. The innovation capital theory says that a company that has the ability to manage their innovation capacity better can handle renewal situations; such as developing new products and services. The company can then easier keep up with market demands.

Dell managers host so called “brownbag sessions” with their employees to seize any good ideas that live within the company. There are a great number of different ideas that have ended up as patents in the manufacturing and supply chain areas, but also elsewhere. The recruiting process at Dell Nordics was made more efficient after the implementation of an idea from an employee. Now the first interview with potential salespersons are held over the phone, this has cut the costs and made it easier to screen the non-suitable applicants. This demonstrates how Dell has used the ideas within the company to gain in efficiency and to create a more competitive organization.

It is natural to seek ideas within the own organization but today’s greatest innovations are based on cooperation between several actors. It can be suppliers and producers who are innovative, even customers and competitors have in some cases cooperated to create something innovative together.

Dell has relied on their innovation capacity for quite a while and it has been successful. Dell has effective processes for generation and implementation of ideas coming from their employees.

5.1.2.3 Processes

The intellectual capital theory counts a company's processes as a value-creating factor, but classification of a process can be quite hard to do in an illustrative way. In Dell's case it might be easier to consider all those procedures that have led to the super efficient supply chain. Since this is not a thesis with a logistic focus we will instead discuss some other aspects of Dell's processes.

First and foremost Dell has very effective, and necessary, IT-support function. The IT solution is crucial for Dell in many aspects, not only the more public part as the internet ordering, but also the internal databases with contacts, performance records and customer information. Dell has, naturally, most of its procedures based on IT. The solution is multidimensional and has solutions for customers, suppliers and employees. The most known aspect must be the ordering function where consumers goes from order to receiving complete systems without a single personal contact, it has all been done via internet and maybe phone. The system is then picked up at the nearest post office or even in the mailbox. This is a suitable system for information gathering, such as customer statistics. Dell grows their knowledge about customer behavior after each single sale. Even if the contact may seem fairly impersonal, the customer does not feel it that way. The contact might be done solely by phone but it is still done directly with the producing company, so the contact feels close for the consumer anyway.

The larger customers with a more complex need and larger spending capacity get naturally more personal attention and, as mentioned before, two account managers. Even though more interaction happens face to face in this case, IT plays an important role here too. All information about the customer, its needs and the solution, are codified and put into the systems. The information must be easy to find and easy to share in the organization and outside it; with suppliers and partners.

The internal aspect of the IT-system is also very valuable for Dell. Since the company has a rock hard performance focus, it is necessary to keep complete track of all employees'

performances. All grades and valuations are generated and stored in the IT-systems. This is the ground for development programs and controls the whole staff's improvement. One could just imagine how complex the HR procedures would be without a sufficient system. These days, it is very common to keep records in databases, but the need gets even more obvious in a situation like Dell's. The IT-system is also useable for idea generation. Ideas can easily be discussed and tested in smaller scales and when proved to be successful, they can be implemented in larger scale in the right environments.

The least known aspect of the IT-system is about the contacts with the suppliers and partners. We do not have as much information about this aspect but we do know that a lot of contacts are done by e-mail etc. The database with information includes of course the suppliers as well, which makes it easier when new contracts are set up and should be delegated to different partners. Track and performance records are not only important for the employees, but the suppliers have a great pressure to perform too. Dell has long lists of demands and goals the suppliers have to fulfill. The suppliers' different skills are also mapped to make sure Dell know what solution they can offer the customer. If a certain skills is lacking, Dell develops that skill in-house or finds a supplier who can offer that skill. The different skill matrixes can be seen as semitransparent papers, which are put on top of each other, and then show stronger colors where Dell and their partners are powerful.

Another procedure that makes the work in Dell a little easier is the common vocabulary used around the whole organization. It is not about talking English everywhere, more about labeling things the same way everywhere and using the same vocabulary. Processes and procedures are the same around the globe and it is supposed to be possible for one person to drop down anywhere in the company and still know what everybody is talking about. One example of this common vocabulary is the segmentation process; it is the same in all offices and makes it much easier for sales people to meet and discuss different customers. Communication is much more effective when no misunderstandings appear because words and labels mean different things.

After a deal, hardware and software must be aligned to fit the unique customer demand, later on must there be somebody who installs the system on the customer's location, programs must be implemented and maybe there is a need for data transformation and relocation. After the installation, there will probably be a support function that has to work properly. This is where the supplier relations and processes come into the picture. It is the suppliers that take care of all these pieces. Since Dell does not manufacture anything on their own, the supplier relations are almost as important as the customer contacts, but they do not bring any revenue but only costs to the accountants. But the suppliers can be seen as very valuable anyway. Without the suppliers, Dell could not offer anything to its customers and no revenue would appear. Dell is nowadays so big and mighty that the suppliers fight amongst each other to win a contract, and that means that Dell easier can chose partners that fulfill all their demands on a good supplier.

Dell divides its suppliers by two different contracts. One is the operational partner who works on customer locations to put up and service all the systems. The other is the technology partner who does not set foot on the customer spot. They deliver hardware and software and are very important, but it is the operational partners who meet the customer, and there is the success created (according to Asbjörn Navrestad). To influence the suppliers in a positive way, so the customer sees Dell solutions in a good way, Dell has people who work only with the suppliers. They develop training, sales activities, and they are also giving lectures in the technology for the suppliers. This knits the two parts tighter together. The access to each other is also important means Dell, who offers "drop-down" workplaces and has a standing schedule for meetings, several times a week, with the suppliers. This makes it easy to hold a stable contact with the suppliers. As the employees, the suppliers' are also measured to keep up the quality in the supplier line.

The processes have always been vital organs in the Dell body, the heart beats for the assembling solution but processes are also regulating other aspects of the business. There are strict processes in the valuation of employees and suppliers. Most of the processes are controlled via the internal IT-system.

5.1.3 Competitive Analysis - Business Model

Dell is in the highly competitive Personal Computer industry. They have managed to stay competitive for a long time thanks to efficiency and a well-designed business model. The on-demand assembly strategy enables Dell to keep a very low stock and focus on perfecting the assembly process and a swift delivery to the customer.

5.1.3.1 Industrial Organization

One traditional view on strategic management is said to be Michael Porter's five forces analysis. That analysis takes aim on the industry and means that a company should choose a suitable position on the market to gain as much profit as possible.

The PC industry is very competitive with many actors trying to survive, both part producing companies and assembly focused firms. There are also some powerful software producers that want their share of the cookie.

The five forces analysis looks in to how harsh the competition of existing firms is. Fortunately for Dell is that there are just few competitors to worry about. On the other hand all of them are strong with big market shares. Dell has their own niche without physical stores and a great assembling process, but there are other niche players too; one good example is Apple. There is a very high level of rivalry between existing firms. The market is with other words divided in a few big blocks with no extreme leader.

The supplier side of the analysis is quite complex with many smaller and specialized producers. Some of the suppliers have been successful during their journey and developed superior parts that most buyers want, that give them a good position on the market. Some good examples are Intel and Microsoft, and they have a big influence on the market. Intel is

driving the development on the processor and motherboard side while Microsoft almost has a monopoly-like position on operating system. Even under these circumstances Dell has managed to keep a high level of financial performance, probably much thanks to their relatively big market share.

The customer side has grown rapidly during the last decades and does not seem to slow down either. Dell is targeting every possible customer on the globe and there is of course some difference between buying and bargaining power. The smallest consumers do not have much of a chance to bargain for a better price, but they can get a custom built computer to a good price. The price is actually controlled by the customer; she just has to choose the right parts in the computer. As in any other business order size is important, and the bigger the order is, the easier it is to get a better prize. One factor that speaks for the smaller consumer is the switching cost, which is not big for the smaller systems. When the need for an upgrade comes, it is practically free to switch to another brand. The larger corporations have to think twice before they change system deliverer. The initial cost to set up a brand new system can in many cases frighten companies from a change. Many aspects have to be considered before this can be done; employees need to learn the new system, programs must be installed, data must be transferred and so on. The cost is also of big importance. A company's IT-system is often integrated through the whole organization and if a change has to be done, it must be done completely. All computers must be updated and integrated with the new system, which raises the cost.

The gentlest factor of the five forces analysis is the substitution aspect. That derives from the fact that there is no other product that fully can fill the functions of a personal computer, or the total IT-systems that exists today. For example the switch from paper to disk office can be mentioned. When a company abandons handwriting and paper storage cabinets and goes to computers and server storage, it is not a possibility to change back to the way it was. Efficiency is just too good with the modern systems.

The threat from new entrants is not substantial since it would take a very long time to build up an organization that can compete with Dell. A new entrant would probably not be able or gain anything from trying to copy Dell's position on the market.

The key to the success has been a business model that assembles computers that are custom built to the customers' requirements and delivers them within a few days. This can be achieved through an extraordinary efficient and integrated supply-chain management.

5.1.3.2 Generic strategy

Dell has since the beginning focused on having the most effective production line in the industry. The no-store policy has been questioned many times but proved to be successful. Several competitors have tried the same recipe, but without anything that can be compared to Dell's success. With hundreds of patents regarding the assembly process and a hard cost focus Dell has achieved a status among computer users as quality to a good price, almost the lowest price. The strategy has been to cut all possibly costs in the supply chain, to be able to offer the lowest price but still have a good margin. This has worked out well, especially at the consumer side where the sales and ordering process are cheap. The business-to-business side is more time demanding and complex. The consumer side is also more price sensitive than larger organizations, and the businesses demand a good support program and solutions that perfectly fit their needs. Dell's high market value has rested on their unique and effective supply chain. The market believes in this, and values the company three times as high than their financial assets.

We think that Dell has discovered some weaknesses of the current model they are using. One of the weaknesses could be that it is imitable, even if no company has done it with the same success, yet. Cost cutting is nothing unique and cannot last forever. Relations on the other hand are harder to copy, and is it not a classical old saying that "old love never rusts", meaning relations are sustainable? That would be applicable to business relations as well,

with a pinch of salt of course. Dell has the last year implemented an organizational and strategic change, which will help to put focus on the relations.

The business side puts more pressure on Dell to have a different approach than the old cost strategy, since from the customers' perspective; price is just one small part of the whole solution. Dell has recently changed focus, at least on the business side. The Dell 2.0 is not just about cutting costs and making the assembly line more effective, but now are solutions and relations in the focal point. The extended solution, specially created for the customer, with great support and all the necessary equipment delivered from Dell, will be different from the traditional cost focused one the market is used to.

Switching costs are getting higher and higher because the solutions are getting more and more complex, it gets more difficult to attract new customers, and competition is harder than ever. In the end, it all comes down to one question; who can hold on to their customers? The relations and the ability to offer a sufficient solution to the customer can be the key for success.

Dell has been famous for its effective business model and cost focused strategy. We think that the organizational and strategic shift is based on the insights that the former model might be imitable. Dell is now trying to find a more sustainable model for the future competition.

5.1.3.3 The Resource-based view

In the theory chapter we described the VRIO framework for assessing whether a firm's resources are competitive advantages or not. To be competitive the resource has to be valuable, rare, and organized. But this will only be a temporary advantage or a first mover advantage. Since the rivals are able to replicate the resource, there is only a matter of time before competitors level the advantage out. If the resource is imperfectly imitable it means that it is hard for competitors to replicate. This means that the advantage will stay an advantage, as long as there are impediments for a rival to imitate it.

Dell has several valuable resources; we have listed the most important of them below with inspiration from Barney (J. Barney, “Gaining and sustaining competitive advantage”). Dell is heavy on structural capital so all of them are also well organized. But this not only a matter of being organized, it is about identifying the valuable resources and exploit them efficiently; even in this area Dell is very strong. All of the valuable resources are not rare though.

| | Valuable | Rare | Imperfectly Imitable | Organized | Competitive Advantage |
|---|----------|------|----------------------|-----------|-----------------------|
| Continuously improved Assembly Operations | Yes | Yes | Yes | Yes | Sustainable |
| Just in time purchasing, small hardware inventory | Yes | Yes | No | Yes | Temporary |
| Personalized Online support | Yes | Yes | No | Yes | Temporary |
| Internet based sales | Yes | Yes | No | Yes | Temporary |
| High volume purchasing | Yes | No | No | Yes | Parity |
| No physical stores, cost efficient | Yes | No | No | Yes | Parity |
| Outsourced distribution and software development | Yes | No | No | Yes | Parity |

All of the resources we have mentioned above are valuable and organized, some of them are rare, but a competitor can replicate all of them. But there is one skill that might not be the first thing that comes into people’s minds when thinking of Dell. Most people know of the business model with the phones and Internet as the main distribution channels. But Dell also has a major resource and skill in the perfected production processes.

As of today, it looks like no competitor can catch up Dell overnight in the many inventions on how to streamline production processes. But it is hard to find a business that changes as rapidly as the computer industry. All parts of a computer are getting smaller and faster by the month. What tomorrow might bring in computer hardware and what that will imply for the

assembly processes we can only guess. But we do know that it will keep on changing in at least the same pace as it does now, so Dell has to build these innovation forces into the organization to be able to keep the competitive advantage even in the longer run.

5.2 The Triple-A Supply Chain

Dell has no doubt a very efficient supply chain, but there is something more that has led to that Dell's has been able to keep the upper hand on competitors for so many years.

5.2.1 Agility

In September 1999 there was an earthquake in Taiwan that brought the local computer hardware production to a production standstill. This led to a shortage of computer parts, and the hardware producer's customers, like Apple and Compaq, suffered from this and could not deliver computers to their customers in time. Dell, on the other hand, was able to change their pricing strategy overnight and by that redirecting demand towards other computers. These computers did not include these affected parts and by this could Dell avoid the shortage of supply. This shows how Dell can handle unexpected situations with help from a dynamic and agile supply chain. This is of great value for Dell since they can minimize their losses caused by supplier failure. This is important since Dell has so many suppliers over the world.

Dell is also offering contingency plans to customers with the Platinum Plus support. Uptime is one of the most important factors demanded by the high-tech market. To ensure that any disruptions are solved as soon as possible, Dell has an "Enterprise Command Center" (Power Solutions, August 2006) which purpose is to react in the very same moment a customer's crucial server is not responding. The center keeps track of different data such as weather forecasts, traffic reports, part inventories etc. From the moment the technician is sent out with spare parts, the customer can track him through the Google Earth Pro system. From this interface the customer can see exactly where the spare part or technician is and what the estimated time of arrival will be. This is a good example on how technology can be used for

resolving unforeseen incidents and sharing information with customer. Instead of causing a lot of negativity with unclear messages about service time, Dell can now say exactly when service and help will arrive. This might be good for the relation and the customers will probably value this feature high since most of their activities are dependent of computers and servers.

The contingency plan service was put to test during the hurricane Katrina. The center had already collected a lot of crucial information and where ready to protect and restore several essential systems for the coast guard, hospitals and power plants. A lot of damage was reported, but the level of damages was hopefully kept down with help of the service center.

5.2.2 Adaptability

Dell has also been adapting good to the dynamic environment. When different needs on the market have occurred, Dell has been able to adapt to these new demands. The supply chain has seen a few changes during the years to sustain competitiveness. The suppliers have got a more specialized role since they got divided into two main partner groups; the operational and the technological.

The ordering process is another example of the adaptability. It all started with telephone orders and has now developed into an advanced web based ordering solution. On the website the consumer can get an overview of the whole product line that Dell is offering in that area. The consumer can also try different set-ups and see the cost, and based on that take a decision. Financial help is also available with credit and divided payments.

Dell has also outsourced parts of the supply chain. Cheaper labor in Asia keeps the cost down and enables Dell to always have the most effective partners to the lowest price. This is necessary since the computer prices are pushed down further and further.

5.2.3 Alignment

The last part of the triple-a theory is all about common goals and incentives through the whole supply chain. To achieve an effective and successful supply chain, the different actors must have aligned goals and know their place in the chain. To be able to analyze this part we would have to look in to the contracts and agreements between Dell and their suppliers. We have not seen exactly what kind of deal Dell is offering their suppliers. We have seen some of it from Dell's side; all their demands and long lists of requirements on the suppliers. We know that Dell has high demands on their suppliers and they seem to fulfill them, which must mean that Dell gives their supplier sufficient benefits that it pays to fulfill those high demands.

The supply chain has always been the ace in Dell's deck of cards. They have great control over the supply, so it can be adjusted when demand is fluctuating. They have also shown that they are able to adapt when the market changes. The alignment might be a weakness, but that criticism is based on a too narrow knowledge about the written agreements between Dell and their suppliers.

6 Conclusions

In this chapter we will present the conclusions we have drawn from our analysis. We will describe our personal interpretation of Dell's value scheme and how we believe it has changed over time. Some additional observations and thoughts that were not included in the purpose will also be presented and discussed.

6.1 Dell's Intellectual Capital

Dell is a unique company, a story of success, and that is one of the reasons why it is so interesting to study. We saw that the market valued the company three times as high than the books and wondered what the reasons might be. The intellectual capital theories offered an explanation and we decided to look deeper into this. We also wanted to have a competitive aspect on the thesis so we added the two main theories of strategic management, the resourced based view and the industrial organization theories. Since the case object was Dell, it felt naturally to bring in some thoughts about efficient supply chain management too. The people at Dell welcomed us with enthusiasm, and gave us a lot of interesting, important and useful information. Suddenly there were a number of different paths available for the thesis, but we tried to stay as close to our initial intentions as possible.

We believe that the goal has been reached and the purpose fulfilled. Our understanding for the subject has increased massively and we have created a model of the intellectual capital that will be presented later in this chapter. As the work proceeded, we realized that some other observations could be made, which was not really included in the original purpose. These observations will also be presented in the conclusions.

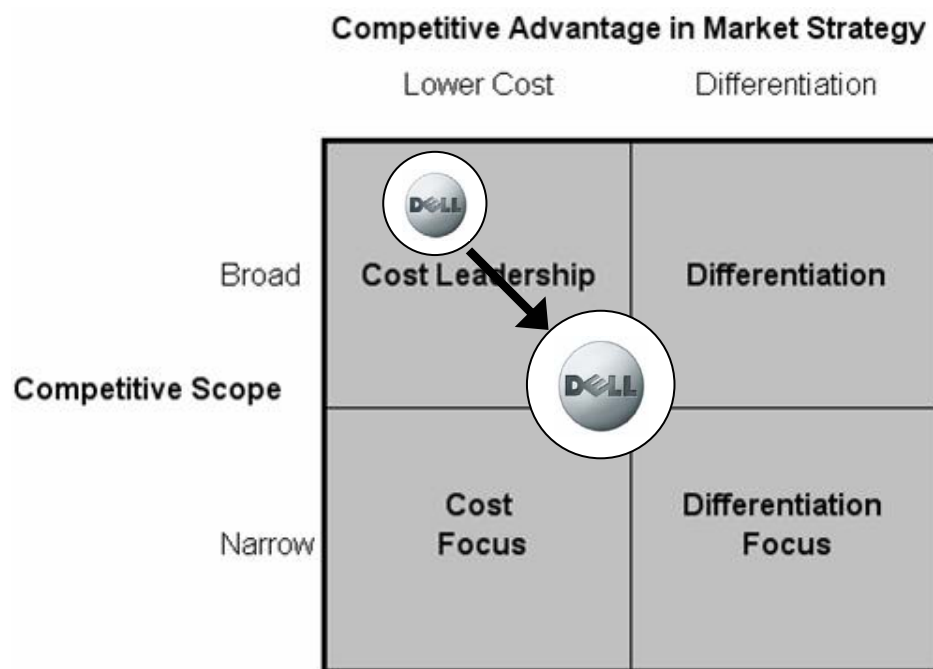
During the empirical data collection our understanding for the intellectual capital at Dell was slowly developed. It became obvious that there had been a change of focus at Dell. The strategy, and thoughts about how to create value for the customer, had changed over time. That is why we find it necessary to explain the intellectual capital of Dell from two perspectives. First, there is the classical low cost approach that has been Dell's leading star for a long time now, and then there is an upgraded model that we think Dell will use to meet the future demands from customers and markets. Since we included the competitive theories as well, an observation has been done on how this second model would affect the classic generic strategies. That it is quite an interesting observation, which will be discussed below.

During the first decades of Dell's life the cost focus has worked very well and contributed to the great development of their business and the market value. Many actors have tried to copy the famous recipe but not succeeded in the way Dell has done. Even though none has been successful in their efforts yet, such an approach is imitable, and we believe that the Dell management has realized that. They are now trying to develop the organization, so it can be prepared when new tougher demands strikes the market. The new focal point will be good relations, together with the total solution that Dell can offer. Before the shift the management could rely on the business model, which almost was competing on its own. The business model gave Dell such cost advantages that no one could challenge them in delivering high quality, low priced computers.

6.1.1 An emerging generic strategy shift

It looks like Dell now has discovered some weaknesses in their present competitive strategy since they are trying to change it. The old model with a heavy cost focus lies in the past and the current aim is to develop deeper relations. When we are applying these thoughts on the generic strategy theory, it shows that Dell is moving away from their old position into a new one. According to Michael Porter (1985), this would be a negative change of position since the company is descending to the middle of the generic strategies model. The theory says that

a company “stuck in the middle” gets a blurry strategy due to the confusing message being sent. Our analysis with the intellectual capital theory welcomed the development as a necessary change to keep up with the market demands. The generic strategy theory though, goes in the other direction and tells us the change is of negative character. What does this tell us?



We think that the old traditional theory about having a generic strategy to gain competitive advantage is not sufficient to explain why some companies are profitable and some are not. When the situation gets more multifaceted and the market demands for more advanced solutions, it seems quite obvious that the explaining models must get more complex as well. The generic strategies model above can visualize Dell's change of strategy, but the supposed conclusion drawn from this move are not adequate in the current business environment. We need new and contemporary models; better adapted to the information and knowledge society we live in, to paint the full picture.

6.1.2 RBV Support

The VRIO model is almost as recognized as the generic strategies model, but this one is better aligned with the conclusions we have from the intellectual capital. Dell has quite a few competitive advantages on their rivals. They have very efficient purchasing and stock strategy, plenty of experience in customer support through new media, assembly processes that falls second to none when it comes to quality and speed. Most of these competitive advantages are temporary because a rival can imitate them. The most difficult resource for competitors to copy is the continuous work on improving the assembly processes. Patents can be imitated but the process of constant improvements is tricky to imitate. But in this world nothing is truly sustainable. The computer industry one of the most competitive industries on the market and it will take innovative and hard work to stay among the top actors.

When we put the whole picture together, we can see that there are indeed some important resources that are valuable, rare and organized. Together they are powerful and daunting to competitors, but nothing lasts forever. Dell might have mastered the art of putting together computers as lean as possible, but it can all be turned around by changing customer preferences or a technology shift. Dell acknowledges this and is moving towards not only producing computers, but also producing valuable relations. The transformation from being a plain “box-mover” to a trusted business partner was initiated for about a year ago; we believe it is a viable way to go and that it will pay off in the future. Home computers are commoditized and the margins are low, there is a need for supplementary services to get a competitive advantage.

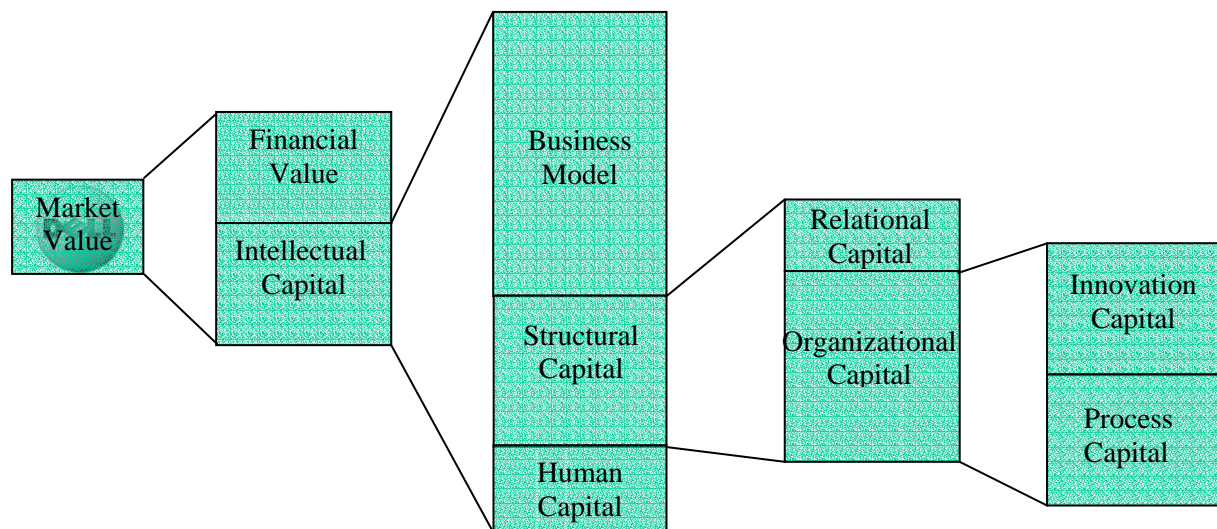
We believe the business will become less sensible to external factors as Dell builds up quality relational capital with key clients. As the workforce increases its knowledge, they can offer much more than just hardware. These services build even stronger bonds between the customer and Dell. We believe significant profits can be made from these relations in the future.

6.1.3 The traditional model

The Dell organization has traditionally been competing with efficient assembly processes and the aligned supply chain. The distribution of the market value was almost equal between financial value and intellectual capital. When the intellectual capital was broken down into its three parts, it could be seen that the business model was dominating the structural and human capital. The human capital was regarded as a part of a big machine that was heavily depending on the trusted business model. The organization was very hierarchical, each employee had a specific function to fill, and major decisions were privileged to management only. There were a tendency towards micro managing and a control culture. The Dell machine was running much like a conveyor belt at a factory; each employee has a specific task in getting the computer from the factory out to homes or offices around the world. The structural capital was holding a smaller piece and acted more as protector of the business model with its many patents and effective processes. The relational capital did not get as much attention since the customers did not demand any longer relations with their computer supplier and much could be automated. The many patents were representing a large part of the organizational capital. It is hard though to define whether the value came from the patents or the efficient processes that where used in the assembly plants and in the supply chain.

The model should be seen as a graphical illustration of the location of the value in the intellectual capital. The purpose of the model is to display our thoughts about the proportions of the different parts of the value scheme. Even though the model looks like a flow or a supply chain, it should be seen as an exploded view where the former part is broken down into its element (see next page).

The Dell traditional model:



(Illustrative model: “The Dell Traditional model”. Edsälv & Wallquist)

6.1.4 Need for change

Times were changing and if Dell wanted to keep their good market position they had to change as well. Organizational and strategic changes have been made and the goal is to shift, or at least to develop, an additional focus, namely the relations. When computers can be found in every home and all companies are using IT in increasingly more sophisticated ways, the demands are getting higher. This comes naturally since the market for computers and IT are reaching a more mature state, even though some parts are still developing in a high pace. The standard solutions have matured but the edge technology is developing faster every day. The prices have been pushed down and at the same time the importance of computer access has increased, this has led to a reduction of the markets price sensitivity. The price is still playing an important role but other factors have now taken over as lead determinant when a purchasing decision is about to be taken.

The total solution has become very important. The customer is of course often wondering if one supplier can deliver all needed hardware such as computers, servers, printers etc. Downtime is getting more attention and that puts a pressure on the support function of every

producer. A lot of businesses are made online today so the producer cannot afford to let the customer be without access to the IT-systems. The contact between supplier and customer are even more frequent, and the relation has to be a positive and generative one, otherwise the customer might choose a different supplier. Luckily the switching costs are getting higher too, the two aspects are working in opposite directions. But still, relations are getting more and more important, and this is confirmed from people within the Dell organization. The market is also changing in a higher pace than before, so the capacity to change and adopt is valuable. Dell has proved before that they are able to change, but it is important to keep doing that. The innovation capital shows the value of renewal skills. It values how well a company can put new products and services on the market, but also how they handle new ideas within the company.

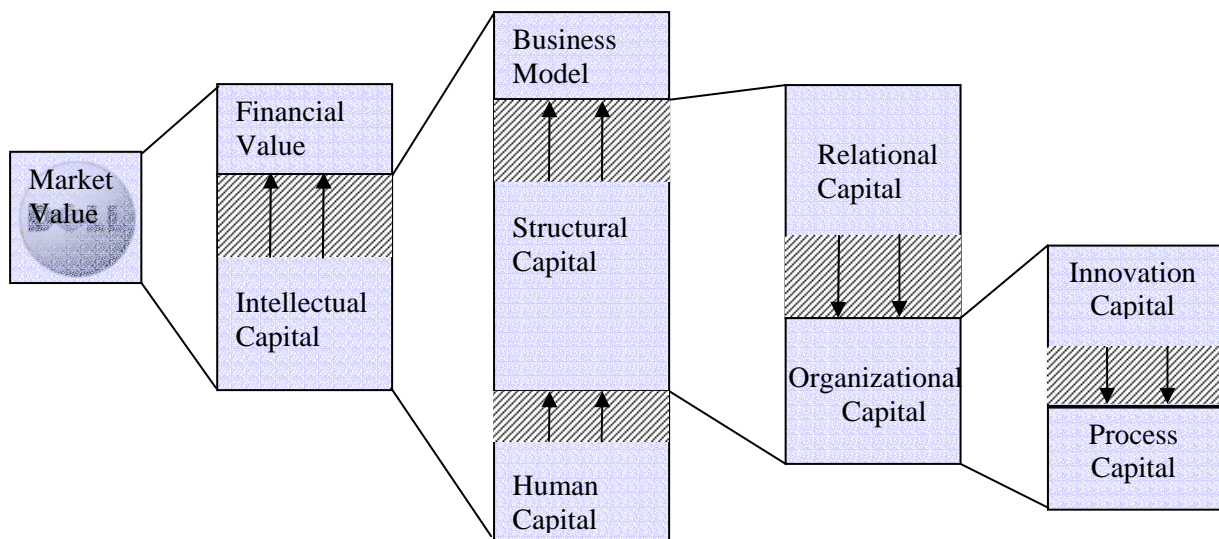
When Dell took the steps towards being a trusted partner and moved away from the box-mover-identity, there was a need for more complex skills. As the IT-solutions are becoming more advanced customers are turning to Dell with a need for more and better support. Not only support when things go wrong, but they need the day-to-day operational support to make sure they have the right hardware and that the operations are running smooth with high performance. Internally at Dell the need for advanced skills increased and what they could not find internally or preferred to have outsourced, they found external partners for. To make sure the partners also took on the Dell identity they moved in very close to them. The partners are intensively communicated with, and there are always guest desks ready for a partner to work on site together with the local Dell crews.

The new situation will put other demands on the human capital. Since the multiplier effect is affected of both structural capital and human capital, the human knowledge has to keep growing. The skills have to be aligned with the new strategy. The management has to make sure the incentives match the upcoming focus. It might be necessary to measure success in a different way, and that will affect the rewards as well.

6.1.5 The emerging model

The recent organizational changes are made recently so we can only speculate about the result, but we think that the relative proportions of the company's intellectual capital have or will soon change substantially. All values have increased over the years but it is not the absolute amount of value that is interesting but as mentioned earlier, the proportions of where the values are derived from is even more interesting. The relative relationship between intellectual capital and financial capital has grown in favor for the intellectual capital. In other words, the value gap has grown. The intellectual capital is now creating two thirds of the total market value. When we estimated the new value scheme after the strategic shift and the organizational upgrade, we were able to build an illustrating model representing the new strategy.

The Dell emerging model:



(Illustrative model: "The Dell Emerging model". Edsälv & Wallquist)

The formerly so dominating business model has been reduced and now the structural capital is dominating the intellectual capital. Human capital has taken a bigger part too, but cannot match the structural capital. This is important from the multiplying effect's point of view. A

good multiplying effect is dependent of high values on the human and structural capital. That is why we think this change is positive; it leads to a better multiplying effect. As a result the future earning possibilities may increase.

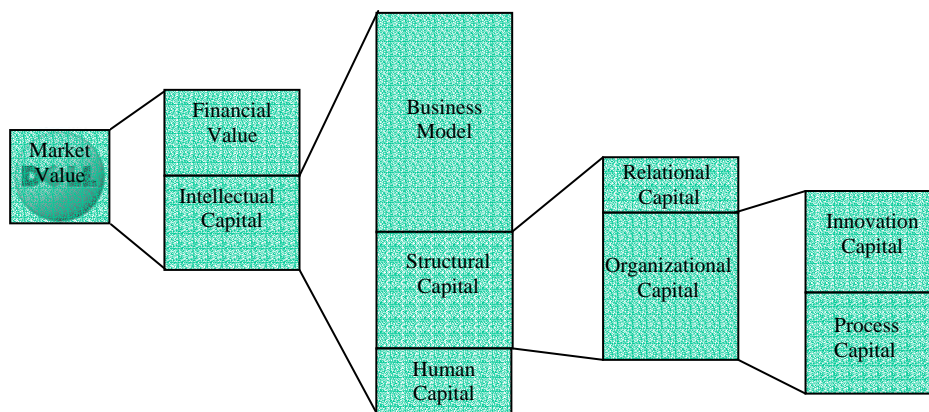
If we look at the next step, the elements of the structural capital, we can see that there is a reversed relationship here. The relational block is now the foundation of the structural capital, while the organizational aspects play a smaller role. The innovation capability and the value of processes should certainly not be neglected, since they still are vital for the assembly processes and the supply chain. The attention should be focused on the new structure of the model. The two dominating areas are now the structural capital and the relational capital. The structural capital feeds the intellectual capital, which in turn is the reason to the high market value. Unlike the old model now are relations more important than the organizational procedures. This might stem from the fact that procedures and processes can be formalized and copied. A relation is usually much more informal and grows depending on environment, situation, and the type of energy it gets from its different parts. A relation depends on so many unique features that it is almost impossible to imitate. When a relation is established, and taken care of, it can be very profitable. We think that Dell is on the right track here, a relation can certainly be as profitable as a patent or a process in the long run, but the difference is how easy it is to imitate. A patent can run out or be substituted anytime whilst a relation is much more sustainable, but on the other hand a patent can be very reliable and a relation can get infected in no time.

One interesting aspect of Dell is the innovation capital and where the company gets their ideas. Sure, it is important to gather the ideas from the employees, and it is of course important to be able to implement the innovations in an effective manner. The question we are asking is; why have not we heard or seen anything about collaborative innovation generation? Many of the most interesting innovations lately have come from several parts that have cooperated over the traditional boundaries. The most obvious example is the Bluetooth project initiated by Ericsson. Dell has a network of many high technological companies, which they could use for innovative projects. They are using their partners in an extended way when they are creating solutions for their customers. Dell is using their “advisory board” to

get a better view of the customer demand. The problem is that they are not generating anything new and unique. It is just different parts put together from different suppliers, like any traditional producer is doing. Knowledge lies between people and can only be exploited by cooperation.

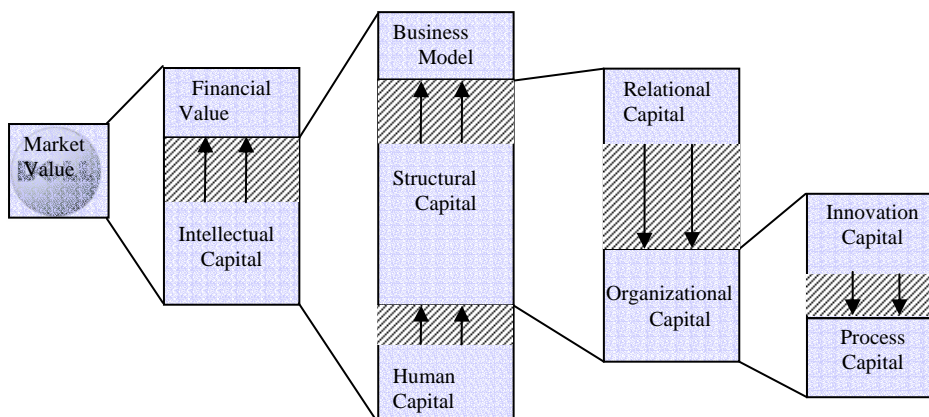
The models below sum up our major contribution in explaining the Dell organization through the intellectual capital theory. The models illustrate Dell's ongoing strategic shift visualized by the IC value scheme. This time the models are orientated above each other for easier comparison.

The Traditional Dell model:



(Illustrative model: "The Dell Traditional model". Edsälv & Wallquist)

The Emerging Dell model:



(Illustrative model: "The Dell Emerging model". Edsälv & Wallquist)

6.2 Personal insights

After ten weeks of intensive work with this interesting subject, we have to ask ourselves what we actually have learnt. The natural lessons are of course considered deeper knowledge of the theories used and about our research object, Dell. This is knowledge that could have been attained through literature. The more interesting and valuable lessons were collected from method of applying models on empirical data, cooperation and interaction between the members of the research team, our supervisors, and of course the people within Dell.

The most interesting that we will bring into the future are the insights we have done during the journey. Classical tools and models do not always fit for real life situations and problems. More contemporary models must be used to be able to understand the environment companies operate in today. One must be open-minded for new ways of explaining the modern situations we live in. We cannot be afraid of thinking outside of the box and have the courage to move on from the dominant theories when they do not help you explaining the issue. We learned that the value scheme of intellectual capital theory also could be used for visualizing and analyzing a company in transition, changing its core strategies.

We have realized that efficiency is not enough anymore; a great deal of the value is created by humans, and in the relations between them. We got it confirmed when a cost focused company like Dell, known for its efficiency, now is turning towards building profitable relations.

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8 Appendix

8.1 Questions for Dell

Human Capital:

What type of measures do you take to develop the employee's personal skills?

What motivates a Dell employee?

What reward systems for do you have?

What is rewarded?

How high is your turnover rate?

How long do people stay with the company?

What is the goal for turnover rate?

What competencies do you look for when you recruit?

Do you practice job rotation?

How long do people stay in the same job?

What is your experience of job rotation?

Structural Capital:

Relational Capital

How do you interact with suppliers?

How do you make sure customers come back?

How does a valuable relationship look like, from your perspective?

What do you demand from suppliers?

Innovation Capital

How do you capture improvement suggestions from employees?

Process Capital

How do you facilitate for knowledge sharing between employees?

How do you store knowledge?

Which are your most valuable processes? Why?

Structured processes?

Business Model:

How dependent are you of your business model?

How sustainable do you think the model is?

How does Dell work to develop the model?

What is most important, god margins or growth? Explain.