Capabilities that enable innovation

Benchmark studies of successful companies where leadership, organization, processes and tools do enable innovation.

CHRISTOFFER WESTMAN

Master of Science Thesis
Stockholm, Sweden 2011
Capabilities that enable innovation

Benchmark studies of successful companies where leadership, organization, processes and tools do enable innovation.

Christoffer Westman
Abstract

Innovation is today often directly related to organizations’ competitive advantage. Organizations that produce innovative solutions to the market are often seen as the leaders. Many companies follow the new trends set by the leaders’ solutions of products or services and many times try to copy them. Certain companies take the leader role and manage to stay as leader within their market. How do these companies become innovative and how do they sustain their competitive advantage?

The aim of this thesis is to study capabilities that enable innovation and then recommend the capabilities that characterize successful innovative companies to Group IT, Swedish Match.

The concept of capability is divided into four areas in this thesis work: Leadership, Organization, Processes and Tools. These four areas are the foundation of the qualitative study for finding capabilities that characterize the leaders of innovation. To find these capabilities benchmark studies are performed at innovative companies. The companies were found through a selection model including parameters of relevance and success. The parameters of relevance secure that the innovative companies are of relevant size, have multinational operations and are not active in the same market as Swedish Match. The success parameters secure the success of the innovative companies by comparing operating income over time and their credit ratings set by S&P.

The results showed that human and financial resources devoted to innovation activities are vital for enabling innovation. Together with correct processes of idea management and cross functional interactions can a company, that has a desire to innovate, come up with new innovations and creative solutions and become the leader within a market.

To be able to recommend which capabilities Group IT could implement, a survey was performed at Group IT. The result of the survey shows that many of these characteristic capabilities were not fully in use at Group IT.
# Table of content

1. INTRODUCTION.................................................................................................................6
   1.1 BACKGROUND ..............................................................................................................6
      1.1.1 Project Background ..............................................................................................6
      1.1.2 Swedish Match - overview presentation of the company .....................................6
      1.1.3 Group IT - a part of Group Finance & IT .................................................................7
   1.2 PURPOSE ......................................................................................................................8
   1.3 RESEARCH QUESTIONS .............................................................................................8
   1.4 LIMITATIONS .............................................................................................................8

2. THEORY ...........................................................................................................................9
   2.1 INNOVATION ..............................................................................................................9
      2.1.1 Dimensions of innovation ....................................................................................9
      2.1.2 Innovation – more than new products ..................................................................9
      2.1.3 Innovation in an organizational context ...............................................................10
      2.1.4 Innovation supports a competitive advantage .........................................................10
   2.2 CAPABILITY ...............................................................................................................10
      2.2.1 Leadership, Organization, Processes and Tools .......................................................11
   2.3 LEADERSHIP AND ORGANIZATION .......................................................................11
      2.3.1 Culture ................................................................................................................11
      2.3.2 Risks-taking ..........................................................................................................12
      2.3.3 Knowledge Management ......................................................................................12
      2.3.4 Organizational structure and resources .................................................................13
   2.4 PROCESSES AND TOOLS ......................................................................................13
      2.4.1 Knowledge sharing process ................................................................................13
      2.4.2 Critics of the SECI model ....................................................................................14
      2.4.3 Knowledge sharing system ..................................................................................14
      2.4.4 Communities of practice ....................................................................................14
      2.4.5 Idea management process ..................................................................................15

3. METHOD ..........................................................................................................................16
   3.1 OVERVIEW OF THESIS WORK PROCESS AND RESEARCH STRATEGY ..................16
   3.2 USING BOTH A QUALITATIVE STUDY AND QUANTITATIVE STUDY .....................16
   3.3 QUALITATIVE STUDY ...............................................................................................17
      3.3.1 Model for selecting companies ..............................................................................17
      3.3.2 Selection of respondents ......................................................................................18
      3.3.3 Interview request .................................................................................................18
      3.3.4 Interviews .............................................................................................................18
      3.3.5 Ethics .....................................................................................................................18
      3.3.6 Limitations and critics to the qualitative study .......................................................19
   3.4 QUANTITATIVE STUDY ...........................................................................................19
      3.4.1 Purpose ................................................................................................................19
      3.4.2 Ethics .....................................................................................................................19
      3.4.3 Limitations and critics .........................................................................................19

4. EMPIRICAL STUDY PART ONE – RESULTS FROM INTERVIEWS .....................................21
   4.1 QUALITATIVE STUDY ..............................................................................................21
1. Introduction

Companies that revolutionize the world with new products or services are seen as innovative and creative. These companies are many times leaders in their market and often followed by others. How do these companies become innovative? This thesis treats the concept of capability and which capabilities that enable innovation. Through benchmark studies at four innovative companies, capabilities that can enable innovation are found and discussed.

1.1 Background

1.1.1 Project Background

Innovation is continuously an upcoming subject in many reports and thesis’s. This thesis aims at the practical view on how companies become innovative. The concept of capability in this thesis primarily means the ability to use available resources to manage a problem (Teece et al, 1997; Bessant et al, 2005; Adams et al, 2006). The primary study object in this thesis is Group IT, Swedish Match.

1.1.2 Swedish Match - overview presentation of the company

AB Svenska Tobaksmonopolet and Svenska Tändsticks AB merged in 1992. The tobacco products and lights operations were included in the Procordia Group. In year 1994 they were joined to a group called Swedish Match AB. In 1996 Swedish Match AB became a public company (Swedish Match, 2011a).

![Figure 1 Swedish Match history](image)

Today Swedish Match develops, manufactures and sells market-leading brands in snus and snuff, other tobacco products (US mass market cigars and chewing tobacco), and lights products.

In 2009 Swedish Match announced their new group strategy.

“Swedish Match is a unique tobacco company with the vision to be the global smoke free leader, to leverage strong platforms and maximize long term profitability in other tobacco products and continue operational excellence in lights products” (Swedish Match, 2011b).

To successfully perform this strategy the board realized that new tools and processes had to be implemented. At the same time existing tools and processes had to be examined. The tools and processes are developed and/or maintained by Group IT, a part of Group IT and Finance.
1.1.3 Group IT - a part of Group Finance & IT

Group IT focuses on three disciplines which are the customers, to develop new tools and processes, and to maintain all tools and processes connected to IT within Swedish Match. The unit has a responsibility to create value for Swedish Match through performing these three disciplines well. The customers are all divisions at Swedish Match, seen in figure 2.

Earlier Group IT has worked mostly after the pull model which roughly means solving problems that have appeared or create a new tool after specified order by a division (customer). The Chief Information Officer wanted Group IT to become a unit working with push flow instead, which means to create solutions before the customer come and ask for them. Well performed push flow enables shorter lead times in Group IT and the unit can be faster and more flexible to new requests from the divisions.

To increase the performance and enable shorter lead times through well performed push flow, Group IT culture has to align with innovative and creative thinking. The leadership does make a great impact on the culture and their willingness of being creative (Cooper, 1993).

Standardization will be needed for many continuously upcoming problems. Without standardization there will be too much fire fighting (non effective problem solving). Standardization can save time for innovation and creative activities beside the routine processes. It is important to mention that without standardizing certain processes it could take too much time at Group IT. There would be less time for innovation and creativity because inventing the wheel over and over again appears too often (Liker, 2009).

At the time of this thesis work there are nearly 70 employees at Group IT and Finance, Swedish Match. Just above sixty of them are working for Group IT. Another 40 consultants and contractors are involved as well in different projects at Group IT and Finance.
1.2 Purpose
The purpose of this thesis is to study capabilities that enable innovation, used by successful innovative companies. The examined companies are not allowed to be competitors to Swedish Match. Thereafter identify which of these capabilities are not fully in use at Group IT, Swedish Match. Not fully in use capabilities will then be recommended to implement at Group IT.

1.3 Research Questions
To fulfill the purpose of this thesis work, two research questions are required to be answered.

- Which capabilities do enable innovation in successful multinational companies?
- Which of these capabilities are not fully in use at Group IT, Swedish Match?

1.4 Limitations
A selection model of benchmark companies is created to find innovative companies that are relevant for this study. The aim is to find capabilities that Group IT, Swedish Match could gain from. There are many other innovative companies that are not examined because of the parameters in the funnel model.

Leadership, organization, processes and tools are the capability components in this thesis. This limitation has been done through interpretation of theories concerning innovative capabilities and in consultation with the supervisors at Group IT, Swedish Match.

In order to implement these capabilities, standardization is needed to save time on upcoming routine processes and tasks. Standardization is not included in this thesis work.
2. Theory

The theory presented in this chapter is the baseline needed to understand the study and the used concepts. First is the concept of innovation explained by a definition and theoretical references. Then the concept of capability is explained and how it is divided into Leadership, Organization, Processes and Tools. These four areas that capability is divided into will also be presented through theoretical references in this chapter.

2.1 Innovation

“Innovation is any renewal, designed and realized, that strengthens the organization’s position against its competitors’, and which allows a long-term competitive advantage to be maintained” (Vrakking, 1990. pp.95).

Vrakking (1990) argues that innovation is an invention (renewal/redesigned) that becomes realized. The invention will become an innovation if it brings benefits to the holder. To bring benefits to the holder the invention has to be realized.

2.1.1 Dimensions of innovation

Bessant et al. (2005) describes different dimensions of innovation. The dimension depends on the degree of novelty. The incremental dimension refers to improvements and new versions of existing products or processes. The radical dimension refers to brand new solutions and not improvements of an existing, seen in table 1. Bessant et al. (2005) argues that incremental innovation is most common and of great importance and represents 90 to 94 percent of all projects that are labeled innovation.

Table 1 Radical versus incremental innovation.

<table>
<thead>
<tr>
<th>Radical innovation at system level</th>
<th>Incremental innovation at system level</th>
</tr>
</thead>
<tbody>
<tr>
<td>The wheel</td>
<td>Tire applied to the wheel</td>
</tr>
<tr>
<td>The car</td>
<td>New versions of engines</td>
</tr>
<tr>
<td>The television</td>
<td>Liquid Crystal Display</td>
</tr>
</tbody>
</table>

2.1.2 Innovation – more than new products

Many theories concerning the innovation process are often connected to product innovation. Bessant et al. (2005) describes different types of innovation and have divided it into four areas called the 4Ps of innovation. All four different types of innovation describe change which means that the invention has been realized as Vrakking (1990) argues.

Product innovation

New or redesigned product or service which has been offered. For example the wheel or a new type of engine that enters the market is product innovation.

Process innovation

Changes realized in the developing process of a product or a service. For example a new more effective way of developing a product or a service.

Position innovation

Context changes which then affects how the products and/or services are introduced and positioned. For example Lucozade first was positioned as a medicine, later the same product was positioned as a sport drink.
**Paradigm innovation**
Changes in the mental models of what an organization does. For example low-cost airlines which changed the whole industry and created new opportunities for new entrants and by that changed the mental model for many organizations.

2.1.3 Innovation in an organizational context
In the beginning of the 19th century firms focused on one or maybe a few things. For example one firm made steel out of iron and sold it to the workshop which made one or maybe a few products out of the material. Further into the 19th century firms became larger and thereby more internal and external processes arose. Add administrative activities and a lot more processes arose and had to be controlled and managed. To be competitive all these processes need to be effective and produce excellent products and services. These processes need to support creativeness (Trott, 2005).

The focus of one innovator or the precise source of innovation as Hippel (1988) discuss has changed to instead put the focus on the organizations knowledge and creativity as one broad source working in the same direction. Trott (2005) argues that the organization is synonymous to the innovation they produce and deliver which means that the whole organization can be the source today.

2.1.4 Innovation supports a competitive advantage
Financial resources have for a long time been connected with competitive advantage. Still today the financial resources are important for staying competitive in the fast moving markets although the focus has decreased. Instead more focus has been directed to knowledge. Mobilize the organizational knowledge and lead it into the same direction and by this use all the organizational resources (both human and financial) to enable innovation and stay competitive in the market (Bessant et al. 2005).

2.2 Capability
The term capabilities include functional competences, resources and organizational skills. These need to align with the organizational aim and strategy and be managed in the right direction (Teece et al. 1997).

Bessant et al. (2005) describes capability as a concept that includes collective wisdom, knowledge, and resources.

Adams et al. (2006) presents organizational capability as the organizations possibilities of being competitive in their market. This includes managing innovation connected to knowledge management, culture and well performing processes. Obviously tools are needed to get these processes working.

The presented theory above enables to argue that the concept of capability is the ability to manage a task and includes the available resources that are required for the task. These resources can be human resources, financial resources and material resources. In this thesis work the concept of capability aims to the organizational capability. To make the study more clear the concept capability is divided into four areas due to the wideness of the concept. Resources can be divided into organization (human resources and financial resources), processes (using resources) and tools (material resources for the processes). A leadership is necessary to lead and control these different resources.
2.2.1 Leadership, Organization, Processes and Tools
The concept of capability is divided into four areas. The areas are Leadership, Organization, Processes and Tools (LOPT). Thereby LOPT can be applied on a big company or to a project group within a company or even down to a single employee. This means that companies that have an innovative leadership, innovative organization, innovative processes and innovative tools have capabilities to enable innovation. If these capabilities are used correctly the company has a great chance to stay competitive in their market and stay leaders by enabling innovation.

2.3 Leadership and Organization
“An innovative leader, has become vital to the new technological world” (Koprowski, 1967. pp. 79).

The leader has an important role to fill, especially where the gap between innovative inputs and outputs are hard to realize. Compared to the industry level where the relation between input and output is more obvious to the employees. The leaders have to explain and define the process as simply as possible to encourage the employees of the difference they are making and how important their creative ideas are for the competitive advantage and long term sustainability (Tidd, 2001).

The tone and pace within the organization has to be clear and set. This job is done by the Chief Executive Officer who must be willing to take risks and support a culture ready to take risks for staying competitive in their market. The Chief Executive Officer needs to adopt this type of decisions him-/herself otherwise it will be impossible to send a clear message to all the employees. The old fashion way of controlling a business must be replaced by this new approach. The future resources are the employees, not the machines as in the past (Koprowski, 1967).

The knowledge within the organization has to be managed where cross-functional interaction is of importance. Both formal and informal interaction can create value and increase the competitive advantage (Tidd, 2001; Nonaka, 1994; Frappalo, 2006).

2.3.1 Culture
Environmental factors are important for the creative and innovative behavior. The environment should attract thinking and seeking of new possibilities and solutions. Freedom is one way of creating this environment. For example the organization can switch structure between loose and tight control. This creates a culture where the employees feel freedom and at the same time execute their routine missions at the tight controlled time. This means that organizations need to provide freedom for exploration of creative solutions, but at the same time manage the ideas that can become innovations (Adams et al. 2006).

Van De Kratz and Thurlings (1997) argue that well performing leaders manage the innovative processes work at all times. Many leaders succeed when it comes to getting their staff innovative while they are at the same geographic position. A few leaders successfully implement the processes into the organization and its cultural thinking which allows the processes to work while they are away. The most important management principles are creativeness, use of resources, balancing powers and ductility of the organization according to Van De Kratz and Thurlings (1997).

The relationship between management and the employees becomes crucial for the culture and the culture becomes crucial for the company success and long term competitive advantage. This means
that innovation will not appear without the environmental foundation working and facilitate for innovation (Van De Kratz and Thurlings, 1997).

2.3.2 Risks-taking
Cooper (1993) finds it very important that employees are willing to take risks to create new innovative solutions. The only way of not doing mistakes is to never take risks. This is why employees scared of making mistakes never will be creative and innovative. In the long run their creativeness will be damaged if none risk-taking is accepted. It is close to impossible to change this kind of company- or unit culture on a short term.

Koprowski (1967) argues that being innovative without taking risks is inconceivable. Many businesses are taking actions to minimize risks and short term economic loss. This is a balance every company board needs to be aware of and send their message down to the rest of the organization. There is a different approach on how to get the company culture more creative and innovative. Koprowski (1967) describes the model where the responsibility of getting the culture more innovative is delegated to the staff group. They often work closer to the operative actions and the employees in the organization. This is more important when the hierarchic structure is deep.

Trott (2005) describes the importance of accepting risks. At the same time Trott (2005) argues that accepting risks is not synonymous with gambling. Instead he proposes that the importance lies in the willingness to carefully consider all opportunities where risks are involved. It is important to take calculated risks and to include them into the project portfolio with different risk levels.

2.3.3 Knowledge Management
Knowledge is the information that creates value for the carrier. Knowledge management have many definitions, most of them aims to lead the collective wisdom.

“The leveraging of collective wisdom to increase responsiveness and innovation” (Frappalo, 2006, pp.8).

Knowledge management has its focus on the organizations explicit and tacit knowledge and to find solutions for sharing, storage and using the knowledge. At the same time knowledge management covers the process of gathering information both internal and external. This makes knowledge management vital for an innovative organization (Adams et al. 2006).

Different types of knowledge
Tacit knowledge is the knowledge which is hard to send or share. The tacit knowledge comes more often from experience and is hard to take in quickly. This is why global companies struggle with tools and technologies to successfully share this type of knowledge. The tacit knowledge within a company is the most important knowledge to keep inside the walls because the competitive advantage it provides for the owner company (Nonaka, 1994).

Explicit knowledge is the knowledge that companies today can store and use later on even called codifiable. It is easy to send it and share it with other units in the company. This type of knowledge is easy to adopt for other companies and can affect the competitive advantage to some extent. This is why this type of knowledge has to be used carefully especially when it can gain the competitive advantage (Nonaka, 1994).
2.3.4 Organizational structure and resources

"Knowledge is of little value if not supplied to the right people at the right time" (Teece, 2000. pp. 38).

The organizational structure and numbers of decision levels affects the statement above though faster decision making is possible through less levels in the organizational structure. Companies slow to respond on new ideas and a changed reality may have problem staying competitive in their market (Teece, 2000).

Pearce and Page (1990) argues that large innovative organizations must contain systems/processes for resource allocation. It is important that the leaders controlling these systems/processes not focuses on the short term results cause innovation and risks then will be reduced and possible innovation can be harmed. Pearce and Page (1990) states that the systems/processes of resource allocation run by traditional authority operates on fundamentally different premises and merit than systems run by leaders without the focus of economic calculation. Decisions by short term economic calculation can harm risk-taking and innovative projects as well as the culture of creative thinking (Koprowski, 1967).

2.4 Processes and Tools

Processes can be of various kinds and the trend is clear, every business that has been active for more than a century has increased their numbers of processes significant. For example there are production processes, development processes, sales processes, economic processes, decision processes, and marketing processes. The bigger a company gets, the more processes will arise (Trott, 2005). Tools are required to run many of these processes within a company and are well connected to process in many ways (Wikforss, 2006).

2.4.1 Knowledge sharing process

Nonaka (1994) argues that the continuous dialogue between tacit and explicit knowledge can be divided into four areas. It is important for the management to create this type of dialogue which never stops or drops speed. Without interaction and a culture willing to learn and share, the model becomes useless. This model is called SECI (Socialization, Externalization, Combination, Internalization).
**Tacit knowledge to tacit knowledge**
Socialization is the key of sharing tacit knowledge. There is important that the involved employees share some experience for making it possible. The tacit knowledge can be shared by both conversations as well as observation. Best practice is a combination of observation and conversation according to (Nonaka, 1994).

**Explicit knowledge to explicit knowledge**
A social process including meetings, chat and phone calls. Through reconfiguration of existing knowledge and structure, new knowledge can appear and be used (Nonaka, 1994).

**Tacit to explicit knowledge and explicit to tacit knowledge**
The tacit knowledge and the explicit knowledge complement each other over time. This means that usage of different types of processes and interactions will expand both the tacit and the explicit knowledge. Explicit knowledge becomes tacit knowledge in a process that can be identified with the school system where theory are presented and explained. Using these theories to understand the practice by getting more and more experience makes explicit knowledge become tacit. This process is called internalization. Externalization appears when tacit knowledge becomes explicit knowledge and can be explained by documentation of practice for example (Nonaka, 1994).

**2.4.2 Critics of the SECI model**
Glisby and Holden (2003) argues that Nonaka’s model presented above works well in the right fitted context. The company culture needs to socialize by itself and be willing to share knowledge. According to Glisby and Holden (2003) the SECI model can only be adopted provided that the company culture support this kind of context.

**2.4.3 Knowledge sharing system**
The explicit knowledge that a company can access from the inside and outside of the organization is often seen as a resource for staying competitive in their market. To successfully manage the problem of knowledge sharing over geographic borders and over time the company can implement a knowledge sharing platform (Voelpel et al. 2005; Wikforss, 2006).

Failure when implementing these systems have happened many times (Voelpel et al. 2005). Pearlson and Saunders (2004) argue that tools and employees have to work together. It would be useless to implement tools not well fitted with the employees and their tasks. It is also very important to study short term and long term needs before implementing new tools. Otherwise functionalities may be missing.

**2.4.4 Communities of practice**
Communities of practice can be defined as “a set of relations among persons, activity and world, over time and in relation with other tangential and overlapping communities of practice” (Lave and Wenger, 1991. pp. 98).

The concept Communities of practice is a social learning theory consisting of two interrelated activities (Lave and Wenger, 1991).

1. Practice through participation.
2. Knowledge creation.
By practice through participation the person increases their experience and their tacit knowledge. Together with other people in the community of practice the experience and knowledge are being shared and at the same time new knowledge will appear to the participants though all participants share some experience and at the same time brings some individual experience into the discussions.

**Virtual communities of practice**

Wenger et al. (2009) describes internet as a tool that takes away the geographic limitations and time limitations. By that participating in a community of practice becomes easier with IT as a tool. Instead other limits appear when internet is being used as a tool for the process. A vital part in communities of practice is the experience and the feeling of togetherness. This fact creates a gap between the reality version of community of practice and the virtual version. The virtual version works, although limitations exists and can affect the results of the community of practice.

**2.4.5 Idea management process**

Cooper (1993) argued that a single individual employee never have the responsibility to generate new ideas. And if a new idea arises, no action is taken. Gamlin et al. (2007) argues that action is not taken cause there is no process described that evaluates the added value one idea could bring compared to other that have arose.

The problem seems to be the lack of a home for the new ideas. One solution is to implement an idea management system which has been popular among many companies but failed too many times due to limitations and a non supportive culture. Few companies have succeeded to implement an idea management system. There are examples where a company used a more active version of the system, not only as a suggestion box. These active systems display problems that need solutions and this makes the ideas more focused and increases the employee desire to be creative (Gamlin et al. 2007).

Prather and Turrell (2002) describes an effective idea management process as a process where the employees are allowed to be more involved into the business and lets everyone know that new ideas are valuable. A system simplifies the process and needs to encourage new ideas. The system removes barriers and makes it easy to contribute with new ideas. The ideas seem to need more than a home, instead the managerial process of evaluating the ideas and feedback to the source of the new idea is vital (Prather and Turrell, 2002). The system is a valuable tool and may be helpful for the idea management process.
3. Method
In this section the method of the thesis work will be explained and discussed. To be able to give recommendations to Group IT both a survey and qualitative external interviews at innovative companies were performed. The survey was performed at Group IT and the qualitative study was performed at companies named A, B, C and D. This chapter will also discuss how the selection of companies was performed and the ethics of these both practical studies. The reliability, validity, and generalizability of the results are discussed for both studies in this chapter.

3.1 Overview of thesis work process and research strategy

First the purpose of the thesis was defined. To fulfill the purpose both a qualitative study and a quantitative study had to be performed within the thesis work to answer the research questions. To create relevant interview questions for the qualitative study, theory had to be examined. The relevant theory for presenting the results is presented in the Theory chapter.

The results of the qualitative study are presented in the Empirical study part one chapter and later discussed in the chapter Discussion where findings, characteristic capabilities, frequency, effects, and value are presented. In the Discussion chapter were characteristic capabilities that could enable innovation found.

To motivate which characteristic capabilities to recommend for Group IT, the gap of not fully in use characteristic capabilities had to be found. A quantitative study at Group IT was performed to find out which of the found characteristic capabilities existed and which ones were not fully in use. The results of the survey are presented in Empirical part two chapter. The thesis work ends with a concluding discussion and recommendations for Group IT.

3.2 Using both a qualitative study and quantitative study
This thesis work includes both a qualitative study and a quantitative study. The research questions aims to find capabilities and to investigate if any of these found capabilities are not fully in use at Group IT. For finding the capabilities at successful innovative companies and being able to evaluate them, a qualitative method was used. To find the innovation gap at Group IT a quantitative survey was performed at Group IT. The questions were defined through the discussion of the qualitative study that was performed before the survey.
3.3 Qualitative study
This section describes the selection of companies, selection of respondents and position, structure of interviews, ethics, and limitations of the results. The qualitative studies were performed at four different companies.

3.3.1 Model for selecting companies
A funnel model was created to secure that the companies asked to participate in the study both were innovative, relevant, and successful.

![Funnel model](image)

Figure 5 The funnel model for selecting innovative companies to interview.

The gross list companies, chosen mainly from the 2010 business weeks most innovative companies, were selected down to a net list (Business Week, 2011). This was done through a funnel model created as figure 5. 17 companies were taken through the selection model and 12 made it through the model to the net-list.

The exact parameters are shown below in table 2 and 3. After the elimination due to the parameters there was a further elimination and priority order formed by the Chief Information Officer and Head of Service and Development at Group IT. Their priority order depended mostly on success and interest in the different companies coming through the parameters in the funnel model.

**Parameters**
The parameters were split into two categories (Swedish Match relevance parameters and Success parameters). The relevance parameters were chosen to eliminate companies that were not relevant to size, operating only nationally and to secure that they were not in the same competitive market as Swedish Match.

### Swedish Match relevance parameters

**Table 2 Relevance parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multinational</td>
<td></td>
</tr>
<tr>
<td>Turnover &gt; 1 billion SEK</td>
<td></td>
</tr>
<tr>
<td>Not a competitive business to Swedish Match</td>
<td></td>
</tr>
</tbody>
</table>

All companies brought in to the model and in to the gross list made all these three parameters shown above. All the companies had multinational operations, had a turnover of more than one billion SEK and none of them were competitors to Swedish Match.

### Success parameters

**Table 3 Success parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financially stable – Credit rating (BBB-AAA)</td>
<td></td>
</tr>
<tr>
<td>Operating income 2002 &lt; 2009</td>
<td></td>
</tr>
</tbody>
</table>

The success parameters were chosen to secure that the companies were successful and had a good economic growth. All companies made it through the criteria of Standard & Poor’s credit rating (Standard and Poors, 2011).
Year 2002 and year 2009 operating income were compared and chosen due to the alike global economic situation. When comparing the operating income parameter had 5 of the 17 companies a lower operating income in 2009 than 2002. Comparing a good economic year with a bad year would be useless because the information would be irrelevant and not connected only to success. Operating income numbers were found in the annual reports that all the companies had presented.

**Priority order by decision makers**

After the elimination caused by the parameters in the funnel model Chief Information Officer and Head of Service and Development at Group IT prioritized the order of the companies left into the net list. The net list order described in which order the innovative companies were contacted. This priority order did not affect the qualitative study because all companies on the net list were asked to participate due to the fact that many companies declined to be interviewed.

### 3.3.2 Selection of respondents

To ensure that the interview respondents were familiar with the concept of innovation and could give relevant results to the study the aim was to perform interviews with R&D Managers, Head of Innovation or Product Managers. Unfortunately only one respondent at each company had time to participate in an interview. This may have negative effects on both the reliability and the validity of the qualitative study.

### 3.3.3 Interview request

When the net list was set, companies were contacted and asked if they would like to participate. Eight out of 12 companies declined to participate in an interview mostly because innovation is a corporate secret. This may have negative effects on the reliability and validity of the qualitative study.

### 3.3.4 Interviews

The interviews were performed semi structural. The respondents were permitted to discuss related areas to the question and focus more deeply where knowledge is at its best. At the same time the interviewer was trying to add questions where areas got more interesting for the study (Collins and Hussey, 2009).

The main focus area in the interviews was the concept of capability which is divided into Leadership, Organization, Processes and Tools in this thesis work. The interview questions can be found in Appendix 1.

### 3.3.5 Ethics

The author correctly described to the respondents that the client of the thesis work was Swedish Match. In both e-mail and telephone call the author described the purpose of the thesis work to the respondents before they were asked to participate in an interview.

The respondents were asked if they wanted to participate anonymously in an interview and follow up questions. The interviews were not recorded, instead the author took notes. A couple of respondents agreed that this decision was well thought out and felt more relaxed over the notes.

All the results from the interviews were transcribed and sent back to the respondent for control that the results were correct and not misleading.
3.3.6 Limitations and critics to the qualitative study
Capabilities that could enable innovation are examined. This means that the companies examined has to be innovative. The problem of selecting innovative companies was solved by the funnel model. The funnel model increases the validity of the thesis work although only 4 out of 12 companies from the net list agreed to participate in an interview with one respondent per company. The fact that only one interview per company was performed decrease the validity of the qualitative study.

Because innovation is connected to competitive advantage (Bessant et al. 2005) many of the companies at the net list (after funnel model) declined to participate in an interview due to corporate secret. The reliability of the results had increased if more interviews had been performed at companies from the net list. On the other hand most of the results were confirmed in all interviews. More respondents at each company would have had positive effects and increased the reliability of the study as well.

The companies examined act in fast moving markets. Generalizing this study is possible although not risk free when only 4 of 12 innovative companies participated in an interview.

3.4 Quantitative study
To be able to recommend capabilities that enable innovation to Group IT, the gap needed to be examined. The gap is the capabilities that do not exist at Group IT but were characteristic for the innovative companies interviewed in the qualitative study.

The survey tool used is called Survey Monkey. A link to the survey was sent to all employees’ e-mail addresses at Group IT. All employees had one week to answer the survey before it was closed and data collected (Survey Monkey, 2011).

Twenty-six employees participated in Sweden and US. The respondents could choose between four answers to the claims: disagree, mostly disagree, partially agree, and agree. The answer options in the survey were designed as the Likert scale (Collins and Hussey, 2009).

3.4.1 Purpose
The purpose was to examine if any characteristic capabilities found in the Discussion chapter that could enable innovation were not fully in use at Group IT.

3.4.2 Ethics
The respondent answered anonymous to assure the result would not be affected in any unnecessary way. The employees participated on free will and no one was pressured to answer the survey questions at Group IT.

3.4.3 Limitations and critics
Group IT is a relative small unit which does the statistics of the survey sensitive. The statistics are further limited by the amount of respondents. Only 26 out of 60 performed the survey.

The validity of the quantitative study is high because the answers only affect the recommendations for Group IT.

The survey had 26 respondents out of 60 asked to participate. The result sent a clear message of which characteristic capabilities that were not fully in use at Group IT. More respondents could have changed the result and the reliability becomes less due to the lack of respondents.
The generalizability of the results was limited in this study because the results depended on the organizational context. The results may differ between different units and different companies. Cultural aspects can influence the answers as well which decreases the generalizability even more. This study cannot be generalized risk free to any other company or unit except Group IT, Swedish Match.
4. Empirical study part one – results from interviews

The interview results are presented in this chapter.

4.1 Qualitative study

4.1.1 Presentation of companies that have been interviewed

All the companies that participated in the qualitative study are actors on their global markets. They all deliver products and services with short time interval between new versions of products or/and services. The parameters of the selection models secured both relevance and success of the examined innovative companies. None of the companies are acting on the same market as Swedish Match. All companies has a turnover more than one billion SEK and had a higher operating income in year 2009 than year 2002.

Company A

The company named A in this thesis is a global leader in their market. Their product portfolio is wide, including solutions and services in many areas connected to storage of data. Some of their products have a global market share close to 50 percent. The interview was performed with the Product Manager, Scandinavian market.

Company B

The company named B in this thesis is a company with an outstanding wide product portfolio with more than 30,000 different types of products. They deliver their solutions to many different markets where they through their size and strong brand easy can enter new markets with their innovative products. The interview was performed with the R&D Manager, Sweden.

Company C

The company named C in this thesis is a rarely young company attacking a few markets. The past years company C has increased their market shares significant in these markets. Their annual report shows an impressive profit margin near to 50 percent of the total turnover. The company is represented globally but unlike company A, B, and D with American origin, the company has its origin in Israel. The interview was performed with the R&D Manager, Sweden.

Company D

The company named D in this thesis is a global leader in many areas of their different markets. They are for example a competitor to the company named A in some markets. In other markets company D compete with other global companies. The interview was performed with the Head of Innovation, Sweden.

4.1.2 Results

The results presented in this chapter are categorized into the components of capability. The concept of capability is divided into leadership, organization, processes, and tools presented in the Theory chapter. The results are presented separate for each company. In the end of the chapter a summary of the results for each company are presented. The results presented in this chapter were the relevant information found in the interviews.
4.1.3 Company A

**Leadership**

“Never try to force innovation, enable it”. - Product Manager, A

The culture plays a vital role for innovation. If the culture not attracts innovation it will be hopelessly hard to create innovative solutions or products. To successfully implement this surge within the culture for innovation the leadership has to facilitate innovation. This is done by enabling wide interaction between the units and within the units. To manage the knowledge in right direction and create interaction within the culture, processes are implemented by the leadership. Most important is to never force the employees to come up with new ideas and solutions. Instead the leadership should enable innovation and creativity at all time.

**Organization**

Social competence is important to successfully manage both formal and informal interaction among the employees. This is valued when employing new staff. To develop the employees competence courses are held both internal and external at company A.

To create a culture that attracts innovation, all employees at company A have innovation as an informal part in their job description. This means that all employees have an informal expectation to be creative and share ideas to the other employees within the company. Every employee that has a new idea is expected to share it at company A.

“Because of our size and resources, we can accelerate innovation”. – Product Manager, A

Resources are vital for enabling innovation. Both human and financial resources are devoted to both create a culture that attracts innovation and to realize new ideas that have come up. Also acceleration of innovation happens when company A buy up comers on the market that have creative ideas and specific knowledge that can be useful at company A.

**Processes**

Resources enable innovation activities like workshops and competitions. New ideas can appear everywhere within the company and needs a home. A formal idea management process is defined at company A. Through this process all holders of an idea enables to share it. The process evaluates the idea and then brings feedback to the holder of the idea. The evaluation of an idea is performed through a group of employees having a formal meeting to discuss ideas that have been brought in to the process. The process needs to work well and formal meetings are held once every week. This is vital for keeping the high iteration of new ideas into the idea management process.

The process of realizing a new idea has to be well defined. The financial resources are defined in levels and depend on position of the person that is supposed to realize the idea. The human resources always need to be discussed with the management for realizing a new idea.

**Tools**

The usual mobile phone and email are tools used at company A. One extraordinary tool is flex-office that is implemented. Flex-office means that almost no employee has their own room or space at the office. Instead the employees choose a place to sit when they arrive to the office. This tool creates
interaction cross-functional and a culture where the employees easier get a better overview of problems and tasks.

4.1.4 Company B

Leadership
“Risk projects runs in its own furrow where no short-term expectations exists”. - R&D Manager, B.

Risk-projects are run on own budget which supports the creative culture in company B. Through these kinds of processes the leadership sends innovation culture down through the whole organization. Innovators are rewarded with recognition and the culture has a huge desire to create and come up with new ideas. The leadership has worked hard with the culture and its way of thinking creative. To share and increase the organizational knowledge, cross-functional teams are very common. This helps company B to spread the culture from R&D to other units, which increases the whole company culture to attract innovation.

Organization
Curiosity and social competence are important among the employees to enable processes where knowledge can be shared. Courses are held internal as well as external to develop the employee’s knowledge. Many of the experts though have a hard time finding courses where they can learn more in their specific area.

“A new idea needs to be evaluated which takes time and cost money”. - R&D Manager, B.

Resources are described as vital for innovation and without them innovation will be near to impossible. Both the formal idea management process and the realization process needs resources for creating value of new ideas.

Processes
The innovation activities are many at company B. Near to all employees have 15 percent of their time off for innovation. Some enthusiasts are allowed even more. The time off should be used for innovation within the employees daily work. The employees are not allowed to do other things on this time for example sports or activities not connected to their mission. Other processes are the formal idea management process and joint seminars where knowledge is being shared.

Tools
The tools used are mobile phone, email, and machine equipment. There are no extraordinary tools existing at company B.

4.1.5 Company C

Leadership
At company C the R&D Manager describes the leadership focus lies in knowledge sharing and to integrate it within the daily work. For example much development work is done in pairs. Both to secure the knowledge stays within the walls and for a more effective development process when lead times has to be really short for staying competitive. Every day starts with daily morning meetings within the teams and then one weekly meeting to increase the cross-functional knowledge. At this meeting the different teams brings up their problems and shows their solutions to the other
teams. This increases the knowledge and understanding for all employees which gets a greater picture of the whole R&D unit.

**Organization**

Loss of time has lead to implemented timeslots between the projects. These timeslots are used for formal workshops, creative ideas and learning. Without these timeslots no time for innovation activities would have been possible. The timeslots enable creativity, discussions, knowledge sharing and by that innovative solutions.

Social competence and experience are highly valued at company C. The R&D Manager states that the leaders’ role is to enable knowledge sharing and socialization among the less social employees. Many times the least social employee is the top expert within their area. This knowledge is highly valuable to have within the walls and it is important to secure it stays within the company walls as well. The management has a great responsibility to find a way for these less social employees to share their knowledge to the rest of the group at company C.

Every employee has innovation as an informal part in their job description. The IT architects are the only position within the company that has innovation as a formal part in their job description. The R&D Manager describes that the architect job is to find new solutions and evaluate them. Still no one forces them to find it at a specific time. On the other hand the employees at this position are creative and really like to search for new solutions at all times.

“No resources, no innovation. No innovation, no company C”. - R&D Manager, C

Resources are devoted to innovation, both human resources (for example the timeslots) and financial resources. This is vital for enabling innovation according to the R&D Manager of company C.

**Processes**

Like company A and B, formal innovation activities exist at company C. The idea management process is defined and processes for dividing resources to different projects are set. The formal idea management process enables speed as well because the idea always should be delivered and evaluated to the nearest leader. The leader brings the interesting ideas further on to a weekly meeting where all new ideas are discussed and evaluated by a team.

“9 of 10 ideas are thrown away, although it is important to keep the high idea iteration up and not try to increase the efficiency”. - R&D Manager, C

Formal brainstorm meetings within the timeslots enable high iteration of new ideas. The meetings also allow different competences to discuss new and old solutions. The R&D Manager argues that it is important not to try to minimize bad or not relevant ideas. Instead it is important that the process which evaluates them is effective.

**Tools**

Videoconference is one of the more common tools except mobile phone and email. No extraordinary tools are used. Instead focus lies in not spending money on tools that do not create value to the company or increases the creativity within the company.
4.1.6 Company D

**Leadership**
The culture attracts innovation through the clear message sent by the leadership. The whole company culture is driven by awards and internal recognition, which have positive effects on the desire. Interaction becomes vital for solving the daily tasks and is by that integrated into the culture. Because of the encouraged creative culture, finding new solutions and sharing new ideas are integrated into the daily work for the employees at company D.

**Organization**
As in the other companies social competence is important. With social employees the interaction becomes better and provides better solutions and ideas. The company culture motivates the employees which makes this competence important.

Resources are vital for innovation and easier to manage than the culture. The combination of resources and willingness/desire to innovate are the key factors to successful innovations according to Head of Innovation, D.

A separate budget for innovation exists at company D. For example risk projects run on their own budget and increases the willingness of sharing new ideas and start new creative projects. The budget supports the creativity among the employees at company D.

**Processes**
Networks between different units are used to create cross-functional knowledge sharing and at the same time find better solutions faster. Many processes support the culture in company D, for example time off for innovation in teams is one of the processes that support the culture. Another process is formal workshops where cross-functional competence together solves problems.

“Our idea management processes are not working well today as we have too many of them”. – Head of Innovation, D

The holder of an idea should easy know where to deliver it. He or she should feel secure that feedback will come and that the idea will be evaluated in a formal process.

“Keep an intense iteration of new ideas”. – Head of innovation, D

Without this process working well, ideas will be missed and over time this can affect the creative culture negative within the company. Instead this process has to work well to increase the number of incoming ideas which may lead to more great innovations in the end. At company D a high iteration of new ideas is seen as positive because certain ideas become great innovations.

**Tools**
“Tools that increases the performance and creativity should be used, nothing else”. - Head of Innovation, D

No extraordinary tools are being used. Instead focus lies on not to use unnecessary tools because limitations can appear. These limits may not always be discovered in an early stage. Instead they may affect the creativity and implement limitations that have negative effects on both culture and processes.
4.1.7 Summary of results

**Company A**
- The leadership creates a desire to innovate.
- Motivators are implemented (competitions) which drive the culture to more creative thinking.
- Resources enable innovation.
- The idea generating source is broad.
- Formal idea management process enables to send the idea for selection and realization.
- Cross functional interaction is encouraged.
- Flex-office creates broader interaction cross functional.

**Company B**
- Motivators (awards and recognition) are implemented and drive the culture against innovation.
- The leadership encourages broad interaction and broad knowledge exchange.
- Resources enable innovation.
- Social competence enables interaction and knowledge sharing.
- Free time for innovation enables idea generation.
- Formal idea management process enables to send the idea for selection and realization.
- Seminars create broad interaction cross-functional.
- Risk projects run on own budget with no short term financial expectations.

**Company C**
- The culture is curious and creative.
- Resources enable innovation.
- The timeslots enable creativity and innovation.
- Formal idea process helps the holder of the idea to pass it forward.
- High iteration will generate valuable ideas.
- The leadership actively works with sharing knowledge.
- The leadership integrates the knowledge sharing process into the daily work.
- Brain storm meetings enables creativity in group and valuable ideas may appear.

**Company D**
- Motivators for innovation (awards and recognition) are implemented and drive the culture to a more creative thinking.
- Resources enable innovation.
- Time off for innovation (at the same time) creates a better interaction and creative ideas built on many competences.
- Important to simplify the sharing process of an idea to minimize confusion. Use a formal idea management process.
- Knowledge sharing cross-functional is encouraged and enables new ideas to appear.
- Innovative risk projects runs on own budget and increases the willingness of taking risks.
5. Discussion

![Diagram of the discussion model]

**Results to findings**
The discussion chapter is designed according to the model above in figure 6. The results from the interviews were divided into the capability components which are leadership, organization, processes and tools. The important results were then taken further to findings. Certain results do not necessary have any effects and can by that not contribute to characteristic capabilities that enable innovation. The step is taken to enable a better underlying understanding of the characteristic capabilities.

**Findings to characteristic capabilities**
The findings were defined and characteristic capabilities were created by these findings. Each finding presented in table 4 has a number (1-6). These numbers represent which characteristic capability the finding together with other findings creates. If all four companies having a finding with number (1) the frequency will be 4(4).

**Frequency, effect and value of the characteristic capability**
The frequency of the characteristic capabilities was then presented and described how many interviews (1-4) that the finding had appeared. The effects of the characteristic capabilities are then discussed as well as the value (shown by a Harvey ball). The values were set to essential, important, or contribute. The value depended on the frequency and the effects importance of the characteristic capability.

**Characteristic capabilities discussed and compared with theory**
The characteristic capabilities were then discussed and compared with theory presented in the Theory chapter.
5.1 Findings

All findings have their origin in each company results in the Empery part one chapter. The number(s) after each finding states which characteristic capability the finding created together with other findings having the same number. In table 5 the created characteristic capabilities are presented.

Table 4 Findings from interviews.

<table>
<thead>
<tr>
<th>Company A</th>
<th>Company B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>The leadership creates a desire to innovate. (1)</td>
<td>Motivators (awards and recognition) are implemented and drive the culture against innovation. (1)</td>
</tr>
<tr>
<td>Motivators are implemented (competitions) which drive the culture to more creative thinking. (1)</td>
<td>The leadership encourages broad interaction and broad knowledge exchange. (5)</td>
</tr>
<tr>
<td>Resources enable innovation. (2),(3)</td>
<td>Resources enable innovation. (2),(3)</td>
</tr>
<tr>
<td>The idea generating source is broad. (2)</td>
<td>Social competence enables interaction and knowledge sharing. (5)</td>
</tr>
<tr>
<td>Formal idea management process enables to send the idea for selection and realization. (4)</td>
<td>Free time for innovation enables idea generation. (2)</td>
</tr>
<tr>
<td>Cross functional interaction is encouraged. (5)</td>
<td>Formal idea management process enables to send the idea for selection and realization. (4)</td>
</tr>
<tr>
<td>Flex-office creates broader interaction cross functional. (5)</td>
<td>Seminars create broad interaction cross-functional. (5)</td>
</tr>
<tr>
<td></td>
<td>Risk projects run on own budget with no short term financial expectations. (6)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company C</th>
<th>Company D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>The culture is curious and creative. (1)</td>
<td>Motivators for innovation (awards and recognition) are implemented and drive the culture to a more creative thinking. (1)</td>
</tr>
<tr>
<td>Resources enable innovation. (2),(3)</td>
<td>Resources enable innovation. (2),(3)</td>
</tr>
<tr>
<td>The timeslots enable creativity and innovation. (2)</td>
<td>Time off for innovation (at the same time) creates a better interaction and creative ideas built on many competences. (2),(5)</td>
</tr>
<tr>
<td>Formal idea process helps the holder of the idea to pass it forward. (4)</td>
<td>Important to simplify the sharing process of an idea to minimize confusion. Use a formal idea management process. (4)</td>
</tr>
<tr>
<td>High iteration will generate valuable ideas. (4)</td>
<td>Knowledge sharing cross-functional is encouraged and enables new ideas to appear. (5)</td>
</tr>
<tr>
<td>The leadership actively works with sharing knowledge. (5)</td>
<td>Innovative risk projects runs on own budget and increases the willingness of taking risks. (6)</td>
</tr>
<tr>
<td>The leadership integrates the knowledge sharing process into the daily work. (5)</td>
<td>Brain storm meetings enables creativity in group and valuable ideas may appear. (5)</td>
</tr>
<tr>
<td>Brain storm meetings enables creativity in group and valuable ideas may appear. (5)</td>
<td></td>
</tr>
</tbody>
</table>
5.2 Characteristic capabilities, frequency, effects and value
From the Empery part one chapter, findings were found. These findings from all four companies create characteristic capabilities. If a finding is repeated in more than one company, the frequency increases and the characteristic capability become more important. The characteristic capabilities may bring effects to the companies that have them. These effects are also discussed in table 5. The value depends on the frequency of companies having the characteristic capability and the effect it may bring to the companies having it.

<table>
<thead>
<tr>
<th>Characteristic capabilities</th>
<th>Frequency</th>
<th>Effects</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Desire to innovate and share creative ideas.</td>
<td>4(4)</td>
<td>Increases the willingness of sharing knowledge and discuss new ideas and creates a broad source.</td>
<td>Essential</td>
</tr>
<tr>
<td>2. Human resources available for innovation and creative thinking.</td>
<td>4(4)</td>
<td>Increases the number of ideas and creates a broad source.</td>
<td>Essential</td>
</tr>
<tr>
<td>3. Financial resources devoted to innovation activities.</td>
<td>4(4)</td>
<td>Increases the number of ideas.</td>
<td>Essential</td>
</tr>
<tr>
<td>4. Formal idea management process.</td>
<td>4(4)</td>
<td>More ideas will be shared and feedback will increase both willingness to share again and increase the holder`s knowledge. The effects are important, still innovation can appear without this characteristic capability.</td>
<td>Important</td>
</tr>
<tr>
<td>5. Cross-functional interaction is encouraged, both formal interaction and informal interaction.</td>
<td>4(4)</td>
<td>Broader source that share knowledge and ideas, which can increase the quality and overview of a new solution. The effects are important, still innovation can appear without this characteristic capability.</td>
<td>Important</td>
</tr>
<tr>
<td>6. Risk projects run on own budget.</td>
<td>2(4)</td>
<td>Increases the creative thinking and knowledge sharing when failures are accepted and no short term financial expectations exist.</td>
<td>Contribute</td>
</tr>
</tbody>
</table>
5.2.1 Desire to innovate and share creative ideas
Without the employees willingness to be creative, search for new solutions and share creative ideas the source will be less broad and the creative culture more centralized to specific units. The effects that the desire within the culture brings are sharing knowledge, discussing new ideas and create a broad source that generates new ideas. All interviewed companies stated this as very important, and the value is set to essential. It is important to notice that without the desire to innovate, no resources (financial or human) can bring up new ideas. This is why the desire is vital for the leaders of innovation.

Nonaka (1994) argues that there is important to mobilize the organizational knowledge into the right direction. This may both increase the knowledge among the employees when a greater picture of what the organization is doing appears and at the same time it may increase the willingness of sharing and discussing new ideas. Adams et al. (2006) argues that a culture where freedom feeling exists may increase the willingness and desire to share new ideas among the employees. The leadership can manage the problem of freedom feeling and routine work through switching between tight and loose control. Tight control when routine work needs to be done and loose control for more creative thinking. The found theories align with the empirical results concerning the importance of the willingness to innovate and share creative ideas.

5.2.2 Human resources available for innovation and creative thinking
All companies have human resources available for innovation. The effect will be more creative and innovative ideas. The source may also become broader. The value is set to essential because of the high frequency and very important effect this characteristic capability brings to its holder.

Pearce and Page (1990) argues that resource allocation has to be well performed. If human resources are available for innovation and creative thinking the allocation problem may be easier. If the resources exist the problem may instead be the lack of a process that fast can make decisions on which resources are divided to which project. A formal idea management process has to be defined. This process can both evaluate the ideas and allocate resources for realizing the idea. The human resources enable both a working idea management process and fast allocation of resources to new ideas that have come up. The theory concerning resource allocation and its problems are in the empirical results solved with processes concerning idea management and realization. These processes (often integrated to one) together with human resources devoted to innovation handle the allocation problem and enables fast decisions.

5.2.3 Financial resources devoted to innovation activities
All interviewed clearly described the financial resources devoted to innovation as vital to successfully come up with innovations. The effect of the characteristic capability can be an increased number of ideas because the financial resources make processes and innovation activities possible. The value is set to essential due to the frequency and very important effect that this characteristic capability brings to its holder.

Pearce and Page (1990) argues that resource allocation needs to be well performed and decisions have to be taken fast. If financial resources are devoted to innovation the problem with allocation decreases significantly when resources already are set aside. Still there is important that the financial resources devoted to innovation have a process behind where these fast decisions can be taken and resources well allocated. The theory aligns with the empirical results even if the theory more
specifically concerns the allocation problem more than just devoting financial resources to innovation. On the other hand dedicated resources to a specific area decreases the problem of allocating resources. The allocation problem may appear first when too many innovation projects are in the pipeline.

### 5.2.4 Formal idea management process

All four innovative companies had one or more idea management processes. It is important that the process enables the holder of an idea to share and get feedback. The value is set to important. The process can bring benefits if it is well implemented into the culture. The value is not set to essential because innovations can appear without this formal process. Still, the process can enable more innovation.

Gamlin et al. (2007) argues that a home for new ideas has to exist. An idea management process is one example on how to solve this problem when a home is missing. The process enables the holder to share the idea. Prather and Turrell (2002) argue the importance of an active process where the employees become more involved into the business which can increase the ideas value to the company. The empirical results argue that the importance instead lies in the iteration of new ideas to enable the valuable ones. The empirical results state that it is important to never try to increase the efficiency of the incoming ideas value to the company. Instead focus could be to increase the efficiency of the process managing new ideas to realization and finding the valuable ideas fast through a well performing idea management process.

### 5.2.5 Cross-functional interaction is encouraged

All interviewed companies worked with and enabled cross-functional interaction. Formal interaction through workshops, seminars and weekly meetings were used by all of the interviewed companies. The informal interaction were also encouraged and started often in connection with the formal interaction. The effect may be a broader source because of better overview knowledge in many units. Different experience can also increase the quality of the new ideas. The value is set to important because the effect will be to sustain a broad source and the characteristic capability may increase the quality of the solutions.

Nonaka (1994) argues that formal processes where knowledge and experience can be shared are vital to increase the knowledge within the culture. The formal process may also increase the willingness of sharing knowledge informal (Nonaka, 1994; Glisby and Holden, 2003). Performing the formal knowledge sharing process cross-functional enables the mobilization of the organizational knowledge faster. The empirical results align well with the theory concerning knowledge sharing and cross-functional interaction. Frappalo (2006) argues that mobilizing knowledge into the same direction is important for innovation which also aligns with the empirical results.

### 5.2.6 Risk projects run on own budget

Risk projects where no short term expectations exist can lead to radical innovations and long term competitive advantage. Short term losses may appear but is not questioned. Instead focus is to take all risks necessary to try new creative ideas. These kinds of projects can increase the creativity and send a clear message to the culture, that creative ideas are taken seriously. Only two out of four companies had their own budget for innovative risk projects. This is why the value is set to contribute.
Cooper (1993) and Koprowski (1967) argue that the leadership has an important role for creating a culture where employees are willing to take risks. Risk projects support Cooper’s theory and will enable the culture to attract more risks. To successfully come up with radical innovations (Bessant et al. 2005) risk projects may be the answer where no short term financial expectations exist.

5.3 Summary of empirical results supported by theory
In table 6 a summary of characteristic capabilities and theory are presented. It is clear that most of the empirical characteristic capabilities are supported by the theoretical capabilities although some differences are found and discussed in 5.2.1 to 5.2.6.

<table>
<thead>
<tr>
<th>Empirical characteristic capabilities</th>
<th>Supported by theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Desire to innovate and share creative ideas.</td>
<td>Mobilizing organizational knowledge into the right direction. Freedom feeling – the leadership can switch between loose and tight control of employees daily routine work.</td>
</tr>
<tr>
<td>2. Human resources available for innovation and creative thinking.</td>
<td>Enable fast decisions through well performed resource allocation.</td>
</tr>
<tr>
<td>3. Financial resources devoted to innovation activities.</td>
<td>Enable fast decisions through well performed resource allocation.</td>
</tr>
<tr>
<td>4. Formal idea management process.</td>
<td>Idea management process provides a home for the idea.</td>
</tr>
<tr>
<td>5. Cross functional interaction is encouraged, both formal interaction and informal interaction.</td>
<td>Formal processes where knowledge and experience can be shared. Informal processes where knowledge and experience can be shared. Mobilizing organizational knowledge into the right direction. Well implemented knowledge sharing system.</td>
</tr>
<tr>
<td>6. Risk projects run on own budget.</td>
<td>The leadership has an important role for creating a culture where employees are willing to take risks.</td>
</tr>
</tbody>
</table>
6. Empirical study part two – Survey results

The quantitative results present which characteristic capabilities that exists and which ones that is not fully in use at Group IT. The gap existing at Group IT is the characteristic capabilities held by the innovative companies and not fully in use at Group IT. The survey had 26 respondents working at Group IT. Employees both from Scandinavian offices and US office participated in the survey.

6.1 Existing characteristic capabilities at Group IT

The figures show how the respondents Disagreed, Mostly disagree, Partially agree or Agree to the different claims. As the figures tell, most of the characteristic capabilities that exist at the innovative companies are unfortunately not fully in use at Group IT. More details concerning the survey results can be found in Appendix 2.

6.1.1 Desire to innovate and share creative ideas

![Bar chart]

Figure 7 Survey question result

The desire to innovate and share creative ideas was according to all four companies very important for enabling innovation. The result from the survey shows that most of the respondents agreed to the claim and has a desire to innovate and share creative ideas. Only three out of 26 respondents disagreed and one mostly disagreed. This result shows that the characteristic capability exists. At the same time there is important to keep in mind that this capability is dynamic and the leadership has a great responsibility to sustain and increase the desire within the culture to innovate and share creative ideas in the future.
6.1.2 Human resources available for innovation

Figure 8 Survey question result

Human resources for innovation and creative risk projects was one of the characteristic capabilities that enable innovation according to all four innovative companies. This capability is not fully in use at Group IT where 15 of the 25 respondents disagreed and seven mostly disagreed. Only three respondents partially agreed and one agreed to the claim. One respondent choose to not answer this question in the survey.

6.1.3 Financial resources devoted to innovation

Figure 9 Survey question result

Financial resources devoted for innovation was one of the characteristic capabilities that enable innovation. The survey result shows that this capability is not fully in use in Group IT. Only four out of 25 respondents agreed that money for innovation existed at Group IT. 11 of the respondents disagreed and the rest answered mostly disagree or partially agree. One respondent choose to not answer this question.
6.1.4 Formal idea management process

![Figure 10 Survey question result](image1.png)

To enable innovation was formal idea management process one characteristic capability that appeared at all four companies. According to the survey result, 16 of 26 respondents disagreed to the claim and seven mostly disagreed. Only four respondents partially agreed and none agreed. The result shows clearly how this characteristic capability is not fully in use in Group IT. One respondent choose to answer both disagree and mostly disagree. This is why 27 results instead of 26 exist in the figure.

6.1.5 Cross-functional interaction is encouraged

![Figure 11 Survey question result](image2.png)

Formal cross-functional interaction is one characteristic capability that all four companies had. The result of the survey shows that 18 respondents disagreed or mostly disagreed. This result shows that the characteristic capability is not fully in use within Group IT, when only eight respondents partially agreed or agreed. One respondent answered both partially agree and agree to the survey. This is why 27 results exist in the figure.
Informal cross-functional interaction was also a characteristic capability existing at all four innovative companies. At Group IT did 12 respondents disagree or mostly disagree and 14 respondents did partially agree or agree. The result shows that the characteristic capability is not fully in use although some respondents agree that it exists at Group IT. This may be the reason why a desire to innovate exists in the culture of Group IT.

6.1.6 Risk projects run on own budget

Risk projects run on own budget is a capability found in two of the interviewed companies. 11 respondents disagreed and six respondents mostly disagreed to the claim. Five respondents partially agreed and one respondent agreed. Three respondents choose to not answer the question.
6.2 Summarizing survey results

The results of the survey shows that four out of six characteristic capabilities found in the qualitative study were not fully in use or mostly not fully in use at Group IT. The only characteristic capability existing at Group IT was the desire to innovate and share creative ideas. For the claim concerning informal cross-functional interaction more respondents agreed and partially agreed than respondents that disagreed and mostly disagreed. This capability partially exists although not completely. This result may be connected to the capability desire to innovate and share creative ideas. If informal interaction is encouraged this may have effects on the creativity and the positive culture to innovation and new ideas.

The presented results of the survey show how some capabilities exists to certain employees and not to others. Many respondents choose to answer partially agree or mostly disagree to some questions. This shows how many of the characteristic capabilities exist in some cases although not completely. The capabilities not having most answers of Agree are considered as not fully in use at Group IT and are recommended to be implemented.

The results of the survey show how resources and processes mostly are not fully in use at Group IT. These not fully in use characteristic capabilities are recommended to be implemented into Group IT and will hopefully enable innovation in the future.
7. Concluding discussion

The purpose of this thesis was to study capabilities that enable innovation, used by successful innovative companies. The examined companies are not allowed to be competitors to Swedish Match. Then examine which of these capabilities were not fully in use at Group IT, Swedish Match. Not fully in use capabilities were then recommended to Group IT. Two research questions were defined.

- Which capabilities do enable innovation?
- Which of these capabilities are not fully in use at Group IT, Swedish Match?

The answers to both research questions are presented and discussed in this chapter. At an early stage in the thesis work another conclusion appeared not connected to the research questions. When the net-list companies were contacted and asked if they would like to participate in an interview, 8 of 12 companies on the net-list would not like to participate. Many of the companies were very clear that they denied an interview due to corporate secret information. The theory supports this conclusion as innovation and successfully mobilize knowledge into the same direction are today seen as competitive advantage (Bessant et al. 2005).

7.1 Which capabilities do enable innovation in successful multinational companies?

In the Discussion chapter were characteristic capabilities found. These were created from the findings from the results. Different theories supported the found characteristic capabilities. Theories supported some capabilities very well and a few capabilities were partly supported by the theory presented in the Theory chapter. Tools that enabled innovation were not found in the interviews instead tools could only be used if they increased the performance of a process. The characteristic capabilities presented below are categorized into the capability components.

**Leadership**
- Desire to innovate and share creative ideas.

**Organization**
- Human resources devoted to innovation and creative thinking.
- Financial resources devoted to innovation activities.

**Processes**
- Formal idea management process.
- Cross-functional interaction, both formal interaction and informal interaction.
- Risk projects run on own budget.

**Tools**
- Not found. Empirical results agree that only tools necessary for relevant processes could be used.
7.2 Which of these capabilities are not fully in use at Group IT, Swedish Match?

None of the characteristic capabilities had full support by the answer Agree in the survey. All except two of the characteristic capabilities were mostly not fully in use at Group IT according to the survey. The characteristic capability almost fully in use was the desire to innovate and share creative ideas. This may fortunately be the hardest characteristic capability to implement of the found capabilities that characterize the successful innovative companies.

The results also showed how informal cross-functional interaction had more support by agree and partially agree than of disagree and mostly disagree. This may be one of the underlying factors to the cultural desire of innovating and sharing new ideas. Not said that the capability today completely existed within Group IT.

When the not fully in use characteristic capabilities are implemented at Group IT hopefully the desire to innovate and share creative ideas will increase even further. In the future when the resources and processes support the cultural desire and willingness to innovate at Group IT, hopefully innovations will appear.
8. Recommendations

Group IT, Swedish Match are recommended to implement these not fully in use characteristic capabilities that enable innovation found in the qualitative study.

- Devote human resources to innovation and creative thinking.
- Devote financial resources to innovation activities.
- Implement a formal idea management process.
- Encourage and enable formal cross-functional interaction
- Encourage and enable informal cross-functional interaction.
- Run risk projects on their own budget.

8.1 Managerial implications

To implement processes enabling innovation, resources has to be devoted to innovation activities. Results show that it may be hard to implement these processes that enable innovation without resources devoted to the area.

The results indicate that resources to innovation activities can be a start up for enabling innovation when the culture is positive. Both financial and human resources are recommended to implement as a start. Then start to implement processes in relevant order where a formal idea management process could be a great start and send a clear signal to the already positive culture. At the same time formal processes including cross-functional interaction could be implemented. Hopefully this would lead to more informal cross-functional interaction as well.

Further on when these processes are implemented a budget for risk projects could be set by the management. This budget could sustain and increase the willingness of taking risks and think more creative.

To start with, a roadmap for fall 2011 is presented below by the author of this thesis work.

Roadmap fall 2011

- Devote human resources to innovation and creative thinking.
- Devote financial resources to innovation activities.
- Implement a formal idea management process.
- Organize formal cross-functional interaction.
9. Limitations and further research

Limitations
This study has some limitations. First of all, time is a limitation. More time for this thesis work had enabled the author to go through a greater gross-list which may have created a greater net-list. More companies on the net list could have increased the number of interviews. More interviews could have secured the characteristic capabilities further cause of a higher frequency scale.

The funnel model uses success parameters which set aside some innovative companies because their operational income unfortunately had lower numbers in 2009 than 2002. This could depend on a bad year or that this economic crisis was harder for them in 2009 than in 2002.

Further research
Are there any markets where these characteristic capabilities bring any other effects?

The interviewed respondents did not mention human resource management (HRM) at all. Can HRM be connected to innovation and competitive advantage? Can HRM possibly enable innovation?
10. References

10.1 Books


10.2 Articles


### 10.3 Digital sources

**Business Week**  
http://www.businessweek.com/magazine/content/10_17/b4175034779697.htm 2011-01-20

**Survey Monkey**  
http://www.surveymonkey.com 2011-04-15

**Standard and Poors (S&P)**  
http://www.standardandpoors.com 2011-02-12

**Swedish Match History**  

43
Appendix 1

Qualitative study – interview questions

Short presentation
Purpose of thesis work

Introduction
Which position do you have?
For how many years have you had this position?
For how many years have you worked for this company?

Capabilities that enable innovation

Leadership
How are the employees motivated to share their knowledge and learn from each other?
Do incentives come from the leadership to create an innovation culture in the organization?
Does the leadership enable creativity among the employees?
   - Encouraged / accepted or not accepted?
Do you feel that the corporate culture is positive to new thinking and change?
Do you feel that the corporate culture is positive to learning?
Has the leadership clearly communicated its view of taking risks, to solve problems?

Organization
What qualities does the company believe is most important among the employees?
Developing competence: internal and/or external?
Is the organizational structure deep or flat?
Is innovation a part of the role description for any employees? What position?

Processes
How does the company work with innovation?
   - Workshops, Communities of practice, Free time for the employees?

How does the company catch up new ideas?
   - Formal process(es)?
   - Informal process(es)?

How do new ideas become realized?
   - Decision taken centralized or decentralized?
   - Formal process?

Tools
Which tools does the company use to enable innovation and new ideas?
Appendix 2

Quantitative study – questions and result details

The results from the survey performed at Group IT after the characteristic capabilities were found.

### I have a desire to innovate and share creative ideas.

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>11,5%</td>
<td>3</td>
</tr>
<tr>
<td>Mostly disagree</td>
<td>3,8%</td>
<td>1</td>
</tr>
<tr>
<td>Partially agree</td>
<td>26,9%</td>
<td>7</td>
</tr>
<tr>
<td>Agree</td>
<td>57,7%</td>
<td>15</td>
</tr>
</tbody>
</table>

answered question 26
skipped question 0

### I have time off for innovation and creative risk projects.

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>60,0%</td>
<td>15</td>
</tr>
<tr>
<td>Mostly disagree</td>
<td>28,0%</td>
<td>7</td>
</tr>
<tr>
<td>Partially agree</td>
<td>8,0%</td>
<td>2</td>
</tr>
<tr>
<td>Agree</td>
<td>4,0%</td>
<td>1</td>
</tr>
</tbody>
</table>

answered question 25
skipped question 1

### Money for innovation and creative risk projects exist.

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>44,0%</td>
<td>11</td>
</tr>
<tr>
<td>Mostly disagree</td>
<td>20,0%</td>
<td>5</td>
</tr>
<tr>
<td>Partially agree</td>
<td>20,0%</td>
<td>5</td>
</tr>
<tr>
<td>Agree</td>
<td>16,0%</td>
<td>4</td>
</tr>
</tbody>
</table>

answered question 25
skipped question 1

### A formal idea management process exists, where feedback to the innovator are expressed.

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>61,5%</td>
<td>16</td>
</tr>
<tr>
<td>Mostly disagree</td>
<td>26,9%</td>
<td>7</td>
</tr>
<tr>
<td>Partially agree</td>
<td>15,4%</td>
<td>4</td>
</tr>
<tr>
<td>Agree</td>
<td>0,0%</td>
<td>0</td>
</tr>
</tbody>
</table>

answered question 26
skipped question 0
Formal cross-functional interaction is encouraged, for example workshops and/or communities of practice.

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>30,8%</td>
<td>8</td>
</tr>
<tr>
<td>Mostly disagree</td>
<td>38,5%</td>
<td>10</td>
</tr>
<tr>
<td>Partially agree</td>
<td>26,9%</td>
<td>7</td>
</tr>
<tr>
<td>Agree</td>
<td>7,7%</td>
<td>2</td>
</tr>
</tbody>
</table>

answered question 26
skipped question 0

Informal cross-functional interaction is encouraged.

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>23,1%</td>
<td>6</td>
</tr>
<tr>
<td>Mostly disagree</td>
<td>23,1%</td>
<td>6</td>
</tr>
<tr>
<td>Partially agree</td>
<td>38,5%</td>
<td>10</td>
</tr>
<tr>
<td>Agree</td>
<td>15,4%</td>
<td>4</td>
</tr>
</tbody>
</table>

answered question 26
skipped question 0

Risk projects runs on own budget where no short term financial expectations exists.

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>47,8%</td>
<td>11</td>
</tr>
<tr>
<td>Mostly disagree</td>
<td>26,1%</td>
<td>6</td>
</tr>
<tr>
<td>Partially agree</td>
<td>21,7%</td>
<td>5</td>
</tr>
<tr>
<td>Agree</td>
<td>4,3%</td>
<td>1</td>
</tr>
</tbody>
</table>

answered question 23
skipped question 3