

Leveraging External Ideas and Knowledge - Managing Inbound Open Innovation

Organization and Management

Master's thesis

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Research Objectives

This research was conducted for the research project E-Innovation, a part of FIMECC Oy's Innovation & Networks research program. The E-Innovation project focuses on the development and utilization of open innovation approaches within the context of sustainable innovation. The purpose of this study was to find out which organizational factors affect the processing of external ideas and knowledge within the case organization. By using the questions how and why, ways to improve the mobility and progress of ideas and knowledge were sought after.

Methodology

This research was conducted as a qualitative single case study. The case organization was a Finnish business media and business services company. Thematic interviews were used as the main data collection method. 13 interviews in the case organization worked as the main empirical material of the research. Additionally, selected written materials provided by the case organization were used to provide background information. The empirical data was analyzed by using the method of analytic induction.

Research Findings

Lack of properly functioning systematic processes was found to be the key barrier to the internal mobility and progress of external ideas and knowledge. Insufficiency of dedicated roles and responsibilities for the processing of ideas also worked as a hampering factor. In addition to these, it was also noted that facilitation and discipline were needed in order to make any systematizing efforts function as supposed to. An underlying factor affecting the behavior of the employees was the influencing power of perceptions that people form of the overall innovative possibilities of the organization, of the willingness of other employees to collaborate, and of the potential significance of their contributions. The findings imply that, in order to manage inbound open innovation effectively and efficiently, appropriate structures and systematic processes should be in place, action should be facilitated, obedience should be required, and sufficient transparency and communication should be ensured to avoid false negative perceptions that might decrease the employees' willingness to contribute.

Key Words

Innovation, open innovation, inbound open innovation, innovation management

Saana Mäkijärvi

AVOIMEN INNOVAATION JOHTAMINEN: ULKOISTEN IDEOIDEN JA TIEDON HYÖDYNTÄMINEN

Tutkimuksen tavoitteet

Tämä tutkimus tehtiin E-Innovation -tutkimusprojektille osana FIMECC Oy:n Innovation & Networks – tutkimusohjelmaa. E-Innovation -projekti keskittyy avoimen innovaation käytäntöjen kehittämiseen ja käyttöön kestävänn innovoinnin kontekstissa. Tämän tutkimuksen tarkoituksena oli saada selville, mitkä organisatoriset tekijät vaikuttavat ulkopuolisten ideoiden ja tiedon käsittelyyn tutkimuksen kohteena olevassa organisaatiossa. Käyttämällä kysymyksiä ”miten” ja ”miksi” etsittiin tapoja parantaa ideoiden ja tiedon liikkuvuutta ja edistymistä.

Metodologia

Tämä tutkimus toteutettiin laadullisena yhden tapauksen tapaustutkimuksena. Tutkimuksen kohdeorganisaationa oli suomalainen liike-elämän media- ja palveluyritys. Teemahaastattelut olivat pääasiallinen aineistonkeruumenetelmä. 13 haastattelua kohdeorganisaatiossa muodostivat empiirisen tutkimuksen pääaineiston. Lisäksi valikoituja kohdeorganisaation tarjoamia dokumentteja käytettiin tutkimuksen taustamateriaalina. Empiirinen aineisto analysoitiin analyyttisen induktion menetelmää käyttäen.

Tutkimuksen tulokset

Toimivien systemaattisten prosessien puute todettiin ulkoisten ideoiden ja tiedon sisäisen liikkuvuuden ja edistyksen pääesteeksi. Myös ideoiden käsittelyyn määrättyjen roolien ja vastuiden riittämättömyys toimi haittaavana tekijänä. Näiden lisäksi tuli esiin, että toimintaa tulee fasilitoida ja noudattamista vaatia, jotta pyrkimykset systematisoida toimintaa voisivat onnistua. Työntekijöiden käyttäytymisen taustalla yhtenä ohjaavana tekijänä havaittiin olevan näiden käsitykset yrityksen innovaatiopotentialista, muiden työntekijöiden halukkuudesta tehdä yhteistyötä, sekä heidän omien panostustensa potentiaalisesta merkityksestä. Tutkimuksen tulokset viittaavat siihen, että ulkoisten ideoiden ja tiedon sisäisen hyödyntämisen johtamisessa tulisi luoda sopivanlaisia rakenteita ja prosesseja, toimintaa tulisi fasilitoida ja noudattamista vaatia, ja riittävästä läpinäkyvyydestä ja viestinnästä tulisi huolehtia työntekijöiden osallistumishalukkuutta mahdollisesti heikentävien virheellisten negatiivisten käsitysten välttämiseksi.

Avainsanat

Innovaatiojohtaminen, avoin innovaatio

Table of Contents

- 1. Introduction..... 2
 - 1.1. Research Goals and Design 3
 - 1.2. Key Concepts 4
 - 1.3. Methodology 6
 - 1.4. Structure of the thesis 7
- 2. Earlier Research..... 8
 - 2.1. Innovation 8
 - 2.2. Exploration, Exploitation and Ambidexterity 9
 - 2.3. Open Innovation..... 12
 - 2.3.1. Critique and Recommendations for Future Research..... 16
 - 2.3.2. Inbound Open Innovation 18
 - 2.4. Managing Inbound Open Innovation 19
 - 2.4.1. Structures and Processes 21
 - 2.4.2. Resource allocation 26
 - 2.4.3. Knowledge management 29
 - 2.4.4. Change Management 32
 - 2.5. Summary 35
- 3. Methodology 37
 - 3.1. Research Process 37
 - 3.2. Data and Analysis 40
 - 3.3. Quality of the Empirical Research 40
- 4. The Empirical Study 42
 - 4.1. Introduction of the Case Company 42
 - 4.1.1. Operating Environment – the Turbulent Media Industry 42
 - 4.1.2. Company Overview 44

4.1.3. Strategy and Innovation	44
4.2. Research Findings.....	46
4.2.1. Perceptions of Innovation and Cooperation within the Firm	46
4.2.2. Realized Innovation Efforts	58
4.2.3. Major Organizational Factors Influencing the Flow and Progress of Ideas.....	70
4.2.4. Summary	97
5. Conclusions.....	99
5.1. Key Findings in the Light of Earlier Research	99
5.2. Recommendations for the Case Company.....	105
REFERENCES	108

1. Introduction

This thesis is made for the research project 'E-Innovation' which is a part of FIMECC Oy's Innovation & Networks research program. E-Innovation project focuses on the development and utilization of open innovation approaches within the context of sustainable innovation. The project is conducted jointly with Aalto University School of Economics, UC Berkeley and FIMECC.

Managing innovation has become vital for companies of every size in every industry in today's world, where the only constant is change (Chesbrough 2003). Innovation is a critical dimension of any dynamic approach to business strategy, as it allows the enterprise to achieve and defend competitive advantage. This means that as thinking about strategy becomes more dynamic, the growing literature around innovation becomes especially relevant. (Chesbrough et al. 2006)

In a world where strategy life cycles are shrinking, innovation is the only way a company can renew its lease on success. The environment for business has changed – and what has changed most remarkably is change itself – the frantically accelerating pace of change is what distinguishes our age from every other. Over the coming decades the adaptability of every society, organization, and individual will be tested like never before, and success is dependent on capacity for adaptation. (Hamel 2007)

The need for innovation is particularly apparent within the media industry, where the radical ongoing changes in several significant factors in the business environment are shaking the grounds of business as usual (see e.g. PricewaterhouseCoopers 2009). The case firm of this thesis is a media company with a long history in newspaper publishing, which presents a very fruitful context for exploring topics relating to innovation management.

Open Innovation has been proposed as a new paradigm for the management of innovation (Chesbrough, 2003; Gassmann, 2006 in van de Vrande et al., 2009). The open innovation phenomenon has developed from a small number of innovation practitioners to a widely discussed and implemented innovation practice (Gassmann, Enkel & Chesbrough, 2010), and it has gained notable interest among scholars and practitioners during the past few years. This thesis contributes to this relatively new research field of open innovation.

Dahlander and Gann (2010) list four reasons for the common currency of the concept of open innovation. First, they state that it reflects social and economic changes in working patterns. They maintain that professionals these days seek portfolio careers rather than a job-for-life with a single

employer, which means that companies need to find new ways of accessing talent that may not wish to be employed directly or exclusively. Their second argument is that globalization has expanded the extent of the market and that it thereby allows for an increased division of labor. As their third rationale they mention the improved market institutions such as intellectual property rights (IPR), venture capital (VC), and technology standards that allow for organization to trade ideas. Fourthly, they point out that new technologies allow for new ways to collaborate and coordinate across geographical distances.

The focus of this study is on the internal organization of a firm as it relates to the pursuit of exploiting external ideas and knowledge. The organizational side of open innovation has been identified as an important area for future research by several authors that have explored research on open innovation (see Fredberg et al. 2008). Chesbrough et al. (2006) state that it is quite likely that the heterogeneity of firms to learn and profit from relationships with external sources of knowledge is largely determined by the internal organization of these firms. This thesis is set to investigate this matter further. The focus is on organizational factors that affect the internal use of external knowledge and ideas. This practice of leveraging the discoveries of others is called inbound open innovation (Chesbrough & Crowther 2006).

1.1. Research Goals and Design

The case organization for the empirical investigation of this research is a Finnish business media and business services company. Whereas prior open innovation research has mainly focused on high technology industries, this study contributes to the research field of open innovation by bringing in more research from the service related media industry.

In addition to contributing to the research field of open innovation, another purpose of the study was to produce managerial recommendations relating to the management of open innovation based on the empirical study as well as earlier literature around the subject.

The main research question in this thesis is the following:

What organizational factors affect the internal processing of external ideas and knowledge?

The secondary questions are:

To what extent and how do external ideas and knowledge flow from one department or from one person to another?

How are ideas evaluated and how do they get developed further?

What kind of measures relating to structures, processes and practices of the organization could enhance the internal processing of external ideas and knowledge?

This study is focused on what happens to external ideas and knowledge once they have reached the company, the actual obtaining of external knowledge inputs is mainly left outside the scope of this research. Thereby, the focus is on the ideas and knowledge that the individuals inside the organization already possess.

Ideas and knowledge that relate to web development – the making of innovations or improvements that concern the web presence or the web based services of the company – are in the center of attention, but as the mobility and progress of other types of ideas and knowledge are affected mainly by the same organizational factors, they have not been excluded from the research. Hence, the empirical study was conducted with emphasis on web development related external knowledge inputs, but including any potentially relevant knowledge in general.

1.2. Key Concepts

Innovation

Innovation is about coming up with and implementing something new. It is about searching for ideas, developing and implementing them, and successfully introducing them (as products) into the marketplace. What differentiates innovations from mere inventions is the successful commercialization. (Buijs 2007)

Open innovation

Open innovation has been suggested as a new paradigm for innovation, replacing the old paradigm of essentially inward focused research and development activity within companies (Chesbrough 2003). Open Innovation has been defined as 'the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively'. (Chesbrough et al. 2006, p.2) The open innovation approach places external ideas and external paths to market on the same level of importance with internal ones (Chesbrough et al. 2006).

Ideas and Knowledge

An idea is, simply defined, a thought that can be a basis for creating something. The concept of knowledge has been defined in a variety of ways (see e.g. Håkanson 2010). In this study, knowledge refers to any information that is understood – in one way or another – by individuals. Knowledge includes information that can potentially be used for innovation purposes, but is not necessarily an idea as such.

This study is mainly concerned with ideas, but as pieces of knowledge can form parts of ideas and their development when combined, and their mobility is affected by the same factors as that of ideas, any knowledge that might work as an ingredient in the innovation process is also included in the research. The term 'knowledge input' is used to refer to ideas as well as any kind of knowledge that might be used for innovation or development purposes.

Organizational structures, processes and practices

Structure refers to the manner in which an organization utilizes its human resources for its goal-oriented activities. It is the way human resources of an organization are fitted into relatively fixed relationships that largely define patterns of interaction, coordination, and task-oriented behavior. (Steers 1977 in Santra & Giri 2008, p. 28) In other words, organizational structures usually refer to the roles and responsibilities and their organization in the entity of an organization. The important aspects of organizational structure include work specialization, departmentalization, chain of command, span of control, centralization, decentralization, and formalization (Santra & Giri 2008).

The concepts of organizational processes and practices are somewhat confusingly utilized in the innovation and management literature. Christensen (1997) defines processes as the patterns of interaction, coordination, communication, and decision-making through which organizations create value by transforming inputs of resources – people, equipment, technology, product designs, brands, information, energy, and cash – into products and services of greater worth. Processes, According to Christensen (1997), can be formal or informal – that is, explicitly defined (formal), or just habitual ways of doing things in the organization (informal). For the purposes of this paper, processes are defined as more established and widely spread ways of doing certain specified things in the organization, whereas practices are the habitual ways of acting of individuals or smaller groups within the organization, which have somehow emerged rather than been specifically designed or planned. Referring to Cristensen's (1997) definitions, the former refers to his description of formal processes and the latter to his description of informal processes.

The term 'practice' is also used in the literature to refer to more widely spread ways of doing certain things. Reckwitz (2002) explains the twofold use of the term in the following way: 'Practice' in the singular represents merely an emphatic term to describe the whole of human action (in contrast to 'theory' and mere thinking). 'Practices', however, are something else. A 'practice' is a routinized type of behavior which consists of several elements, interconnected to one another: forms of bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge. (Reckwitz 2002, p.249) Expressed in a more simple way, a practice is something that people do on a repeated basis (Reckwitz 2002).

In most of the articles presented in chapter two, the term practice refers to the wider interpretation of the word, meaning more widely spread ways of going about certain things – whereas in the presentation of the empirical findings in chapter four, practices refer to the habitual and emergent ways in which individuals and small groups in the organization do certain things.

1.3. Methodology

This research was conducted as a qualitative single case study. According to Eriksson & Kovalainen (2008), qualitative research is a valid research method when in-depth information and understanding are needed. This can be said to be the case in this study – answering the research questions requires finding out how and why the employees act as they do, which cannot be researched through a quantitative method. Ghauri & Grønhaug (2005) conclude that a case study is regularly chosen as the research approach when a single organization is studied and when the research questions include 'how' questions.

The empirical data was gathered through fourteen thematic interviews. One of the interviewees represented the parent company and the rest were employees of the case company. In addition to the interviews, a selection of documents relating to the case company's strategy and innovation efforts were used.

The research findings are based on insights from the interviews and other provided material, backed up by related existing literature. The empirical data was analyzed through analytic induction.

A more detailed description of the research process and the methods used will be provided in the methodology section of this thesis.

1.4. Structure of the thesis

In the following chapter, selected points from previous research on open innovation and other research streams that relate to managing the use of external ideas within an organization will be presented to provide context for understanding the phenomenon investigated in this study.

The third chapter is devoted to a more profound account of the research methodology that was shortly described earlier in this introduction chapter. Comments relating to the validity and reliability of the research are also included.

The empirical results of the case study will be introduced in the fourth chapter. To provide context for interpreting the empirical data, the current state and challenges of the operating environment of the case company, as well as the company's characteristics and strategic goals are described.

The final chapter presents the conclusions of the research, based on the empirical investigation and the related previous literature. Some practical recommendations for the case company will also be provided in the end.

2. Earlier Research

2.1. Innovation

As defined in the introduction, innovation is about searching for ideas, developing and implementing them, and successfully introducing them into the marketplace as products of some sort (Buijs 2007). The word 'innovation' is used both for the activity of innovating and the outputs resulting from it. It is important to distinguish an innovation from an invention – an innovation differs from an invention in that it provides economic value and is diffused to other parties beyond the discoverers. Whereas inventing is discovering something new, innovating includes the commercializing of the new discovery. (Garcia & Calantone 2002)

There is an abundance of terminology related to innovation (Garcia & Calantone 2002). For the purposes of this thesis, a few terms are defined here as they are used in this paper. The innovation terms that deserve explicit explanations in this context are organizational innovativeness, radical and incremental innovation, and management innovation.

Organizational or firm innovativeness can be defined as the propensity for a firm to innovate or develop new products (Ettlie, Bridges & O'Keefe 1984 in Garcia & Calantone 2002) or the propensity for a firm to adopt innovations (Damanpour 1991). Consistent with the open innovation ideology, a combination of these two is used as the definition of the innovativeness of the organization in this thesis.

Innovation can be seen as an iterative process, whereby the distinction between incremental and radical innovations can be drawn. The products at the early stages of diffusion and adoption are typically called radical innovations, whereas incremental innovations concern the advanced stages of the product life cycle. (Garcia & Calantone 2002)

Open innovation can also be said to be a management innovation. According to the definition by Hamel (2007), 'Management innovation is anything that substantially alters the way in which the work of management is carried out, or significantly modifies customary organizational forms, and, by so doing, advances organizational goals. Put simply, management innovation changes the way managers do what they do, and does so in a way that enhances organizational performance'. (Hamel 2007, p. 19)

Hamel (2007) asserts that management innovation can provide the highest levels of value creation and competitive defensibility, while each of the genres of innovation – operational innovation,

product innovation, strategy innovation, and management innovation – all make their own contribution to success.

Hamel (2007) lists the essential managerial duties in a list that is presented below and says that anything that dramatically changes how this work gets done can be labeled as management innovation. The essential managerial duties according to Hamel (2007) are the following:

- setting and programming *objectives*
- motivating and aligning *effort*
- coordinating and controlling *activities*
- developing and assigning *talent*
- accumulating and applying *knowledge*
- amassing and allocating *resources*
- building and nurturing *relationships*
- balancing and meeting stakeholder *demands*

Hamel (2007) states that management innovation encompasses value-creating changes to organizational structures and roles. A new way of connecting the entities that companies consist of – business units, departments, work groups, communities of practice, and alliances with suppliers, partners, and lead customers – can constitute a management innovation (Hamel 2007). Taking an open innovation approach has implications for all the aforementioned features, which affirms its status as management innovation.

2.2. Exploration, Exploitation and Ambidexterity

Since the publication of March's (1991) pioneering article, the terms 'exploration' and 'exploitation' have increasingly come to dominate organizational analyses of innovation, organizational design, organizational adaptation, organizational learning, and organizational survival (Gupta, Smith & Shalley 2006). Raisch, Birkinshaw, Probst & Tushman (2009) affirm that one of the most enduring ideas in organizational science is that an organization's long-term success depends on its ability to exploit and explore. Holmqvist (2004), referring to Crossan et al. (1999), states that exploitation and exploration are crucial both to the stable ongoing operations of organizations and to organizational

change. The terms exploration and exploitation are frequently used in the innovation literature (e.g. Buijs 2007; Fredberg et al. 2008; van de Vrande et al. 2009).

According to March (1991), exploration can be characterized by the words search, variation, risk taking, experimentation, play, flexibility, discovery and innovation. Exploitation, in contrast, includes refinement, choice, production, efficiency, selection, implementation and execution (March 1991). Gupta, Smith & Shalley (2006) found that there is some confusion in the literature that has followed March's seminal work as regards the exact definitions of the terms, especially concerning the concept of exploitation. The scholars found a consensus in the previous literature about the view that exploration refers to learning and innovation, i.e. the pursuit and acquisition of new knowledge, but a similar consensus was lacking on the question of whether exploitation refers solely to the use of past knowledge or whether it also refers to the pursuit and acquisition of new knowledge of different kind than associated with exploration. They argued that both exploration and exploitation include at least some learning, which implies that exploitation is not simply concerned with the usage of already gained knowledge, but new knowledge is acquired and learning takes place in exploitation activities as well. It is noteworthy to mention that here the unit of analysis is the organization, and learning in exploitation activities refers to increases in group or organizational level knowledge, implying learning between individuals (Gupta, Smith & Shalley 2006).

March stated already in 1991 that both exploration and exploitation are essential for organizations, and that an appropriate balance between the two is important. He explained how organizations make explicit and implicit choices between them – the explicit choices are found in calculated decisions about alternative investments and competitive strategies, and the implicit choices are buried in for example organizational procedures for accumulating and reducing slack, in search rules and practices, in the ways in which goals are set and changed, and in incentive systems. He also noted that finding the right balance between exploration and exploitation is not easy, as their returns vary not only in respect to their expected values, but also with respect to their variability, their timing and their distribution within and beyond the organization. The essence of exploitation is the refinement and extension of existing competences, technologies, and paradigms, and its returns are positive, proximate and predictable. The essence of exploration, in contrast, is experimentation with new alternatives, and its returns are uncertain, distant, and often negative. (March 1991)

As stated in March's (1991) definitions, exploitation is related to efficiency and exploration to flexibility. Benner and Tushman (2003) take a stance on traditional process management's effects on exploitation and exploration – and thereby on incremental and radical organizational change and

innovation, respectively. They define process management as being based on a view of an organization as a system of interlinked processes, and involving concerted efforts to map, improve, and adhere to organizational processes. They state that process management, aiming at efficiency and consistency by designing and following clearly specified processes, inhibits exploration and supports only exploitative activities, leading to a situation where only incremental innovation and change are fostered. According to these scholars, process management techniques stabilize and rationalize organizational routines and establish a focus on easily available efficiency and customer satisfaction measures, which is likely to result in increased efficiency in the short run but trigger internal biases for certainty and predictable results.

Benner and Tushman (2003) argue that process management practices are positively associated with organizational effectiveness only in a limited set of conditions: during periods of stability or incremental change, and for incremental innovation or existing customers. They assert that under a much wider set of conditions – and more frequently occurring ones – e.g. turbulent environments, for new customer segments, and for other types than incremental innovation, process management activities are less conducive to organizational effectiveness, and counterproductively build resistance to change and momentum and inhibit organizational variability. They conclude that process management capabilities speed exploitation and efficiency, and while they may allow organizations to survive in the short run, they simultaneously diminish the exploration required for longer-term adaptation.

Despite emphasizing the adverse effects of process management techniques on innovation, Benner and Tushman (2003) point out that organizations need to be successful in both short run and long run, and that the organizations that have to meet current customer requirements and new customer demands need to deal simultaneously with the inconsistent demands of exploitation and exploration. They conclude that ambidextrous organizational forms can provide the context for the inconsistent activities of exploration and exploitation to coexist. By building internally inconsistent architectures within a single organization – contrasting architectures that retain the benefits of experimentation and variability, along with the benefits of exploitation and process control – ambidextrous organizational forms can reconcile the paradoxical demands.

The concept of ambidexterity was first introduced by Tushman and O'Reilly in 1996. These scholars defined an ambidextrous organization as one that is capable of simultaneously exploiting existing competencies and exploring new opportunities. They stated that the ability to simultaneously pursue both incremental and discontinuous innovation and change results from hosting multiple

contradictory structures, processes, and cultures within the same firm. After this first article on ambidexterity, much research has been done around the topic, and different perceptions on the concept and its application have emerged.

Raisch et al. (2009) identified four central tensions in the current debate on ambidexterity: differentiation vs. integration – should organizations separate exploitative and explorative activities into distinct organizational units or use mechanisms that aim at enabling explorative and exploitative activities within the same organizational unit; individual vs. organizational level – does ambidexterity occur at the individual or organizational level; static vs. dynamic perspectives – should ambidexterity be seen as a dynamic process or a static state that can be achieved; internal vs. external perspectives – can ambidexterity arise internally or do firms need to externalize some processes? These debate areas show that several important issues concerning ambidexterity still remain unclear, although much research on the subject has been carried out.

Fredberg et al. (2008) state that organizations that work with open innovation have to take the ambidexterity issue into account, especially if they open up the entire organization to external collaboration. These authors point out that although there has been large support for the necessity of ambidexterity in the academic literature, few have been able to describe how it is actually done. Nevertheless, being able to carry out both exploration and exploitation is a relevant issue for firms that pursue open innovation, and ambidexterity literature may provide help in addressing that issue.

2.3. Open Innovation

The term open innovation was first introduced by Henry Chesbrough in 2003. He defined open innovation as a new paradigm for innovation that assumes that firms can and should use external and internal ideas, and internal and external paths to market. The main message is, as Dahlander and Gann (2010) put it, that valuable ideas emerge and can be commercialized from inside or outside the firm. In 2006, together with Joel West and Wim Vanhaverbeke, Chesbrough defined open innovation further as both a set of practices for profiting from innovation, and also a cognitive model for creating, interpreting and researching these practices. With a more practical orientation in mind, open innovation can be described as systematically encouraging and exploring a wide range of internal and external sources for innovation opportunities, consciously integrating that exploration with firm capabilities and resources, and broadly exploiting those opportunities through multiple channels (West & Gallagher, 2006). The open innovation paradigm can be understood as the antithesis of the traditional 'closed innovation' model of vertical integration where internal research

and development (R&D) activities lead to internally developed products that are then distributed by the firm (Chesbrough et al., 2006).

Gassmann and Enkel (2004) identified three archetypes of core processes in companies following an open innovation approach: the outside-in process, inside-out process and coupled process. The outside-in process refers to cooperating with customers and suppliers and sourcing external knowledge to enhance a company's innovativeness. The inside-out process is about bringing ideas to market, selling or licensing intellectual property (IP) and multiplying technology by channeling ideas to the external environment. The coupled process is defined as linking outside-in and inside-out processes by working in alliances with complementary companies. This thesis is primarily focused on the outside-in process of open innovation, also referred to as inbound open innovation (e.g. Chesbrough & Crowther 2006).

Ever since Chesbrough's seminal work on open innovation, the concept has gained considerable interest among scholars and practitioners. The implications and trends that underpin open innovation have been actively discussed in terms of strategic, organizational, behavioral, knowledge, legal and business perspectives, as well as its economic implications (Enkel et al., 2009). Gassmann et al. (2010) organize the different research streams of open innovation into nine different perspectives – spatial, structural, user, supplier, leveraging, process, tool, institutional and cultural perspectives. Brief explanations for these perspectives are shown in the list below:

- The *spatial* perspective refers mainly to the globalization of innovation, and deals with challenges of accessing and managing dispersed knowledge and competencies
- The *structural* perspective attends to questions on work division within and beyond organizational boundaries
- The *user* and *supplier* perspectives focus on issues regarding the integration of users and suppliers into the innovation process
- The *leveraging* perspective concerns pursuing new market fields and externally commercializing intellectual property
- The *process* perspective dives into the processes of managing outside-in, inside-out, or coupled open innovation
- The *tool* perspective focuses on the set of instruments used to embrace open innovation

- The institutional perspective employs a wider view on the effects on and of open innovation, taking the institutional level into consideration
- The *cultural* perspective regards concrete organizational artifacts and leadership related ways to enhance the adoption and success of open innovation practices

These explanations were compiled from the article of Gassmann et al. (2010).

There is currently a broad awareness of open innovation and its relevance to corporate R&D (Enkel et al., 2009). The academic community has already a while ago started emphasizing that firms should be open to outside innovation (e.g. Rigby & Zook 2002; Christensen et al. 2005 in Enkel et al., 2009). Chesbrough (2003) points out that not all the smart people can be assumed to be hired in the firm, and thereby companies need to work with smart people inside and outside the company. Recent research demonstrates an increasing range of situations where the concept of open innovation is regarded applicable (Enkel et al., 2009). One example is Procter & Gamble (P&G), one of the most prominent open innovation practitioners – P&G has announced that they have been able to increase their product success rate by 50% and the efficiency of their R&D by 60% by introducing the open innovation concept (Enkel et al., 2009). Practice and theory seem to indicate that the open innovation approach is beneficial for companies as well as users (e.g. Dodgson et al. 2006; Laursen & Salter 2006 in Enkel et al., 2009).

The applicability of open innovation to lower technology and more mature industries has been questioned (Chiaroni et al. 2010), as the early adopters of the concept – and the main objects of analysis in research – have been organizations in high technology industries (Chesbrough & Crowther 2006; Gassmann et al. 2010). A few recent studies have shed some light on this issue: Chesbrough and Crowther (2006) identified early adopters of open innovation in the aerospace, chemicals, inks & coating and consumer packaged goods industries in the US, and found that even if open innovation concepts are not widespread in use, the firms in the sample clearly increased their leverage on external sources innovation to complement their internal R&D activities. Vanhaverbeke (2006) and van de Meer (2007) (in Chiaroni et al., 2010) studied innovative Dutch SMEs operating in different mature industries (e.g. food and beverage, chemicals, machinery and equipments), and concluded that inbound open innovation activities were rather diffused, whereas significant barriers were still perceived in the adoption of the outbound dimension of open innovation. These examples speak for the applicability of especially inbound open innovation in lower technology and mature industries, as well as SMEs, too.

The opening up of the innovation process has become increasingly popular in leading industries, and the trend toward open innovation is still growing. Although most of the firms described in early works on open innovation have been large multinational firms, it has become apparent that smaller and medium-sized firms are also opening up their innovation process. (Gassmann et al., 2010) Open innovation also mainly started in the high-tech sector, but there is a new trend for the low-tech to exploit potentials of opening up their innovation process. Open innovation's management innovation has spread to different sectors. While today's research mainly aims at product, and, partly, process innovation, the huge potential of innovating the largest sector in developed countries has been neglected: the service sector is still underdeveloped in terms of the innovation processes. (Gassmann et al., 2010)

Van de Vrande et al. (2009) found that small and medium sized enterprises (SMEs) in their study engaged in many open innovation practices and had increasingly adopted such practices since the early 2000's. They found no major differences between manufacturing and service industries, but medium sized firms were on average more heavily involved in open innovation than smaller companies. They also found that SMEs pursued open innovation primarily for market-related motives such as meeting customer demands, keeping up with competitors or opening up to new markets, with higher-order objectives to secure revenues and to maintain growth. They discovered a sequence in the adoption of open innovation of SMEs, starting with customer involvement, following with employee involvement and external networking, and ending with more 'advanced' practices like IP licensing, R&D outsourcing, venturing and external participations.

Open innovation assumes that useful knowledge is widely distributed, and that even the most capable R&D organizations must identify, connect to, and leverage external knowledge sources as a core process in innovation (Chesbrough et al. 2006). If a company does not have considerable R&D resources on its own, using external sources obviously becomes even more relevant. Enkel et al. (2009) conclude that today's business reality is not based on pure open innovation but on companies that invest simultaneously in closed as well as open innovation activities. Thereby, the claim about the paradigm shift implies a more open approach to innovation, not a complete shift to total openness in innovation activities.

Obviously, the appropriate implementation of open innovation practices is always context dependent. As Huang and Rice (2009) point out, open innovation is no panacea. Researchers on openness have suggested that it may be necessary to keep some aspects of the innovation process open while others remain closed (Laursen & Salter 2006; von Zedtwitz & Gassmann 2002 in

Dahlander & Gann, 2010). There can be seen a continuum that ranges from closed to open and covers varying degrees of openness (Dahlander & Gann 2010). Witzeman et al. (2006) state that the appropriate level of seeking out external knowledge has to be considered in light of the firm's current industrial and market position and future business intent. They also conclude that different business units within the same firm, or even different projects within the same business unit, may be at different levels due to the nature of the business and overall objectives in each case. Enkel et al. (2009) contend that it is necessary to have a full understanding of how and where open innovation can add value in knowledge-intensive processes, and that there may be a need for a creative interpretation and adaptation of the value propositions, or business models, in each situation.

Also Chesbrough (2003) emphasizes the importance of the business model when considering open innovation, stating that internal and external ideas are to be combined into architectures and systems whose requirements are defined by a business model. The business model, according to Chesbrough (2003), should utilize both external and internal ideas to create value, while defining internal mechanisms to claim portion of that value. He claims that each company should open up its business model to let more external ideas and technologies flow in from the outside and let more internal knowledge flow to the outside. The business model is to be used as a cognitive device through which decisions about innovation are evaluated and taken. (Chesbrough, 2006)

To sum up the relevant points in the above cited literature, it can be concluded that the trend for open innovation is growing, as also other than high tech industries and large companies that have been the pioneering adopters of the concept, have been found to benefit from open innovation. Examples from practice and research show that diverse firms can gain advantage through opening up their innovation process. Especially inbound open innovation has been found to be advantageous to a wide variety of organizations.

2.3.1. Critique and Recommendations for Future Research

As a relatively new concept in the academic world, the definition and relevance of open innovation is still under debate. The research on open innovation has been criticized for not having enough academic background and credibility (e.g. Trott & Hartman, 2009). This is a valid point, considering the fact that research on open innovation has only existed for ten years. More research is conducted on a continuous basis and the theory of open innovation keeps advancing to address these doubts.

A key problem for open innovation is that firms integrating internal and external innovations can face higher coordination costs and risks than if all activities were internalized. Open innovation entails considerable transaction costs for the search and evaluation of external knowledge sources whose

quality and usability cannot be known beforehand, so that the 'fit' with the organization's goals is uncertain (Chesbrough 2003). Moreover, open innovation approach implies interaction with many external parties, which can make transaction costs rise to extensive amounts. (West & Gallagher 2006) Also, there is still lacking a clear understanding of the mechanisms, inside and outside of the organization, when and how to fully profit from open innovation (Enkel et al. 2009).

The literature has acknowledged the pervasiveness of open innovation – how it permeates several dimensions of a firm's organization and management systems (Chesbrough, 2003). How open innovation is actually implemented in practice, however, is an issue that has been left rather under-researched (Chiaroni et al. 2010). Fredberg et al. (2008) asked a number of established open innovation researchers to define what they consider to be the most crucial questions for future research. Several responses revolved around understanding how organizations can organize for openness.

In the study of Fredberg et al. (2008), the organizational structure was identified as one particularly interesting topic. It was contended that firms today are typically not organized to be able to collaborate with a very large set of actors, which makes the pursuit of open innovation challenging. Several other points were also brought up regarding the actual implementation of open innovation. One of the problems mentioned was organizing the external environment to make use of the wisdom of the crowd, followed by the core problem – how to organize internally to make use of the innovative ideas and knowledge. Concerning the integration of external ideas, it was argued that new ways of working need to be combined with existing systems and structures. One question raised was how the firm can make sure that external knowledge is received and used properly at the right place in the organization. Also a better understanding of the evaluation process was called for. Yet another concern pointed out was how the open innovation initiatives go together with the existing competences and processes for R&D inside the organization. The role of management was stressed by the researchers, changing organizations to become more open innovation oriented requires significant efforts from management. Many of the researchers underlined the need for new organizational structures and managerial practices to enable an efficient open innovation process. Several other issues were discussed in the Fredberg et al. 2008 paper in addition to these, but the ones mentioned above represent the most relevant ones with regard to this thesis.

Bearing in mind these implementation issues recognized in the general open innovation literature, we now move on to the more specific topic of this thesis – inbound open innovation.

2.3.2. Inbound Open Innovation

As mentioned earlier, this thesis is focused inbound open innovation, and more specifically, on what occurs to external ideas and knowledge once they have already reached the organization. The actual acquiring of external knowledge inputs is left outside the scope of this study. From this point on, this paper is mainly concerned with external ideas and knowledge that already reside somewhere within the organization, and what organizational factors affect the flow and progress of these.

According to Gassmann and Enkel's (2004) definition, deciding on the outside-in process – or the inbound dimension – as a company's core open innovation approach means that the company chooses to invest in co-operation with suppliers and customers and to integrate the external knowledge gained. The scholars list examples of means for achieving this – customer and supplier integration, listening posts at innovation clusters, applying innovation across industries, buying intellectual property and investing in global knowledge creation. The list shows that the definition does not include external knowledge from customers and suppliers only, although the choice of words in the above phrasing from Gassmann and Enkel's (2004) article may lead to such interpretation. External ideas and knowledge to be brought in the company within an open innovation approach can be from any source. Chiaroni et. al (2010) talk about inbound open innovation as the practice of establishing relationships with external organizations or individuals with the purpose of accessing their competencies for improving internal innovation performance, giving the concept a slightly broader definition.

Most of the research on open innovation is focused on technology intensive firms, where innovation is about making new products through inventing and applying new technological solutions. This is the case even more so when it comes to extant research on inbound open innovation. The majority of the scarce existing body of literature concerning absorbing and integrating knowledge or ideas from the external environment into the internal organization revolves around technology.

The concept of absorptive capacity has been prominent in the technologically focused inbound innovation management literature, promoting the basic idea that an organization has to have previous knowledge about a certain technological area or solutions in order to be able to absorb related external (technological) knowledge (Cohen & Levinthal 1990; Huang & Rice 2009). Using the specific words of the creators of the term, absorptive capacity is the "ability of the firm to recognize the value of new external information and apply it to commercial ends" (Cohen and Levinthal 1990, p.128). The concept may be applicable at least to some extent to absorbing other types of external knowledge as well, but it has not been researched in other than technology based contexts very

much. The idea of needing prior knowledge about a subject in order to be able to understand its value, nevertheless, seems rational even with common sense. Also, for example Menon and Pfeffer (2003) bring up the concept when discussing valuing external knowledge in general, without referring specifically to technological knowledge. Szulanski (1996) mentions individual level absorptive capacity when speaking about intra-firm knowledge transfer regarding best practices.

As mentioned earlier, the inbound dimension has been found to be beneficial for various types of companies, but implementation issues relating to it have not been researched very much. The following section goes deeper into the managerial issues of inbound open innovation.

2.4. Managing Inbound Open Innovation

This section is about the intraorganizational management of inbound open innovation. The specific focus is on the organizational factors that affect the mobility and processing of external ideas and knowledge. As the extant literature on the internal organization and management for inbound open innovation is scarce, a few other research fields have been included here to provide insights into the relevant issues in question. Research on general innovation management, knowledge management, and resource management has been used to aid in identifying the issues that companies may face when attempting to utilize external knowledge and ideas in their internal innovation processes. The main areas brought up in this section are organizational design (focusing mainly on organizational structures, roles and responsibilities), processes and practices, resource allocation, knowledge management and change management.

Chesbrough (2003) acknowledges that the transition towards open innovation confronts firms with considerable managerial challenges. He points out that an open innovation approach takes considerable time to implement, in big part because deeply engrained organizational mindsets need to be overcome. Several papers on open innovation bring up the issue that there are problems involved in setting up the structures to use open innovation. One such problem is that the existing models direct attention towards internal sources of ideas and competence rather than towards external sources. To change behavior and culture, the formal models that govern the work process therefore need to be the start of the change. (Fredberg et al. 2008)

As mentioned earlier, open innovation permeates several dimensions of a firm's organization and management systems (Chesbrough 2003). Huang and Rice (2009) assert that when adopting an open innovation approach, the development of the firm's systems and capabilities to identify, assimilate, and exploit external knowhow from its strategic environment and successfully integrate it into its

internal knowledge base must be considered. Bergman et al. (2009) emphasize that openness does not mean any kind of looseness in innovation management but calls for coordination and facilitation, and that the challenge for the management in the open innovation process is to find out the appropriate methods and practices for the utilization of external knowledge resources. Chatenier et al. (2010) mention project management skills as a major competence for professionals in open innovation teams, and list that they should be able to control and coordinate, and cope with chaos and uncertainties. The authors also list skills for interpretation, negotiation and combination of knowledge and perspectives as essential for a successful open innovation team member.

Introducing new ways of working is not enough for making an actual change in work practices take place. Sieg et al. (2010) found that employees needed to be supported to actually start using the new ways and tools that were imposed to them. Facilitated participative learning through trial and error was essential to getting the new practices to work. Active communication from the part of the management and aiming at positive word-of-mouth among peers were found to be important as well. The scholars found that companies tended to underestimate the internal resources (time and know-how) needed to support the employees in working with the new systems and practices that were introduced.

Successful new products and services are critical for many organizations, since product innovation is one important way that organizations can adapt to changes in markets, technology, and competition. Being capable of sustained innovation – to consistently generate successful new products or services over time – is not easy, and it is particularly difficult for organizations with long histories of stable operations. (Dougherty & Hardy 1996)

Dougherty and Hardy (1996) found that in large, mature organizations with long histories of non-innovativeness, innovation occurred occasionally, but it occurred in spite of the system, not because of it – the firms were not organized to facilitate innovation. They state, drawing on earlier studies, that for a mature organization to develop the capacity for sustained innovation, it must successfully make innovation-to-organization connections in three key areas: make resources available for new products; provide collaborative structures and processes to solve problems creatively; and connect innovations with existing businesses. They state that these organization-level problem areas are critical issues to pay attention to when attempting to build sustained innovation into a company – resources, collaborative structures and processes, and strategic value and meaning need to be appropriately managed.

The three innovation-to-organization problem areas introduced by Dougherty and Hardy (1996) actually outline the basis of the theoretical framework for managerial issues of organizing for inbound open innovation that is used in this study. Dougherty and Hardy's (1996) article was not the starting point to the theoretical examination of the topic, but was noted to contain all the important areas that were brought up in other studies around the subject. This is how the three problem areas can be seen to include the relevant findings of the investigation on earlier research:

Resource allocation is a major issue when considering the mobility and progress of external ideas within the organization, as it affects what kind of ideas resources are available for; the topic of collaborative structures and processes can be perceived to include the subjects of organizational structures, processes and certain aspects of knowledge management; and, finally, strategic value and meaning are communicated as a part of change management. These issues will be elaborated on in the subsequent three sub-sections in the following order: structures and processes, resource allocation, knowledge management, and change management. Each of these topics brings up organizational factors that influence the mobility and processing of external ideas and knowledge inside the organization.

2.4.1. Structures and Processes

To succeed consistently, good managers need to be skilled not just in choosing, training, and motivating the right people for the right job, but in choosing, building, and preparing the right organization for the job as well. One could take two sets of identically capable people and put them to work in two different organizations, and what they accomplish would likely be significantly different. (Christensen, 1997, 185-186)

Organizational processes can be defined as the patterns of interaction, coordination, communication, and decision-making through which organizations create value by transforming inputs of resources – people, equipment, technology, product designs, brands, information, energy, and cash – into products and services of greater worth. For example product development, procurement, market research, budgeting, planning, employee development and compensation, and resource allocation are accomplished through processes. Processes differ in their purpose, and also in their visibility. Some processes are formal – explicitly defined, visibly documented, and consciously followed, and others are informal – habitual routines or ways of working that have evolved over time, which people follow simply because they work, or because ‘that is the way things are done around here’. Still other methods of working and interacting have proven so effective for so long that people unconsciously follow them – they constitute the culture of the organization. Whether they are formal, informal, or

cultural, processes define how an organization transforms the sorts of inputs listed above into things of greater value. (Christensen, 1997)

One of the dilemmas of management is that, by their very nature, processes are established so that employees perform recurrent tasks in a consistent way, time after time. To ensure consistency, they are meant not to change – or if they must change, to change through tightly controlled procedures. This means that the very mechanisms through which organizations create value are intrinsically inimical to change. (Christensen, 1997) This is why the organization's processes must be carefully considered when attempting to increase innovative activity in it.

Gassmann et al. (2010) see that the industry is starting to professionalize the internal processes to manage open innovation more effectively and efficiently, although they affirm that it is currently still more trial and error than a professionally managed process. They point out that the variance between a best practice in open innovation and the average is huge. Nevertheless, they believe that this difference will decrease as open innovation knowledge spreads through the various industries. They mention two important sources of diffusion: the mobility of executives experienced in open innovation from initial adopters to newly adopting organizations, and the availability of third-party intermediaries, thereby emphasizing the significance of external contacts. Hamel (2007) underscores that new management processes never emerge fully formed, but they are assembled piece by piece through a process of trial and error. The setbacks encountered along the way bring new knowledge that helps refine the approach.

As mentioned in the introduction, open innovation can be considered a management innovation. According to Hamel (2007), management innovation targets a company's management processes. Hamel (2007, p. 21) defines processes as the recipes and routines that determine how the work of management gets carried out on a day-to-day basis, and mentions the following examples of them:

- strategic planning
- capital budgeting
- project management
- hiring and promotion
- training and development
- internal communications

- knowledge management
- periodic business reviews
- employee assessment and compensation

Hamel (2007) explains that processes establish standard protocols for common management tasks, and that management processes are the 'gears' that turn management principles into everyday practice – and propagate best practice by translating successful techniques into tools and methods that can be broadly applied. Hamel (2007) additionally points out that processes also shape management values by reinforcing certain behaviors and not others, and asserts that it is impossible to change the what and how of managing without changing the processes that govern that work. If a firm is to incorporate innovation into the daily work of the organization, the existing processes need to be scrutinized with this thought in mind.

Each innovation project needs administrative structures and processes appropriate to its development stage and access to decision making in the organization. An organization should have structures and processes designed to make decisions continually, to follow through on problems, and to bring new issues to the ongoing agenda. Multifunctional teams should be put in place early on for each innovation, and committees and task forces should work through problems faced by multiple projects and incorporate all the new products into the organization's structure and processes. These collaborative structures and problem-solving processes should connect laterally and vertically, so that people throughout the organization can participate in selecting, defining and refining innovations across the organization. (Dougherty & Hardy 1996) Also Hargadon and Sutton (2000) emphasize the power of systematization. They studied businesses that innovate constantly and found that the best innovators had systematized the generation and developing of ideas into a process.

Dougherty and Hardy (1996) list several likely problems relating to organizational structures and processes and their impact on the innovativeness of the organization. They note that structures and processes in mature organizations are often not designed for organization-wide collaboration and problem-solving, and tasks are usually broken down and assigned to separate units. They also point out that many times the reward system actually punishes people for stepping out of established work roles. Certain departments might also dominate the innovation process despite the existence of formal multifunctional teams and committees. Organizational routines easily limit interfunctional interaction and inhibits the development of customer understanding. (Dougherty and Hardy 1996)

Dougherty and Hardy (1996) found that structures and processes oftentimes sustain routine work instead of innovation. They are not designed to channel the kind of decisions, participation, and problem solving necessary for innovation. Often, there are no workable ways to bring all departments together, to link different levels of hierarchy, or to make meaningful judgments of different projects. There should be extensive collaborative processes, decision making should flow upwards and sideways, and evaluation criteria should relate to innovation. The existence of collaborative structures, however, is not enough, as for example lack of commitment and power imbalances may hinder successful collaboration. Cross-functional teams might also be incomplete, i.e. not involve all the relevant parties, or simply be ineffective. Strong functional boundaries and lack of collaborative vertical relationships also work as barriers to innovation. People in the functions do not necessarily know how to collaborate laterally and vertically when beginning innovating, if collaboration across these boundaries is not part of their day-to-day repertoire of work. (Dougherty & Hardy 1996)

Dougherty and Hardy (1996) noted in their study that limited organizational support had adverse effects on the firms' ability to sustain innovation, and concluded that organization-wide systems that weave together innovations and existing operations should be in place if a firm wishes to build a capability for sustained innovation. When furthering innovation projects depends on the efforts of individuals, the system is highly fragile and vulnerable. Reliance on personal power is limited by the reach of individual networks, knowledge and experience, and changes in the organization easily hamper the progress of innovation projects furthered this way. Dougherty and Hardy (1996) emphasize that processes should link the right people and emphasize the right criteria, and resources should flow to the right places.

Van de Vrande et al. (2009) found that many barriers for open innovation in SMEs are related to corporate organization and culture. Some of the problems that they found that SMEs faced when implementing open innovation were problems concerning the division of tasks and responsibility, the balance between innovation and day-to-day management tasks, and communication problems within and between organizations. The availability of time and resources were also barriers for implementing open innovation, but not the most important ones. Administration related problems – bureaucracy, administrative burdens, and conflicting rules – occurred more frequently.

Van de Vrande et al. (2009) found problems relating to relying on employees to implement open innovation in the SMEs that they studied: it often turned out that the employees did not have the required capabilities or skills to make a valuable contribution to innovation, or they lacked

motivation to do so. They also found that in the end, management decided not to take up any of the ideas provided by employees or that the number of ideas coming from individual employees just got too large to handle in an efficient way. That, in turn, affirm Van de Vrande et al. (2009), poses new challenges to managers when they want to get the most out of the creativity of large numbers of individuals. The authors point out that the managers can get assistance from a growing number of specialized services firms to execute this job.

Hamel (2007) emphasizes the importance continuous self-renewal of organizations as he announces that no single management breakthrough provides payoffs infinitely. He underscores the value of building innovation into the entire organization by making innovation everyone's job and facilitating their contribution to the strategic adaptability of the company. Also Neyer et al. (2009) point out that there is a lot of innovative potential in the abundance of employees who are not directly responsible for innovative activity by their job description, but are nonetheless interested in and have the potential to produce innovative ideas and contribute to the innovation process by suggesting, supporting and or refining innovative concepts. Employee suggestion systems are the main innovation practice used in order to integrate these employees in the innovation process, even though these systems seem unattractive to potential participants. (Fairbank & Williams 2001)

Employee suggestion systems are a means of facilitating the process of motivating employees to think more creatively, to share those creative thoughts, and of converting creative ideas into valuable innovations. An employee suggestion system is an information system used for gathering suggestions from employees. These systems have well-known shortcomings: They typically fail to generate enthusiasm or the motivation to participate in the suggestion process. Rewards offered to submitters often seem unattainable or unattractive. Many initiatives also suffer from slow processing time and an inordinate delay in response to submitters – if any response is even provided. Additionally, misunderstandings may undermine these suggestion systems: employees may not participate due to not understanding how the system operates or what its purpose is; mistrust; or general indifference. (Fairbank & Williams 2001)

Neyer et al. (2009) conclude that to use the important innovative potential of employees across the whole organization, firms should invest in innovation practices that go beyond traditional employee suggestion systems. They state that often these employees are taken for granted and assumed to innovate without being supported by well-designed innovation practices, which is not a workable way of trying to harness their potential.

A variety of authors highlight the importance of paying attention to organizational structures and processes in the pursuit of increasing the innovativeness of an organization. Both creating new processes and making structural alterations and recognizing the guiding nature of existing structures and processes are brought up as crucial. The interplay between old and new structures and processes is raised as an essential consideration. The utilization of external knowledge inputs is necessarily affected by the structural and processual aspects of the firm, since they influence the mobility and processing of these knowledge inputs.

2.4.2. Resource allocation

One of the major reasons for the difficulty of managing innovation is the complexity of the resource allocation process. A company's executives may seem to make resource allocation decisions, but the implementation of those decisions is in the hands of the staff that makes decisions in their day-to-day work. The intuition and 'wisdom' of the staff has often been forged in the company's mainstream value network. (Christensen, 1997)

Hamel (2007) speaks for continuous self-renewal of organizations, and mentions allocational rigidities as one of the major barriers for accomplishing this. He points out that a lack of flexibility in resource allocation is sometimes the actual hurdle to renewal, not a lack of options. He speaks about 'overfunding the status quo' – how companies often overinvest in 'what is' at the expense of 'what could be', and notes that pouring money into existing businesses often does not require appropriate considerations of the reasonability of the investments, unlike when considering new opportunities: managers running established businesses seldom have to defend the strategic risk they take when they pour good money into a slowly decaying business model, or overfund an activity that is already producing diminishing returns.

Hamel (2007) asserts that the resource allocation process is typically biased against new ideas, since it demands a level of certainty about volumes, costs, timelines, and profits that simply cannot be satisfied when an idea is truly novel. He points out that while it is easy to predict the returns on a project that is a linear extension of an existing business, the payback on an unconventional idea will always be harder to calculate. He further elaborates that especially large companies tend to view every new idea as a stand-alone investment, and consequently require a degree of certitude that can actually be met only by projects that are modest extensions of existing activities. Also Välikangas and Gibbert (2005) mention companies' tendency to just do more of the same and shape adopted innovations to conform to the requirements of business as usual, and thereby lose or curtail their

potential. They judge this mentality by labeling it one of the common innovation traps that firms face.

An organization with both innovation projects and mature businesses should ideally have a resource system that channels money, equipment, expertise, and information to all these activities simultaneously. These resources should not rely on the availability of slack, but there should be resources deliberately distributed to foster innovation. (Dougherty & Hardy 1996)

Dougherty and Hardy (1996) found several resource acquisition related problems in their research on innovation-to-organization problems. Employees did not necessarily know how to acquire resources, or did not always even realize the need to do so. Sometimes the organization officially sanctioned certain behavior – for example drawing resources from multiple divisions – but did not provide the means for actually doing so. When resources are not systematically available, those without experience, adequate personal networks or political savvy are at disadvantage in trying to obtain them. (Dougherty & Hardy 1996)

Dougherty and Hardy (1996) point out that there is a link from resources to structure and processes – one of the reasons resources can be difficult to obtain may be that organizational processes also fail to support innovation. If structures and processes nurture functional fiefdom and conservative decisions rather than encourage cross-functional activity and risk taking, innovation is not appropriately supported from the part of the organization. However, simply adding a formal structure and giving official notice that all functions should cooperate does not align resources with innovation either. (Dougherty & Hardy 1996)

Gilbert (2005) researched newspaper organizations' responses to the rise of digital media, investigating how threat perception caused by a discontinuous change in the company's external business environment influences organizational inertia. He defines discontinuous change as 'external changes that require internal adaptation along a path that is nonlinear relative to a firm's traditional innovation trajectory' (Gilbert 2005, p.742), and organizational inertia as 'the inability to enact internal change in the face of significant external change' (Gilbert 2005, p. 741). He further defines organizational inertia to consist of two distinct categories: resource rigidity and routine rigidity. Resource rigidity refers to failure to change investment patterns and routine rigidity to failure to change the organizational processes that use those resource investments (Gilbert 2005, p. 741). He concludes that both resource and routine rigidity constrains organizational adaptation.

Gilbert (2005) states that resource rigidity and routine rigidity have very different causal mechanisms: resource rigidity stems from an unwillingness to invest, whereas routine rigidity is caused by an inability to change the patterns and logic that underline those investments. Thereby, merely making funds available for innovation purposes is not enough to actually enhance the innovativeness of the organization. Gilbert (2005) found in his study that even when money was provided, operating attention could be difficult to secure due to insufficient efforts regarding incentivization and facilitation. Also Dougherty and Hardy (1996) note that 'politics as usual' tend to prevail if there is no force for change.

Gilbert (2005) points out that that a perception of an imminent threat tends to decrease resource rigidity and lead to expanded organizational and financial commitment to reacting to it. However, Gilbert (2005) found that although threat perception reduced resource rigidity, it increased routine rigidity. In his study, three intermediate behaviors were found to amplify routine rigidity: contraction of authority, reduced experimentation, and focus on existing resources.

Contraction of authority refers to transferring control to certain corporate officers and centralizing decision-making. This restriction of autonomy can increase reliance on existing routines because it limits the alternatives that are considered. Reduced experimentation can result partly from the contraction of authority, as managers conform to corporate-imposed routines, but also an aggressive pace of resource commitment can make stepping back and changing behavior difficult. A perception of threat can cause managers to press ahead on the same misdirected paths that they started with, even if those seem to bring disappointing results. The fear of losing business may lead to an increased focus on existing resources and responding with routines that worked well in the past in the existing business, instead of considering new options. Focusing on existing resources often leads to mere extensions of the existing business instead of creating something truly new and innovative that might better harness the potential that the change in the operating environment might offer. (Gilbert 2005)

The main message regarding resource allocation can be summarized in the following way: Resources should be provided for innovation purposes specifically, but merely presenting them as available is not enough. Several organizational factors affect the obtaining of resources for different purposes, and these factors should be considered when attempting to direct resources to innovation.

2.4.3. Knowledge management

Chesbrough et al. (2006) state that open innovation requires an increased emphasis on managing knowledge, both in identifying promising sources of external knowledge – and being able to recognize it as such – and in linking that knowledge together with internal knowledge to create new systems and architectures. According to Huang and Rice (2009), the open innovation approach tends to ignore questions of transformative efficiency and effectiveness once the knowledge reaches the focal organization.

As Gassmann and Enkel (2004) note, external knowledge gained through inbound open innovation activity must be *integrated* into the company. The existence of external knowledge provides no benefits to the firm if the relevant knowledge cannot be identified and incorporated into the firm's innovation activities (West & Gallagher, 2006). Wallin and von Krogh (2010) state that organizing open innovation is a matter of selecting the right mechanisms for integrating knowledge held by people outside and within the firm boundaries.

Bergman et al. (2009) point out that innovation is always formed in a social system, and thereby, innovation is really about the knowledge sharing and creation in a social context. They also mention that it is a process that can occur in the course of carrying out various business activities. They affirm that the creation of today's complex innovations requires the merging of knowledge from diverse perspectives.

Consistent with the arguments of the above cited scholars, knowledge management – and knowledge integration in particular – can be said to be of essential consideration when dealing with inbound open innovation.

West and Gallagher (2006) point out that even if external innovations are identified, that does not mean they will be incorporated into the firm's product strategies. To benefit from external innovations, organizations need to identify them, understand them and be able to combine them with firm-specific internal innovation to produce a product tailored to the firm's specific needs (West & Gallagher 2006).

Kleinsmann et al. (2010) studied knowledge integration in collaborative new product development teams and found factors that influence the creation of shared understanding in the actor, project and company level. The most significant factors in the actor level were the equality in language used between the actors and the ability of an actor to make a transformation of knowledge. At the project level, the most relevant factors were the efficiency of information processing and the quality of

project documentation. At the company level, allocation of tasks and responsibilities was of major importance. Hereby, Kleinsmann et al. (2010) found that the quality of knowledge integration is, in addition to face-to-face communication, also dependent on project management and project organization.

West and Gallagher (2006) assert that effective open innovation integrates internal intellectual property throughout the firm so that additional opportunities can be identified and exploited. In a similar vein, Damanpour (1991) states that truly innovative organizations create a climate conducive to innovation in all their parts, not only in segregated units, and Hamel (2007) says that innovation should be made everyone's job, everyday. This way the company increases its capacity and potential for recognizing and utilizing useful external knowledge inputs.

Szulanski (1996) researched intra-firm knowledge transfer and found that, contrary to conventional wisdom that blames primarily motivational factors, the major impediments to internal knowledge transfer were knowledge related factors such as the recipient's lack of absorptive capacity, causal ambiguity, and an arduous relationship between the source and the recipients. Lack of absorptive capacity refers to the recipient's inability to value, assimilate and apply new knowledge successfully. The absorptive capacity of a person is largely a function of that individual's preexisting stock of knowledge. Causal ambiguity is present when the precise reasons for success or failure cannot be determined when knowledge is being or has been transferred. It reflects the recipient's depth of knowledge or irreducible uncertainty about cause-effect relationships. An arduous relationship between the source and the recipient refers to a distant relationship between the actors, which can hamper the ease of communication and thereby restrict the acquiring of knowledge. (Szulanski 1996)

Szulanski (1996) states that using only incentive systems to mitigate barriers to internal knowledge transfer is inadequate. He suggests that scarce resources and managerial attention should be devoted to developing the learning capacities of organizational units, fostering closer relationships between them and systematically understanding and communicating practices.

Hansen et al. (1999) differentiate between a codification strategy and a personalization strategy in knowledge management. A codification strategy means that knowledge is codified and stored in databases, where it can be accessed and used by people in the company. A personalization strategy refers to channeling individual expertise of people through facilitating the finding of the relevant people so that knowledge can be shared through person-to-person contacts. Hansen et al. (1999) state a company's choice of strategy should depend on the way it serves its clients, the economics of its business, and the people it hires. They say that a combination of these two knowledge

management strategies can be used, but trying to excel at both strategies risks failing at both – one strategy should be pursued predominantly, whereas the other serves in a supporting role. The authors suggest an 80-20 (percent) split, and conclude that innovation is best supported with a personalization strategy in knowledge management: People in companies seeking innovation need to share information that would get lost in document form.

The focus on knowledge aggregation and on portfolios of ideas is of major importance in knowledge creation processes in organizations (Seshadri & Shapira 2003). Also Välikangas and Gibbert (2005) state that it is important to both experiment on small ideas and to cluster individual ideas into larger opportunity domains. Seshadri and Shapira (2003) point out that the aggregation of knowledge and the creation of portfolios of projects and ideas is not easily done, and mention that research on organizational processes suggests that there are several cognitive and structural aspects that operate as barriers against attempts to make use of ideas in different parts of the organization. They state that mechanisms for the facilitation of the matching and combination of ideas are needed – organizations should create procedures, routines and structures where related ideas have a chance to get combined into projects.

Seshadri and Shapira (2003) bring up the issue of timing in combining ideas. They state that the problem lies in the decision-maker level, where they believe that the synchronization of ideas and proposals is facilitated if they are evaluated simultaneously by the decision maker. This issue of timing can be seen to concern the timing of the evaluation of ideas, instead of only focusing on the time when ideas reach a decision maker or a decision-making situation. The problem of timing of the idea flows may be addressed by storing ideas for possible combining and (re-)evaluating to be taken place at a later point of time.

Dougherty and Hardy (1996) emphasize the importance of strategic value and meaning in supporting innovation in an organization: Ideally, an organization's strategy explicitly values innovation, openly welcomes initiative, and clearly rewards those who successfully resolve problems. The constituent activities of innovation – such as understanding markets and tracking technological change – should be understood as appropriate activities for all organization members. Senior managers should set the strategic directions but involve people well down in the organizational hierarchy to solve problems and to create assessment criteria. Involvement helps people understand their part in the innovation process and creates a shared responsibility for success. There should be a shared understanding of the innovation activities in the organization to make them meaningful for everyone. Also, if the strategic attention span is shorter than the development time of the average innovation, then an

organization does not value innovation. Risk should be mediated by the organization, so that employees who might take initiative do not have to be afraid of having to bear severe unpleasant consequences if the initiative fails. (Dougherty & Hardy 1996)

2.4.4. Change Management

Implementing open innovation signifies organizational change, if the more open approach to innovation is new to the company. Chiaroni et al. (2010) connected organizational change and open innovation research and investigated which changes in a firm's organizational structures and management systems the shift from closed to open innovation entails. They state that the journey from closed to open innovation can be conceived as an organizational change process, and that thereby it is reasonable to use approaches and instruments developed by organizational change research when studying this process. They found that the journey involves four main dimensions of the firm's organization along which change could be managed and stimulated: inter-organizational networks, organizational structures, evaluation processes and knowledge management systems.

The aforementioned dimensions can also be considered as managerial levers that can be intervened on for the purpose of streamlining the change process towards open innovation. As regards the network dimension, implementing open innovation requires the establishment of extensive networks of relationships with a number of external actors. Increasing the number of external sources or search channels, or the depth to which the different sources or channels are tapped on, is part of implementing inbound open innovation. Organizational systems that are focused on accessing and integrating this acquired external knowledge into the firm's innovation processes are needed – complementary internal networks must be in place to effectively manage the externally acquired knowledge. The internal reorganization might concern organizational structures, for example the establishment of cross-functional teams; organizational roles for advancing the implementation of open innovation; and rewarding and incentive systems that include more open-oriented goals and metrics. The evaluation processes for evaluating innovation opportunities and projects should entail new criteria to bring more focus on external sources of innovation. The openness of the innovation system complicates the evaluation, because it implies higher uncertainty as external inputs are more difficult to analyze. The evaluation process should be designed to manage this higher uncertainty. Knowledge management systems represent another important area that open innovation impacts on – in fact, it can be said that open innovation is all about leveraging and exploiting knowledge generated inside and outside the firm, to develop and exploit innovation opportunities. Therefore, open innovation requires the use of knowledge management systems that are able to support the

diffusion, sharing and transfer of knowledge within the firm and with the external environment. (Chiaroni et al. 2010)

Chiaroni et. al (2010) emphasize that changes occurring along one of these managerial levers – networks, organizational structures, evaluation processes and knowledge management systems – necessarily have an impact along the other levers. For example, when the amount of innovation opportunities from external sources increases and new evaluation systems are put into place, the need for establishing dedicated organizational roles for handling them increases (link between ‘evaluation processes’ and ‘organizational structures’) (Chiaroni et al. 2010).

Chiaroni et al. (2010) describe the organizational change process where the shift from closed to open innovation happens through three different stages originally introduced by Lewin (1947) – unfreezing, moving and institutionalizing. Each stage, according to Chiaroni et al. (2010), includes different kind of measures that can be taken to advance the embracement of open innovation.

The unfreezing stage is concerned with the establishment of a sense of urgency for change, the assignment of responsibilities for promoting the change, and communicating the new vision to internal and external stakeholders. In this stage, the top management of the company is in a key role in triggering change and overcoming the organizational inertia. The change can be effectively triggered by doing some re-designing of the organizational structure, such as assigning human resources specifically for the management of external knowledge inputs. The changes at the organizational structure level are effective in triggering the change process because they make the change immediately visible to everyone within the firm and can help advancing the implementation of open innovation without interfering too much with the basic processes and routines of the firm. (Chiaroni et al. 2010)

In the moving phase open innovation is put into practice, after the need for a new approach to innovation has been established and communicated in the unfreezing phase. This implementation stage executes the change through the establishment of new procedures and patterns of behavior consistent with the new vision, eventually with the help of budget constraints, targets, schedules and reward systems. This stage is usually characterized by an experimental approach, through which the solutions that are best suited to the firm’s purposes are identified. A pilot project can be used for testing the implementation of open innovation and identifying the most suitable solutions for the firm. Introducing a more formalized evaluation process for innovation projects is helpful in overcoming the traditional belief in the superiority of the firm as the central locus of innovation. Yet another way of facilitating the implementation of open innovation is the introduction of information

technologies that support both project management activities (e.g. videoconference devices, company's intranet, virtual project workspaces) and innovation scouting activities (e.g. scientific databanks). (Chiaroni et al. 2010)

The institutionalizing phase is for making sure that the results achieved in the implementation phase are consolidated and institutionalized, and preventing a slip back to the antecedent status quo. This involves partial re-design of the organizational structure, where new permanent organizational roles are introduced. These roles can be related to for example innovation scouting activities or administering and streamlining the evaluation and development of innovation projects in a given area. By establishing well-defined organizational roles for these purposes, their execution is made independent from individuals and built into the organization. Performance measures explicitly aimed at evaluating the results of the company and its innovation activities under an open innovation perspective are also useful in institutionalizing the transition from closed to open innovation. (Chiaroni et al. 2010)

Chiaroni et al. (2010) emphasize that the journey open innovation is triggered by a change in the organizational structure of the innovating firm. Also Hamel's (2007) descriptions of management innovation's features point attention to the necessity of organizational changes in the firm when adopting the management innovation of open innovation. Damanpour (1991) additionally found out that managerial attitude towards change was a significant determinant associated with the innovativeness of the firm.

Chesbrough & Crowther (2006) found in their study of early adopters of open innovation among organizations outside 'high tech' industries, that their two major challenges in the effective adoption of open innovation concepts were overcoming the not invented here (NIH) syndrome and sustaining internal commitment over sufficient time to realize benefits from adopting the concepts. The NIH-syndrome refers to a negative attitude towards knowledge that originates from a source outside the own institution, potentially leading to rejection of external ideas and underutilization of external knowledge acquisition, and resulting in negative effects on performance (Lichtenthaler & Ernst 2006).

The NIH-syndrome was tackled in the organizations that Chesbrough and Crowther (2006) studied by clearly articulating why internal efforts are insufficient to meet the company's objectives, thereby building greater organizational alignment and commitment to an open innovation approach. Further commitment was gained when organizations involved R&D activities early and identified external inputs where internal research and development could be leveraged to add further value.

To address the second adoption challenge for open innovation concepts – sustaining internal commitment over sufficient time to realize benefits from adopting the concepts – the companies in Chesbrough and Crowther’s (2006) research ensured senior management support and funding at the outset of the initiative, created open innovation champions to manage the processes that incorporate external inputs in the business, and revised internal processes, metrics, and incentives to induce adoption.

Chesbrough and Crowther (2006) conclude that moving from a set of ad hoc processes to clearly defined open innovation practices, systems, roles, and responsibilities can help to ensure successful adoption of open innovation across the organization.

2.5. Summary

Based on the earlier research introduced in this chapter, the main points relating to the management of inbound open innovation are summarized here.

All of the above cited studies point the attention to organizational *structures* and *processes* when discussing issues relating to the implementation of inbound open innovation, or the sharing and developing of knowledge and ideas within the organization – regardless of whether the focus of the research was on knowledge management, general innovation management, or the management of open innovation. As concluded before, all these different research fields are relevant for this study, as the issues of the management of open innovation are highly tied to management issues in pursuing general innovativeness of the organization, as well as managing the mobility and integration of knowledge. Therefore, drawing on the earlier research introduced in this chapter, it can be concluded that organizational structures and processes are of major relevance when managing the flow and progress of external ideas and knowledge inside the organization.

Structure and process related organizational factors were identified to be the key to organizing inbound open innovation. Recurring statements in the earlier research could be found concerning the need for systematic processes to manage the flow and progress of ideas within the firm. However, it was also concluded that setting up formal mechanisms is not enough, but their use needs to be *facilitated*. Also the *interplay between existing and new* structures and processes was taken up as an important consideration – no organizational factor works in isolation.

The following key factors relating to structures and processes were highlighted in the earlier research:

- roles (dedicated human resources for advancing innovation activity)
- responsibilities
- cross-functional collaboration & face-to-face communication
- resource allocation (time, money)
- systematization
- evaluation (participants, criteria)
- tools (for sharing and processing ideas and knowledge)

Knowledge management was identified as a central aspect in the utilization of external knowledge inputs, as open innovation can be framed as co-generating, co-developing and integrating knowledge. *Change management* considerations come into picture when the organization needs to change the ways in which work is being carried out when embracing open innovation. Support from the top management of the company was raised as a significant determinant for the successful implementation of open innovation practices. This support should be demonstrated both in encouraging communication and in concrete investments.

The cultural context of the company and the *perceptions and understanding* that individuals and groups within the organization form affect all of the other aspects of implementing inbound open innovation, and must thereby be taken into account when considering any other aspects.

3. Methodology

In this chapter, the research methodology is described in more detail and the choices are explained.

3.1. Research Process

This thesis is a part of a larger research project called E-Innovation. E-Innovation is part of FIMECC Oy's Innovation & Networks research program. The E-Innovation project participants consist of cross industrial industry partners such as Ericsson Ltd, Royal Caribbean Cruises, Alma Media and Tieto as well as leading academic partners FIMECC Oy, Aalto University and UC Berkeley's Haas School of Business. E-Innovation project connects representatives from the leading Finnish growth industries and introduces pioneering practices of sustainable and open innovation modes by breaking down the conventional borders between industries.

E-Innovation project focuses on the following two key research themes related to the development and utilization of open innovation approaches within the context of sustainable innovation:

1. How to use open innovation networks for sustainable innovation and growth?
2. How to transform companies into successful and open sustainable innovators by learning from the pioneers in USA and Finland?

This thesis fits into the category 1, enriching the knowledge of company managers and researchers in the open innovation field of how to orchestrate and manage the outside in flow of idea generation to a firm's innovation system. The thesis increases the knowledge of innovation managers and researchers on how to systematize the idea flow from external parties and how managers should organize the activity in the dynamic media industry. Thirdly, the graduate thesis provides managerial implications for innovation managers on how to integrate external innovators' ideas into existing or new organizational systems and processes.

The specific subject for the research was chosen because it has not been researched much previously, and particularly not in this kind of context. This means that the thesis can provide an interesting contribution to the research field of open innovation. The organizational side of open innovation in general has been mentioned by several researchers as an important topic to be investigated further (see e.g. Fredberg et al. 2008). Another reason supporting the choice of the particular research focus was its fit with the case firm's situation and strategic agenda. The thesis research was set to bring valuable insights to the case firm's management.

The research was conducted as a qualitative single case study. A qualitative method was chosen, because it was the most suitable approach for finding answers to the research questions posed. Qualitative method is a valid method when the research attempts to answer questions such as how and why (Koskinen et al. 2005) and when in-depth information and understanding are needed (Eriksson & Kovalainen 2008), which is the case in this study.

According to Yin (2009, p.18), the case study method investigates a contemporary phenomenon in depth and in the real-life context where the boundaries between the phenomenon and context are not clearly visible. Investigating how and why ideas and knowledge move and get progressed within an organization fits very well into this description. A single case study was chosen because it allows investigating one case on a deeper level, and the research questions were perceived to be best answered through focusing on one organizational context instead of many. By basing the study on one organization, the major organizational context factors are same for all the people that are included in the research, which reduces the amount of possibly misleading factors for the analysis.

The main data collection method used in this thesis was that of thematic interviews. In addition to the interviews, some documents provided by the case firm were used, mainly as background material. These materials included basic information of the company and its parent firm as well as – and for the most part – materials relating to strategy and innovation issues. Previous research and theories on innovation, open innovation and management were used as background material to aid in interpreting the empirical data.

Thematic interviews – also called semi-structured interviews – are the most used method of gathering qualitative data in economics research (Koskinen et al. 2005). Thematic interviews are based on an interview template that the researcher prepares beforehand. The template includes a few themes that will be gone through in each of the individual interviews. The template is not strictly binding – the questions do not have to be answered in the same order, and the interviewer may formulate questions freely under each theme in each interview, and the interviewees can answer in their own words and bring up additional issues in the conversation about theme in question. The interviewer uses the template to make sure that all the themes are gone through with each of the interviewees, and that the main questions will be asked. Although the interview is somewhat conversation-like, it is the responsibility of the interviewer to make sure that the discussion revolves around issues that are relevant for the research. (Koskinen et al. 2005)

Thematic interviews were considered to be an appropriate method for investigating what organizational factors affect the internal processing of external ideas in the case company, because

the method allowed the people in the organization to talk rather freely and bring up issues themselves so that the most important factors came up without the interviewer having had to anticipate the answers beforehand. Thematic interviews made it possible to build a deeper understanding of the organization and the way it works.

The choice of interviewees in qualitative research is usually done by the researcher by considering who would be the appropriate people to be interviewed, bearing in mind the research objectives. This means that the sample representing the research object is put together through purposive sampling. (Koskinen et al. 2005) Purposive sampling was a suitable method for choosing the interviewees for this study because it allowed the investigation to focus on a certain theme and select the most appropriate people to represent the organization for the research objective. The research was decided to focus mainly on web development, and the parts of the organization that were investigated further were chosen accordingly – the departments that were perceived to have the most to do with web development activity and potential were media sales, business services and web development. A couple of representatives of the editorial department were interviewed as well, as were the project manager responsible for innovation activity and the CEO of the company. Most of the interviewees were directors or managers, but lower level employees were represented also to make the sample give a more thorough picture of the way things are perceived and done in the organization. A member of the board of directors of the parent organization of the case company was interviewed as well, but that interview was not included in the actual analysis of the workings of the case company. The interview of the representative of the parent company was used as an orientating interview and as providing background information to widen the understanding of the corporate background of the target organization.

In line with the thematic interview method, the questions that were asked varied somewhat from one interview to another. The list of the themes and the key questions that were posed in each of the interviews can be found in the end of this thesis as an appendix. The interview template was prepared after carefully studying existing literature on the subject to ensure a relevant set of questions. The questions were formulated freely in a conversational manner in the interview situation, and the interviewees were frequently encouraged to further specify their answers, by using questions like 'how' and 'why' and asking for illustrative examples. All of the interviews were performed in either August or September of 2010. The duration of the interviews varied from one hour to approximately one and a half hours.

3.2. Data and Analysis

The interviews were recorded and typed up into interview transcripts. The transcripts were made as accurate word-to-word replications of the interviews so that important information would not be lost. The transcribed interview data was organized into different documents according to the main themes that shed light on the research questions. The interviewees' comments were organized within the themes so that comments regarding the same issue were grouped together. This way, the recurrence of similar comments as well as differing views could be easily detected.

The transcribed interview data was processed in an iterative manner so that the key findings became clear. Different kinds of notes, bullet-point lists and graphs were used to support the process of analyzing and structuring the key findings. Thereby, the method that was used for analyzing the data was that of analytic induction. According to Koskinen et al. (2005), analytic induction is a very common method in qualitative research, and it consists of first analyzing a small group of instances to formulate an initial conclusion, and then testing it against larger amount of data, refining the conclusion in the process so that in the end it can be said to represent the entirety of the data.

3.3. Quality of the Empirical Research

The quality of empirical research depends on its validity and reliability. The term validity refers to how well the arguments, interpretations or conclusions in the research actually represent the object that they are supposed to represent. Reliability refers to the credibility and repeatability of the research – is the research conducted so that it can provide credible results and would similar results be achieved if the study was repeated. (Koskinen et al. 2005)

The validity of this research is based on the appropriate selection and utilization of the research methods that were used. The suitability of the single case study method and thematic interviews for the purposes of this research is described earlier in this chapter. As regards credibility and repeatability, the way that the research was conducted is clearly explained in this report, and the arguments in the empirical analysis are supported by examples from the interview transcripts to provide the reader a chance to evaluate the appropriateness of the interpretations. The literature review presented in chapter two and the connections made between empirical findings and earlier literature also support the reliability of this research.

The quality of a qualitative research can easily be questioned because of the strong role of the researcher in conducting the research and interpreting the data (Koskinen et al. 2005). The risks of

distorting the results with personal biases and unneutral behavior have been acknowledged when doing this research, and several measures have been taken to avoid any distortions.

There was no earlier connection between the researcher and the case organization, and there was no initial bias towards any kind of conclusion. The researcher was also aware of the need to remain neutral when conducting the interviews. For these reasons, it can be claimed that the research was not distorted by biased behavior from the part of the researcher. All the interviews were conducted by the same interviewer, which means that there was no variation in the interviewing style that might have caused different results.

The interview data was analyzed when the text was still in Finnish, which was the original language of the interviews, and the selected comments that currently appear in chapter four were translated into English only after the analysis and selection of commentaries to be shown in the thesis were made. In this way, the analysis was made when the data still had all the subtle tones that may get lost in translation.

The findings chapter was written with an abundance of supporting comments from the interviews placed in the text at first. The amount of comments was reduced to enhance the readability of the text after all the analyzing text was written. Keeping a large amount of citations in the text when writing the analysis ensured that the right balance was maintained and the depth and diversity of comments was not forgotten by any chance while writing the text.

4. The Empirical Study

4.1. Introduction of the Case Company

4.1.1. Operating Environment – the Turbulent Media Industry

The case company's operating environment is truly a challenging one. The media industry is undergoing profound changes, and the future state of events is hard to predict. The traditional roles and activities of the participants in the media landscape are being reshaped, and as this transformation is taking place in various locations simultaneously, it is difficult to keep up with all the developments occurring. The major role of the Internet increases the speed of the change and challenges the conventional business models of media companies as new ways of creating and sharing content proliferate.

This turbulence in the industry is making innovation a necessity for the big traditional players like the case organization of this research – hanging on to the old ways of working and not reacting to the changes in the environment is not really an option. Figuring out a way to capture profits in the digital economy may be complicated, but actions must be taken in order to overcome the challenge if a strong position in the market is wished to be maintained.

These claims are backed by a report on the concurrent strategic issues concerning the media industry in Finland, published by the Federation of the Finnish Media Industry, Finnmedia, in 2009. The report "Making the Media Sector a Winner: Strategies of the Finnish Media Sector" was produced through a multi-stage strategy process including market analyses, interviews with experts, lead-user research and workshops with representation of around fifty influential individuals from the media sector and its linkage groups. The report lists eight key change factors affecting the media sector, stating that more efficient targeting and measurement of advertising are becoming key factors; consumer's and producer's roles are getting mixed up; the pace of change in the business environment is accelerating; innovation is not an alternative, but an inescapability; customers' special needs must be taken account of as the target groups are getting smaller; the advertising volume is growing and modes of advertising diversifying; consumers are informed and more and more demanding; and the importance of networking is growing. The report also points out that the recession has reinforced the change trends and accelerated technical transitions, thereby causing permanent changes in both consumer behavior and the role of media as an advertising vehicle. This all speaks for the importance of an alert, cooperating and innovative organization.

Finnmedia's report also includes a SWOT analysis of the Finnish Media sector, bringing up two important innovation related issues: lack of development thinking as a weakness and 'innovation vacuum' as a threat. The features connected with the lack of development thinking are passive attitude, slowness of reaction and inadequate R&D. The 'innovation vacuum' labeled threat refers to the speed of change, the risk of missing opportunities, and other consequences of the lack of R&D.

The media sector's strategic goals identified in Finnmedia's report are increasing ability to cope with transition, increasing content productivity, mastery of multi-channel media, and recognizing new business areas. The measures listed to achieve the goals include utilizing customer information; making content production more efficient; management and organization; networking; strengthening the brand; localness and internationalization; and research and product development. The biggest challenge facing management is concluded to be developing organizations to make them more dynamic and capable of adapting more flexibly to change.

PricewaterhouseCoopers published an outlook for newspaper publishing in the digital age with a more global perspective in 2009. The report underlines the fast pace of changes in the environment and the need for a more innovative approach on the part of newspaper publishers. The strong influence of the economic downturn on the behavior of different actors in the industry is emphasized, and it is noted that some of the changes brought about by this are permanent. The report declares that publishers have to find new revenue models to remain profitable. It is also affirmed that the competitive media landscape has changed drastically during the last decade as a result of technological developments and the emergence of new devices, concepts and media platforms as well, and that traditional media provides in general and newspaper publishers in particular have found it difficult to adopt new technologies and use them to monetize content. Nevertheless, the report foresees changes in consumer behavior with regard to willingness to pay for online content, implying that making decent profits on online services is certainly possible in the future. Developing content to match the preferences of paying customers and figuring out suitable ways of offering services online, however, require significant efforts. The report also states that the printed newspaper has a long-term future, although not in the formats and volumes previously seen. This also calls for renewal and innovation. The report also notes that a perception that newspaper publishers lack innovation seems to drive advertisers to use more other medias instead of newspapers. According to the study, newspapers are not perceived as being innovative and as having difficulty in dealing with new technologies, and that they are losing attractiveness as an advertising medium due to declining readership, the inability to reach specific target audiences and the lack of flexibility to make deals with advertisers.

Several points in the PricewaterhouseCoopers report refer to the need for and the benefits of opening up the innovation process. Frequent and intensive dialogue and partnerships with important external stakeholders are recommended as means to keep up with the developments of the industry and create profitable offerings to the market. Constant dialogue with readers is said to be crucial for newspapers to stay up to date with readers' radically changing media preferences - readers must be able to give feedback on the current media mix and to express their needs and preferences with regard to media consumption. Partnering more closely with advertisers is suggested to help newspaper publishers to anticipate preference developments in advertising and to optimize their position within custom-tailored campaigns. Directories, e-commerce and 2D barcodes are mentioned as examples of technological developments that offer newspaper publishers potential for value added service offerings and a chance to reinforce partnerships with advertisers. It is concluded that newspaper publishers need to become more flexible and innovative in their product offerings.

4.1.2. Company Overview

The case company can be defined as a business information provider. It operates a multitude of business newspapers and magazines as well as online services, and it employs approximately 180 people. The organization is divided into nine functional departments: Finance & ICT, Marketing, HR, Web Development, Media Sales, Circulation, Business Services, and Editorial department. Finance & ICT, Marketing, HR and Web Development are named as support functions. The case organization could be described as a fairly traditional silo organization.

An interesting feature in the company is that its two main business channels are going in totally different directions – printed media business is shrinking and internet based activities are growing explosively. Yet these two channels are handled mainly by the same people in the company. This means that people cannot be geared into a certain business mode, but they have to be able to switch their thinking from unimaginable opportunities in the vast world of the internet and new technologies, and the narrowing and more niche-driven path of printed business.

4.1.3. Strategy and Innovation

The case company's primary target group consists of decision makers and managers in the private sector as well as the public sector, and entrepreneurs. Other target groups include individuals that are interested in business and economics in general and their own success in the business life as well as their personal lives.

A fundamental statement in the case company's current strategy is the pursuit of transforming media into a service. Media is regarded as the core of the company's service array and the basis upon which new services ought to be built. Service development is focused on serving the aforementioned target groups.

Some criteria have been set for the creation of new services. One basic rule is that they need to be based on the needs of the decision makers target group, and that those needs must have been detected with careful research or some other reliable methods. The internet is recognized as an important element in the potential new services, serving either as a distribution channel or as being the basis in a web based new service. The services are primarily targeted to business customers, so that a firm is the payer that enables its employees to use the service. Some consumer services for private investors are also possible, but not in the focus of the new service development. The new services need to be synergistic with the company's media purpose and contents. It should be possible to utilize the brand and the sales organization of the company in the marketing and selling the new services if needed. Within three years, each new service should reach turnover of at least 100 000 euros per year. Investments in the new services should be reasonable and not require massive investments at the outset. In addition to product and service innovations, process innovations relating to the way work is carried out are also announced as needed. The emphasis of process related innovation activity is set on increasing the profitability of the printed newspaper.

Improving the innovative abilities of the organization has been recognized as an important antecedent for creating new services, and a separate innovation strategy was crafted in 2009. The innovation strategy contains three major goals, one for each of the years 2010-2013: 1. mobilizing the entire staff for innovation work; 2. focusing innovation activities to fit the company's strategy; and 3. making innovation an integral part of the normal processes of the organization. A project manager responsible for innovation activities was hired in the beginning of the year 2010. The main objectives of the project for enhancing the organization's innovation activity were modeling the innovation process and making customer feedback visible for all personnel. An 'innovation group' consisting of a selection of managers was also established to go through innovation initiatives.

A keener focus on innovativeness is a fairly new thing in the case organization. Innovation has not been a necessity for a business newspaper in the past, and thereby it is not interwoven in the organization, but has to be applied. Recent developments in the operating environment and strategic decisions have led to the current situation, where innovation is seen as important for the company,

and it has been recognized that significant attention and special efforts are needed for making the organization more innovative.

A strategic decision has been made concerning the desired speed of the embracement of innovation – first the people inside the organization should become familiar with the issue and the new approaches to working, and only after that can involving more external people in the innovation processes begin. Obviously customer feedback and different discussions with various external parties and other external contacts of that nature affect the new service development and incremental enhancements made to existing products already, but more systematic participation of external parties has been left to the future.

As paying closer attention to innovation is a rather new development at the case organization, there is still a great deal of changes and improvements to be made in the organization in order to succeed in implementing the innovation strategy and achieving the goals that have been set. The case organization can be said to have had a relatively good start, but there is still a long journey ahead. In the next section I will go deeper into the innovation status of the company and point out issues for improvement and suggest focus areas that should be attended for enhancing the innovative abilities of the organization, with specific concern of utilizing ideas and knowledge from external sources in internal innovation activities.

4.2. Research Findings

In this section, the findings of the empirical research are presented. The findings are organized around three major topics: perceptions of innovation and cooperation in the firm, the specific innovation efforts that have been made in the company, and the major organizational factors that were found to influence the flow and progress of ideas.

4.2.1. Perceptions of Innovation and Cooperation within the Firm

This sub-section describes how innovation was being perceived within the case organization at the time of this study. These perceptions and thoughts are the basis of the actions of the employees, affecting the overall innovativeness of the company, which is the reason this topic is brought up. First, some thoughts of the top management – that is, the CEO and department heads who are members of the board of directors – regarding innovation are presented. Second, the perceptions that employees in general had of the support and direction given from the top management as regards innovation and development efforts are shown. Lastly, the general atmosphere in the

organization relating to innovation and change as perceived by the interviewed employees altogether is described.

Top Management Perceptions

The following account from the CEO of the company describes quite well the current state and desired direction of the organization in relation to innovation:

Last year when we did strategy work, we noticed that maybe our innovation system is not quite what it should be. It was taken up for consideration for a more detailed study, and since then I have spent quite a lot of my time thinking how it could be made more specific. However, in my opinion this company has always had a culture that generates relatively many ideas, but then again, the methods of operation relating to the ideas that will be realized and how to make money out of them and how to develop this product development in a systematic way, that is somewhat uncertain and as a result we have now been developing this system. However, although it is a question of a system, it is also a question of changing the culture and that is of course slow. But I will try to contribute quite strongly to enable us to make progress and reach a good situation in that respect.

This shows that the need for innovation and better innovation management has been seriously taken notice of, but this has happened only recently. The CEO recognizes that more systematic processes are needed, but that the culture of the organization must be somewhat changed in the process as well. He also points out that the change cannot happen very fast, thereby accepting struggles on the way. The view that the change process is probably slow in any case, however, might also slow down the efforts of trying to make the change.

One of the directors points out to the cultural factors by mentioning the mindset that has been forged during the history of the organization and does not quite fit the current situation which calls for innovation. This director also underlines that the process of opening up the mindset and becoming a more innovative company is only in a beginning stage.

Well, we have to start from the fact that the mindset needs to be completely different than what it is now. As this is an over 100 years old institution, where customarily the mindset has been kind of from the inside to the outside – that we think here, we have the expertise, we know our stuff and we release this great output of ours, and those who then are the targets for it are happy that they can have it... Well this is presented in a pointed way, but this mindset should be changed to be from the outside to the inside, and this is still in kind of a discussion phase. This is not at all in the operational phase yet.

Another director points out to the importance of giving time for innovation and affirms that it is essential for achieving progress. This director also emphasizes concrete actions, realizing that becoming an innovative company does not happen on its own but requires considering what kind of efforts need to be made and actually making them:

I claim that those [companies] win that can think of these issues in a clear and right way, pay attention to it and require that things are done and things happen. Not just that we say that we want to be an innovative company – but what it means in practice. [--] it then requires also the systematics of how the new things will then be processed.

These comments on the part of the top management demonstrate that the need for innovation for the survival and success of the company has been recognized at the top and the necessity of concrete efforts has been understood.

However, scarcity of resources is brought up as a challenge. Not much slack means that it is hard to include additional tasks, for example innovation related efforts, into the picture. This means that getting time for innovation related tasks is an issue that requires serious discussions between the directors as well. The CEO said that there is a consensus on the board of directors about the necessity to boost up the company's innovativeness, but the resource issue is something that requires more negotiating.

this company is nevertheless in a relatively effective condition resource-wise and then, when you do something new in addition to daily tasks, like now this innovation system and these idea sessions, and then you also need the management to use their time for this in order to assure people that this is sensible, they won't quite automatically say "yess, now we are doing it this way". But in my opinion, at the moment there is yet quite good consensus [in the board of directors] on this being important work. How much time and energy we spend on it is of course something that must be discussed. Because we obviously need to make a profit also this year. This innovativeness, however, and all these things that we are now talking about, they are the building blocks of the future, but still we need to make a profit this year too.

Balancing efforts between short-term and long-term objectives is seen as a challenge that is not easy to solve. One thing that makes the problem even harder to deal with is the status of a publicly traded company. The CEO points out the difficulty of simultaneously think about the long-term future and secure reaching the short-term objectives:

being an exchange-listed company, you just by instinct think of the next quarter and the one after that, and you don't think about the future thing. So for that reason there must be some people who aren't so much involved in the short-term profit-making or even in the daily editorial process, but there must be people who are able to think about these things.

The CEO shows recognition of the value of specifically assigned resources for future-oriented activities. However, he does not think there should be a particularly large amount of human resources dedicated to innovation activities. In his view, most of the innovation work should be done by everyone in the organization, in addition to their other work tasks.

I don't believe in building a massive innovation group here that would primarily do that work. Our idea is that everyone would participate and everyone would have a chance to participate. That is our goal, but can we reach it? I can't say. However, the idea is that if we have 80 people, we can't build an organization of 18 or not even 5 persons that would only think about those issues. And do nothing else. That's why we must get a sufficiently large but nevertheless a small portion of the working time of the 180 people. So that those issues can will be thought about and then the brain capacity used on it will be much bigger.

How exactly the scarce human resources should be organized in practice to achieve the innovation goals, was a question that remained unanswered. In the following piece he comments on the differing activity levels of employees and expresses accepting it.

there is this kind of an activist group who are much more active than others. And I guess that it cannot be changed, it just is so that it's the law of the universe that some people are more active than others. Not everyone participates, but in my opinion we have nevertheless quite well been able to get a large group of people to contribute. And we have nevertheless tried to do things relatively sensibly, and now that we have some level of, I don't know if it can be called a strategy, an innovation strategy, but this kind of a model of what we possibly would now concentrate on. We have then had idea campaigns and the like, and I have been a bit surprised that people have contributed so much.

Being surprised by the amount of interest that people have shown on the specific innovation activities that have been organized recently does not give a very optimistic impression of the CEOs belief in the innovation and change abilities of the company.

Possible barriers to innovation that can be drawn from the thoughts of the top managers are the following: views of the necessary slowness of organizational change; rather pessimistic feelings about the innovative potential of the organization; and unwillingness to make substantial investments.

These views affecting the decisions of the top management can hamper the innovative development of the organization at least by slowing down the progress. Nevertheless, the comments of the top management show that the importance of innovation to the company and the necessity of investments and management efforts have been recognized, and that the change process is still in an early learning stage.

Support and direction from the top management

Generally, the interviewees felt that the top management was taking innovation related issues seriously, but no specific guidance or help for actually making innovation happen was provided. The interviewees acknowledged that certain amount of efforts had been made in order to enhance the innovativeness of the organization, and that innovation related activities were encouraged and reminded of frequently, but actual support or guidance for reaching the goals that had been set was not given.

We have a supportive atmosphere, so that generating ideas is allowed. [--] It is encouraged. But maybe not so much time has been reserved for it. But I don't believe that anyone would mind if someone took time for innovating as such, but any special measures have not really been taken for making it happen, either.

The top management is perceived to be interested in innovations, and it is felt that they expect people to generate ideas and innovations, as mentioned by the following interviewee. The interviewee points out that much of the expectations cannot be fulfilled.

the managers are quite interested in what kind of new ideas there are and they're expecting new ideas all the time [--] People are expecting it from us a lot. [--] But those mainly remain expectations.

The interviewees also felt that the top management did not necessarily really know how things are done or what is actually done as regards handling ideas. Many interviewees mentioned that innovation was an important part of the company's strategy, and thereby evidently taken seriously by the top management. However, the implementation of the strategy was seen as more problematic and less well grasped by the management. Concrete efforts and success in implementing the innovation strategy were perceived to be scarce – a gap between the innovation strategy and actual efforts was experienced. Resources were seen as a major factor causing the gap.

Last year this strategy was crafted, which is probably for many just this pile of paper and it has this kind of, media grows into a service and, certain new things and they are maybe not implemented concretely enough in the tasks for this year, for instance..

The following interviewee comments on the current efforts of the top management and says that they are insufficient for creating larger developments.

In my opinion it should be so that when this potential idea is identified, and if the steering board of directors really decides that it's the kind of thing that they want to implement, so in my opinion someone has to be made available for it or someone needs to be hired from the outside or something. But it is a kind of a strategic question. The company can choose how strongly it wants to invest in this innovation work or in generating this new thing. If they really want big profits, they should then invest quite a lot in it. The most part what is started with there are the kind of things that will fail one way or another. In order to achieve big profits, the volume of doing needs to be quite large. [--] if we really want to invest in this innovation activity or if we expect that the innovation activity creates big new business operations for example, then it should probably be built a bit differently somehow.

Concrete and visible efforts from the part of the top management, such as establishing the role of the innovation project manager and bringing in the idea suggestion tool seemed to work quite well in convincing the employees of the management's commitment to enhancing innovativeness in the company. They have showed people that investments can truly be made for innovation purposes and that the innovation issue is being taken seriously. Many interviewees referred to a concrete example when talking about their perceptions of how the top management thinks about innovation. These perceptions also played an important role in determining the beliefs on the willingness of top management to invest resources on enhancing innovation activities or implementing ideas.

Well, now after [the innovation project manager] was hired, these certain changes have been made. [--] they are of course quite concrete and even significant steps in that direction, it's been invested in.

It seems so from the variety of comments relating to the support, decision-making and efforts from the top management, that employees feel that the top management has realized the importance of innovation for the business and that the innovativeness of the organization should be enhanced, but that they do not know exactly how. Also the willingness to invest enough resources was questioned. Several interviewees stated that that 'some efforts' have been made and the 'direction' of the efforts seems ok, but concluded that there is still much to be done and probably no one in the organization

really knows how it could or should actually happen. Lack of direction as well as appropriate organization and facilitation of innovation activities are hindering effective organizational innovativeness.

General Sentiment about Innovation in the Organization

Many of the interviewees noted that significant progress with regard to innovation and openness in the organization had taken place recently. They recognized a positive change in for example general attitudes among the personnel and efforts from the part of the top management, but acknowledged that the company still has a long way to go to being a truly up-to-date innovative organization.

If we think a few years back, we have probably improved a lot in this, but we are still in a very early stage anyway.

Positive perceptions regarding efforts and progress seemed to provide a good basis for favorable views and behavior relating to innovation activities. Most of the interviewees showed a positive attitude towards innovation and the use of external knowledge inputs, and they recognized the importance of innovativeness for the company. Several respondents showed a development oriented and rather open mindset, and they viewed development orientation as sort of a part of their professional competence. This is illustrated in the following account:

The motivation for that [promoting and developing ideas] is very high at the moment, earlier it maybe hasn't been possible to do that. It's been a privilege of a certain group of people. In a way, the fact that we have to listen to the customer's voice a lot and hear their desires, so I do get a lot of my motivation from them, so that you can really explain to the customer that this is also feasible and not always just a no-no-no. Because nowadays a company simply can no longer afford to say that this isn't feasible. [--] Also this kind of a natural desire to promote and develop, and it must be out of some kind of appreciation for your own expertise and other kinds of factors like this, as a result of which you just have to assume a certain role, so if I go to a customer as a specialist and I say to everything that this is not feasible because this is how things are done by us and these are the products that we now offer to you, it's not possible to assume a position like that in the long run if you're not ready to start thinking about this innovation issue.

Several interviewees also mentioned that innovation related activities are fun and exciting, in addition to being required by customers and the management. The biggest barriers to innovation concerning the interviewees seemed to be related to facilitation, not their mindsets. However, although general thoughts about innovation were positive and rather open, the degree of openness

that they showed could be wider. The interviewees seemed to have at least an initial understanding of the benefits of openness, but the possibilities they perceived were somewhat limited. Some people even realized the limitations of their thinking themselves, as illustrated in the following two commentaries:

I am open to everything, I don't set any barriers. And frankly speaking, that's sometimes extremely difficult.

It should be so that you're especially sensitive to the ideas that come from the outside and that come from the users of the services and products, but this is also to some extent a mindset question again in a way, that we still have this idea that we know better than our customers as to what is good for them. [--] Although I lecture about this, I also find myself too often to be in this trap where again, that we discuss intensely among ourselves about what is the best solution from the customer's and the user's point of view...

Also the actual actions of the employees regarding external knowledge inputs were more limited than their mindsets might indicate. This again can be interpreted as a call for more facilitation – openness is possible, but does not necessarily become reality without guidance.

Contrasting views came up when asked about the attitudes of other employees towards innovation and changes in work in general. Some interviewees described a positive and even enthusiastic innovation atmosphere throughout the organization, while others felt that a lot of the employees were change averse and unable to think beyond work as usual.

everybody wants this and everybody wants to develop [--] I believe, now that I think about it, that people are well aware of our need to develop and renew ourselves, each and every one of us.

People must have gotten into a rut, like "I have been working on this journal for [years]...", and many people feel that "this is the routine, how it's done" and aren't at all interested in developing it.

Especially people that have been working for the organization for a long time are seen as posing a special challenge in the pursuit of the required organizational change towards greater innovativeness, as can be noted in the following commentary:

we should teach people who have been in the company for 10 or 20 years that now we would like things to be done differently, in order to have everyone to benefit from this more

widely – that's quite challenging. Many times it feels like people have sort of a battle fatigue, like "it used to be so easy to do it this way so can't we continue this way".

The way that things have been done in the past affects the present behavior of the organization. The operating environment and the business logic used to be significantly different, which still has lingering effects in the organization and the way work is being carried out. The new challenges in the business environment and the new products and services of the company call for new ways of thinking and acting, but getting rid of the burden of the past is not an easy task. Several interviewees brought up the mindset issue and pointed out how changing the deeply ingrained thought patterns and working habits is not easy, and that much still has to be done. Nevertheless, the need for thinking differently seemed to be quite widely acknowledged at least in the interviewed sample.

Overall, the interviewed sample seemed interested in innovation activities and willing to contribute. They also appeared to have a rather open mindset. An organizational barrier to innovation that could be detected from this topic was the perceptions of other people's change adverse behavior or unwillingness to contribute. Some of the reasons for these perceptions will be brought up in the following topic.

Cooperation and Understanding across Departments

There were mixed answers regarding the general cooperative atmosphere of the organization and the willingness of coworkers to take into account other functions' perspectives or the ability to understand them. Several interviewees mentioned that the atmosphere was good, but many also brought up self-centeredness and lack of cooperative behavior.

In my opinion we have quite a good understanding of [the operations and viewpoints of other departments], in my opinion we have a good atmosphere in the company as such, which I think is a pretty good basis for having people respect and appreciate others' work in here, and that way the understanding is there. In my opinion, the level [of understanding] is ok.

There are strong personalities in all these [positions], who are responsible for their own area and feel that it's the most important area.

Those who have a vision on their own work are mainly quite motivated and work hard on it, and those who have an understanding of the whole, they are mainly frustrated and impatient because here everyone is focused on their own stuff.

Some interviewees reported recent positive changes in the general atmosphere and mutual understanding and willingness to collaborate across functions. However, they all saw that people were still mainly focused on their own work, and that understanding and taking into account the perspectives of other functions is not at a particularly good level.

There lies [in the understanding between different functions] an enormous challenge. It of course starts from being able to increase this mutual communication so that people will hear in the first place that "oh, this is the way they think about this issue" and then learn to find that [the understanding]. In my opinion, that's really our development challenge that we find it.

The company is organized around functions, which has led to somewhat silo-based acting and thinking inside the company. The functional organization does not foster cross-functional or company-level understanding. People are mostly focused on the tasks and responsibility areas of their own function or area of expertise, and do not necessarily understand or even particularly think about the working logics of other functions, or feel responsible of or interested in contributing to things that are not directly related to their own work.

There has clearly been this problem that things easily get done only in one department and others aren't taken into account so much.

People are also not necessarily particularly open for ideas and comments from outside their department or even from anyone at all. Inward-focused expertise-based thinking may prevail at least to some extent at certain functions or in certain people's minds. The following account describes this situation:

I can imagine that there may also be [a rejection reaction] towards ideas [coming from other departments]. Maybe it's to some extent about a way of thinking that "they don't understand about our stuff". [-] It's quite easy to reject a comment by saying that "they don't understand or know" or that "don't come and tell us how our things are supposed to be done". I do actually think that the general spirit is quite good, but with individual issues it can be a bit like this.

These comments demonstrate noteworthy barriers for incorporating external ideas into the organization. Receptivity for other people's ideas and comments is an absolute prerequisite for open innovation – or for any kind of actual development in today's business world, for that matter. The

mindset of expertise where outsiders are regarded as ignorant and their opinions worthless does not work in the context of today's innovation.

Almost every department has their own systems and ways of using different tools, and the different systems do not really communicate with each other. Thereby, departments work practically very much in isolation, with information flow and communication across departments happening through scarcer methods such as common work projects, meetings and hallway conversations.

The information is scattered, they [departments] have different systems and everything. Of course this clear division of departments, it certainly has an effect on the information not spreading, and then people feel like the information gathered by someone else doesn't concern them because it's not theirs, that the others do different work from theirs.

As different departments are not very familiar with each other's work, ideas and knowledge that move across these boundaries might lose some of their meaning on the way. Not having a shared understanding of different issues, the interpretation of messages may vary considerably and not work in favor of the intended purpose.

Many of the interviewees pointed out that although cooperation and understanding between departments does not work very well at the moment, improvements regarding this have taken place during recent times. Systematic face-to-face information sharing processes and other common get-togethers are frequently mentioned as reasons for the progress.

[Understanding between departments has improved for example because] we have been doing these, we have for example meetings with the managers of different operations every other week. And then we go through topical issues department by department, and that's when you have a chance to hear what's going on in the other department, what they're doing, what topical issues they have ongoing. So it's by creating these kinds of situations that we're trying to find a joint view.

It is noteworthy to pay attention to the fact that these particular aforementioned meetings involve only the managers, which means that information is received and understanding is enhanced on the part of the manager only, and how he or she takes this forward to his or her own department, depends solely on that particular person.

There appears to be a willingness to take into account the viewpoints of other areas as well, at least on the part of some of the employees, but the will does not seem to be quite enough. Many of the interviewees said that they themselves do try to think more broadly and understand the actions and

interests of other functions, but that many of the other people in the organization do not. This is curious – most of the interviewees showed a rather open mind, understanding for the benefits of cross-functional cooperation, and a willingness to take others' perspectives into account in their own work, but they felt that other people in the company generally did not feel the same way. This appears paradoxical – if everybody says 'I do but other's do not', something does not quite add up. Of course, all of the employees of the company were not interviewed, and therefore, in theory, it could be possible that it was merely a coincidence that only exceptionally open minded people happened to be included in the interviewed sample. Nevertheless, it seems more likely – based on insights drawn from the empirical data as a whole – that people generally feel that a) they are acting more open mindedly and cooperatively than they actually are, and b) other people who might be just as open minded and willing to cooperate as they are, have less cooperative potential that they really do. These kinds of erroneous perceptions may function as a self-reinforcing vicious cycle – as people feel that others are not willing to cooperate that much, they will not try that much, which causes a perception that they are not interested in cooperating that much, which in turn discourages others from pursuing cooperative efforts with them, etc. This leads to a situation where there are not very many successful cooperation experiences that could encourage and motivate people to do it.

Despite of saying that they are open to more open discussions and cooperation, several interviewees admitted that their own work is obviously the first thing in their minds and affect the way that they think about things and what they do, and that their own work and experiences may guide their actions in the direction that is more in accordance with the interests of their own work than best for the whole organization. This is most probably one of the reasons why people get the feeling that others are not that willing to cooperate or understand other people's work.

A prominent discovery from the interviews was that the editorial department is viewed as unwilling to cooperate and as a generally difficult group of people within the organization. Several interviewees brought up the editorial department and journalists as not conforming to the agreed rules or processes and as not being able to sympathize with other department's concerns or to contribute to the goals of the entire organization instead of only their own work.

The journalists see that we're making a newspaper or that we're making a web newspaper, and that other issues are maybe not so much related to it [--] they work on a very short cycle, they work on the paper every day and then when doing some project – it requires a bit more time to carry them out, what we do on the background, and maybe they don't understand that, they think that sitting in meetings is enough and the work will be done, they can't see that it requires real work from somebody.

Even one interviewee with a journalist background described the general attitude of the editorial department in the following way, admitting that the prevailing mindset tends to be inward-focused and somewhat self-centered:

Considering the journalists, it's a kind of...there's this general attitude that the reader can't be right...

The following quite drastic commentary demonstrates the frustration that the uncooperativeness of the editorial department may cause in some people.

The journalists are the only ones who don't use [an IT tool], because, I've heard that they don't have time to use it, and this behavior of theirs is just being allowed. None of these people have the guts to say that nothing will happen before you act according to the common rules. It's the same thing with these requirement definitions, if something is required from me, then why isn't the same required from them? Why am I writing five times stricter definitions and they aren't? [--] it causes a bit of this that I don't want to do these either if the same is not required from everybody.

Overall, the perceptions of the willingness and ability of people to cooperate across departments and understand as well as take into consideration the overall workings of the organization and other functions' perspectives varied quite considerably. Among the interviewed employees, nevertheless, the basic attitudes seemed mostly positive. The major barriers to better functioning collaboration appeared to be on the organizational rather than attitudinal side. More facilitation and guidance as well as more favorable organizational choices might bring significant improvements to the current situation, as positive attitudes are evidently not enough. Urgent matters relating to each person's on work tasks and deeply ingrained thinking patterns easily squeeze out more open thinking if it is not facilitated somehow. The cooperation, communication, understanding and perceptions between functions are factors that influence the mobility of ideas and knowledge within the organization, as they affect how people communicate with each other and how messages from others are interpreted.

4.2.2. Realized Innovation Efforts

Ever since the innovation strategy was introduced, certain amount of specific efforts has been made in order to increase the flow and progress of ideas within the company. The most systematic means of gathering ideas that are currently used in the organization are 'idea campaigns' and an IT tool that employees can use to present ideas. In addition, a project manager responsible for innovation

activities was appointed, and an 'innovation group' was established to go through some ideas. In this sub-section, the interviewees' views of these efforts are discussed. It is reasonable to bear in mind that a stronger emphasis on innovation is a rather new development in the company, which means that the efforts have been made only quite recently, and they can be said to still be in a trial stage. This means that people did not have considerable experience of working with these practices yet, and only initial feelings and observations could be reported. For this reason, some of these practices are quite briefly gone through in this section.

As a reminder of the strategic decisions regarding the implementation of the innovation plan of the company, presented earlier in this thesis in the introduction of the case company under the topic 'Strategy and Innovation' , this is how the innovation project manager summarizes the time-related goals that have been set for the development in embracing innovation:

The target that was set for this year was activating the personnel and increasing the awareness of innovativeness. The next year's target is focusing, so that next year the innovation is focused really strongly to these relevant areas, and the following year's target was set to be integration, that we could get this project merged to be part of everyday work during the third year at the latest, maybe already next year.

According to this plan, the efforts that had been made by the time of this study were aimed at activating people and making them aware of the innovation work, bearing in mind the focusing and integrating goals of the next two years.

Idea Campaigns

The idea campaigns are introduced by the CEO each month in a personnel gathering where all the employees are present. Each campaign is about a specific topic that ideas are requested for, and people are encouraged to bring in ideas concerning that topic within the following two weeks. The idea suggestion tool is the main channel of introducing these ideas. Special idea generating sessions are also held around the idea campaign topics. Attending these sessions is voluntary, and anyone in the organization can participate. This is how the project manager responsible for innovation activities describes the idea campaigns:

The campaign is launched once a month in a personnel debriefing and it lasts then for the next couple of weeks. And it's always then also visible in our tool, [the idea suggestion tool], so that anyone can feed an idea in [the idea suggestion tool] whenever they want, but they

are then also supported by this idea generation session or sessions, and anyone is allowed to participate in them, this has been one way of trying to activate people.

Several employees in the company have shown interest in the idea campaigns and participated actively. The innovation project manager and the CEO both mentioned being surprised by this, indicating again some level of disbelief in the innovative abilities of the organization. The innovation project manager tells about the idea campaigns in the following way:

I've been surprised each and every time that there have been more people than I expected. We started the first campaign [(details of the campaign)] If I don't remember completely wrong, 60 people visited and we got at least 60 new ideas. There was some cake or buns or something offered and maybe someone came just to get buns and then wrote some message, but all the same, so surprisingly well. There have been people who have surprised me. But of course most of the people that come are the ones whom the topic concerns the most. But you can clearly see that there are people who are only interested in the issues that concern their own work, and then we have a group here, a few handfuls of people who are active in everything, they participate in all events.

The idea campaigns have been quite successful at least in amassing ideas and spreading awareness of the significance of innovation and certain themes in the organization and giving people positive experiences about development activities with fellow employees. One of the interviewees expresses the positive experience in the following way, emphasizing amazement over the succeeded collaboration of people from different positions and departments:

Particularly important from the point of view of web development has been this day or afternoon, where people from all departments were put together, and there we started to discuss how our web pages would look like in the future when they have been renewed. During the time that I've been in the company that has maybe been one of the greatest moments – that regardless of people's positions or what their tasks were we were able to put together a great group where people from the editorial department, the technical side and web development were very much on the same page about how [the company's website] will look like in the future. So that was a quite surprising and wonderful experience in my opinion, it's maybe the most memorable thing, when we all started innovating together.

The story illustrates how concrete organizational efforts and active involvement of people can help get messages through as people realize them through firsthand experience. Personal experiences like these can alter the ways the employees think and act in the way that communicating by words only

never could. The following account of another interviewee highlights the positive effect of the diversity of opinions that were presented in the idea campaign session:

In my opinion [the idea session] worked excellently, there were people from different departments in the company who do quite different kinds of tasks and everyone of course mirrors that aspect a little in their own use and their own work, and in my opinion we had really good discussions there because there are quite different views on these matters.

The interviewee pointed out how fruitful it was to get different opinions from a diversity of participants. This insight from sessions like these might also help people realize the usefulness of ideas and views from outside the organization's boundaries as well. The interviewee also pointed out how the discussions can help create mutual understanding among people from different functions, which can be very helpful when the ideas are implemented:

And in my opinion, they're good already because new ideas will come up and we're able to put them forward, but also because then people from different parts of the company get to understand why things have to be done in a certain way. So it also helps in getting the idea forward and getting it through when the time for its realization comes.

However, even if the idea campaigns and the themed idea generation sessions have been positively perceived by at least part of the employees, the handling of the ideas gathered in these sessions is seen as something that does not quite work properly yet. One point brought up was that ideas should be developed further as well instead of just gathering ideas.

These innovation sessions that are organized around certain themes are pretty good, but somehow it should be...when there are so many ideas, so that somehow there should be a common time when the ideas would be gone through together and they would be thought about a little bit more also, and not so that a huge amount of ideas just go to one person who has to give opinions, but so that the ideas would also be developed a bit further there as well.

The idea sessions have worked quite well in activating people to generate ideas and in enhancing the mutual understanding of the employees from different parts of the organization, but the actual utilization of the ideas is not very well organized yet. The sessions have brought people positive experiences about the innovative abilities of the organization, which is in accordance with the strategic plan for the year. Increasing the understanding of the benefits of different views works in favor of opening up the innovation activities of the company.

Innovation Project Manager

As mentioned previously, as part of the innovation efforts of the company, in the beginning of the year 2010 a project manager was assigned to be responsible for the innovation activities of the firm. Several interviewees mentioned that this newly recruited innovation project manager had been very helpful in enhancing the innovative ability of the organization. Many of the interviewees praised the improvements that had taken place after the nomination of the project manager. Having a person responsible for advancing the company's innovativeness had brought about significant changes for the better. Many of the interviewees mentioned the efforts for systematizing the processes for innovation that the project manager had been doing as important progress.

[the innovation project manager] has done a really good job in that we now have been able to progress many issues that have previously been in a poor state. We already have some processes and models for how these things can be taken forward.

Getting support and advice from the project manager when not knowing how to proceed with an idea or a problem was brought up as very useful.

Now that we have the specifically assigned person for these issues, you can always get help from her. [--] We have a person who helps at least in what should be done in a certain situation and how the issue can be taken forward.

Particularly more complex issues that for example concern several departments at once were seen as an difficult to get progressed without a specific person handling them.

[the innovation project manager's] role has been enormously important in this. So that there's someone who takes the reins and puts things forward, especially if we want something that goes across departmental boundaries.

It was pointed out that it is good that there is someone to remind people of doing the innovation related tasks. It was brought up that it is not necessarily that people do not want to do them or that they would not be interested, but other tasks just in a way run over them. This brings up the issue of facilitation – the innovation activities need to be facilitated – merely mentioning that something should be done and expecting that people immediately start doing so by themselves is not a very well functioning method.

If I have understood correctly, there's now the [innovation project manager] who keeps track of where we are going and reminds people and sends messages also to the managers that "you should handle this now". So there is someone who oversees things to some extent. I don't think that it's that people wouldn't

want to, it's just the issue of time, there are so many things one should have the time to do. It's good if there's someone who reminds you that, right, I was supposed to do this thing, too.

The positive comments about the innovation project manager illustrate how assigning specific human resources for enhancing the innovative activity of the company is extremely beneficial.

Innovation Group

An 'innovation group' was established for going through innovation initiatives. It has not been in effect for long, so there are not so much actual experiences of how it works, but this is how some of the interviewees felt about it at the moment. This is what one of the members of the group said about it:

[the innovation project manager] has now developed this innovation group, I'm also in that group. People in the company who have been recognized to have skills to process ideas have been selected to be in it. I'd wait and see how it starts to work out. [--] It's not yet... it's in a very early stage, so it's difficult to evaluate how it might work out, but it could have potential.

One of the interviewees expressed doubts about the group's possibilities to make an actual impact:

Well then we have this innovation group, which is a virtual group, like a virtual dimension in this functional organization, and it can't really do much more but raise some dust, and for a while there will then be a lot of dust in the air, and then when you wait for a while, the dust will land and everything will be fine again. As it's a virtual organization, so it doesn't have the strength to take things further.

This interviewee called for more concrete structural arrangements for innovation work:

It will not function as such for long. It will in a way die of its own smoke if the structure is not somehow made concrete, and one way of making it concrete would be that, be it a line organization, the basic organization model whatever, for example this functional that we now have, in every line there should be one development manager who is dedicated to using his/her time to further these new issues.

All in all, not many comments regarding the innovation group were expressed, and more experiences about it are needed to draw conclusions on how it works.

Idea Suggestion Tool

The idea suggestion tool is an IT tool brought to the organization by the parent company. The tool is used for gathering ideas from the personnel. Anyone can feed an idea into the system, relating to basically anything. The ideas are then sent to certain specified people who are responsible for the area that the idea concerns, and they then make sure that the ideas are processed and approved for further actions or decided not to be acted upon. A reward system for the idea suggestion tool is also in place, employees are given points for the ideas they feed into the system, and small monetary prizes or gifts are given for successful ideas. In addition to this, each month one person is announced the 'renewer of the month' in the staff newsletter.

The interviewees expressed a considerable amount of criticism towards the tool. At the time of the interviews, some alterations to the way the tool was used were already on the way. For this reason, the problems relating to the system that came up in the interviews are gone through here quite briefly. Some of the problems may already have been tackled by now.

The main function of the tool was seen as being a channel for the personnel to express any ideas they might have, especially if they do not have direct contacts to people who can make decisions regarding the particular issues that their ideas concern. Several respondents pointed out that this was important – giving people a clear means of putting their ideas forward, and said that the idea suggestion tool was a good thing because of that.

It's of course good that everybody has a chance to put ideas there, at any time and whatever comes to mind.

Several interviewees also pointed out that an IT system like the one that was used was good for gathering ideas, because when ideas are fed into a system, they are documented somewhere and do not vanish as easily as if they were just randomly mentioned to someone.

If someone just gives a development idea vocally or by e-mail, it's easily put somewhere away and is not handled at all. But there [in the idea suggestion tool] it will stay in the system.

It's a pretty good system in my opinion, in a sense that they [ideas] are now documented somewhere if and when people use it.

The latter comment, however, brings up doubts about whether people actually use the system for introducing ideas. Indeed – many of the interviewees who said that they thought that idea

suggestion tool's existence was a good thing for the aforementioned reasons, however, did not feed ideas into the system at all or did it very rarely. Reasons for this were manifold. Many of the interviewees said that the system was either difficult, uncomfortable, or time consuming to use.

In my opinion, the direction in that system is right, but maybe it should still be made a bit easier to use.

The varying comments about the ease of use might be because of personal preferences or abilities to use or learn to use different kinds of IT systems, or simply due to differing levels of time taken to learn how to use the system. It was also pointed out that using the tool was seen as extra trouble, having to open up the system and remember the password for it and so on.

it's probably quite a good system as such but I think that it also has this, again it's a separate system that you need to log into. So you can't find it there easily like, "now that I've got this idea, well, let me write it in there now". But you have to really go through the trouble of logging into the program and it can be, if you don't visit it very often, you can be a bit lost with what were the passwords again and how does this work again. In the end there are a few too many slowing factors. That's why I feel that maybe as such it doesn't quite serve the purpose it was originally designed for. So there should be a sort of a lower threshold for using it.

Some of the respondents also brought up mental barriers to introducing ideas that they were not sure would result successful, or ideas that they perceived as being too small or insignificant. One of the interviewees mentioned that going through the trouble of feeding an idea felt reasonable only when an idea was quite big or significant:

Well, I myself have put there only the kind of ideas that need a bit bigger decisions. [Interviewer: "So you prefer to feed only bigger ideas into the system?"] Yes, that's how I feel. It's also because it takes some time anyway when you write down your idea there, so maybe you don't want to go through the trouble of writing down the smallest things.

It was considered more natural and convenient to mention the ideas directly to a familiar person.

When I get ideas, I don't usually write them down in [the idea suggestion tool], it goes so that when I walk there in the corridors, I just grab someone by the sleeve and say it directly to them immediately, or I'll say something like, hey remind me that I tell you this thing on Monday... So it goes like this, in a more practical way, more concrete.

It was also pointed out that the system was good for introducing ideas that concern working practices or regard several departments at once, inferring that the system is good for ideas that are more difficult to address to particular persons.

Typing an idea down into a system requires more consideration from the part of the employee. Having to formulate the idea in a written form and submitting it for evaluation makes people think twice before putting the idea forward. This may result in many potential ideas being left unsaid, as people do not feel comfortable presenting ideas whose potential they are unsure of.

When it's been written down, it's more serious as compared to if I just mentioned it just like that, hollered to you from here. [--] Maybe it feels too bureaucratic somehow... [--] it's like as long as we throw these ideas around just verbally, they're not so official, or something like that.

Despite of the type of comments presented above, it was also mentioned that some people may use the system as a kind of a general feedback tool for smaller suggestions. This implies that perceptions of the intended or suitable use of the system vary.

sometimes there are, maybe not innovations or even ideas, but maybe it's also some kind of a feedback system for some people, so that they feel like they got to say their thing...

The point taken up in the previous comment was also a significant issue impacting the use of the tool – people were encouraged to feed all kinds of ideas into the system, which had resulted in an abundance of small ideas or suggestions relating to comfort factors at everyday work and the like. Several interviewees mentioned the ‘wrong’ kind of ideas in a way ruining or interfering with the actual purpose of the tool.

We should now be able to freely take new ideas to this system, where they encourage us a lot to write down our own ideas, but I can admit that I haven't myself adopted this service, or this possibility, with my own ideas, so the whole point has been watered down now that people write down suggestions for development which aren't necessarily even related to our business or to developing our business fields, but they're more related to some comfort aspects in the office or the like, so now we have kind of lost the point with the system because of all this, so it's not, it doesn't necessarily serve its purpose now in the way it was supposed to. [--] .. people even try and come up with something as silly on purpose and put it there, so it's like you kind of want to deliver your message, those that actually can develop our business activities, through some other channel to inform the management about it, rather than through some general forum like that.

The previous commentary shows how welcoming all kinds of ideas may distort the purpose and hamper the potential of a system like this. Using the tool as a multipurpose system may be a bad idea, as people's perceptions of the intended or actual use of the tool may direct their behavior in an adverse track. Having all ideas go through the same system also makes the processing stage harder with all the diverse mass to be dealt with.

It was mentioned that some of the people who are involved in responding to the ideas experience it as somewhat of a burden.

Many of the managers find it strenuous.

One reason for this was unclarity concerning the processing stage. A systematic approach to handling the ideas that come through the system was lacking, and specific guidelines or help was not really provided for dealing with the ideas. The interviewees mentioned problems with processing the ideas, as they might be vague or resources may not be available to allow approving all the ideas that were perceived good.

It's not very clear in what to do next with an idea. And there are these ideas that are actually good, but I can't say when we could really make them happen. What to actually do with them then?

The following interviewee also mentioned how handling a big mass of ideas can be difficult and pointed out to the processing problem.

Then there is that problem too that the ideas can get lost in the mass, so we should somehow be able to process them and go forward with them as well.

The following interviewee described how it is hard to respond to suggestions that are not very concrete, and points out how people might be expecting clear responses to their ideas and be disappointed if getting a response takes time. The current processing practices are most suitable for ideas that can be readily implemented.

I think it's a pity to criticize when people have given feedback and ideas, it's a wonderful thing per se, but I have to admit they aren't often very concrete. So that you could actually give an answer straight away, and I often think that these people actually expect me to answer right away, that I have a solution proposal at hand and it's going to go forward and things like that, and no, it isn't really like that... So I also think about how these people feel about this system. And there is the point that, I can see that many people are a little

frustrated because the decisions can't always be made by only that person who received the feedback. That person will forward the idea to someone else, who will also put it forward to someone else and so on, so there is a fair amount of ideas that haven't been attended to yet and then people will probably feel like "I mentioned this before summer holidays and no one has still made any final decision on this".

It was brought up that it would be good to cluster the ideas and suggestions into different categories for getting more use out of them. Currently the ideas were categorized and handled mostly by department, and linkages between ideas were not really drawn. There was also no systematic means for accumulating ideas that concern the same topic to a larger aggregated pool to be examined at later points in time.

Many interviewees mentioned that it was easier and faster to implement the ideas immediately in their own work or tell the idea to a person that they know might use it or have the power to make decisions concerning it, and that using the idea suggestion tool felt like an unnecessary detour.

If I know that some idea is going to be realized anyway, the [the idea suggestion tool] process is then too slow. That's the first problem. The other issue is that.. I don't think there is a lot of time for writing it down in the system. And I can say the idea out loud directly and process it there and then, since I know that it would go to that same person anyway, the person to whom I can say it directly. That's one reason. Then there is perhaps a third reason, that I somehow feel like I don't have the energy to write down some minor issues, so if I did write down something, it should be something really big, something brand new.

By the people whose work include a lot of development activity as such might perceive the idea suggestion tool as a channel for expressing ideas for the people who may not have other means for getting their ideas heard or implemented, as brought up by the following interviewee.

Well, since I work with these development tasks, those ideas will basically go straight to the development processes, so I will be informed about them in any case [...][the idea suggestion tool] is a channel for people who don't have direct contacts, who aren't practically involved in the development work. I get paid for development work, but I don't think that I'm getting paid for using [the idea suggestion tool] and give others extra work that way.

Some of the departments had another IT system that partly overlapped with the idea suggestion tool's function. The people who used this other tool in their daily worked expressed preference for using that tool instead of the idea suggestion tool for the ideas that they knew would progress better through the other system.

As an idea, [the idea suggestion tool] it's pretty great, but in a way we already have a smarter system, [another IT tool].

Several interviewees also pointed out that putting an idea into the idea suggestion tool causes extra work for people who have to go through the ideas and respond to them, and for this reason as well they preferred progressing ideas through other ways.

To be completely honest, I don't write down practically anything in [the idea suggestion tool], because I generate lot of ideas on a daily basis with these people that I work with, so the ideas get processed quite well right there on the spot. I have sometimes joked about it with [a colleague] and [another colleague] that with these movie ticket rewards [in the idea suggestion tool], we would be going to the movies all the time if we wrote all the ideas down [in the system]. And on the other hand we have a tool that has been in use for a longer time, and it works so that when you come up with an idea which can be realized immediately, we usually write it down there, because through the system it will go to the person who will realize it. If I write it down in [the idea suggestion tool] to get points [to get rewards], it will go through a long process and I would have done it for personal advantage. I'm a good employee. I have this company's interest in mind and I will write the idea down in [another IT tool], and not [the idea suggestion tool].

Feeding ideas into the idea suggestion tool that could be more easily put forward and implemented through other means was partly perceived as a selfish act – hunting for the points and rewards given for ideas in the idea suggestion system. One of the who was one of the people who's task it was to go through some of the ideas from the system brought this up as well, saying that extra work is caused just so that people would get the rewards from their ideas. Some of the interviewees also perceived going for the rewards as unnecessary or even somewhat embarrassing.

When people implement ideas directly in their work or throw the idea to a person they know could use them, these ideas are not documented, their progress is not followed (for example if lack of time causes an idea to stagnate, it might be forgotten for good), and ideas cannot be aggregated and combined for a possible greater worth.

The idea suggestion tool's purpose is obviously unclear, as people seem to have differing perceptions of it. This also forms part of the problems that are faced in the processing stage. The abundance of criticizing remarks on the idea suggestion tool show that IT tools and other means of systemizing work should be carefully designed to actually do the work they are supposed to do, it must be made

easy and desirable for people to use them, and they must fit the organization's other systems and ways of working.

The following problems can be identified as the main problems regarding the use of the idea suggestion tool:

- Unclearity concerning what kind of ideas should or could be fed into the system
 - should be elaborated already
- Emotional barriers to feeding ideas
 - not sure whether it's a good one or not
 - seems silly or too official
- Rational barriers to feeding ideas
 - easier to implement immediately in own work
 - easier to tell to someone whom the idea concerns
- The processing stage
 - not clear how it should be done
 - time dimension not well managed
 - often not enough information in the decision-making process

The measures that have been taken in the case organization to improve the innovativeness of the company have worked fairly well in activating at least some people to generating ideas and discussing idea campaign topics together. Organizing activities around idea generating and processing also sends a message that the issue is regarded as important by the management. However, these are only first steps on the journey to become an innovative organization. Additionally, the current actions focus more on internally generated ideas, and thereby characterize employing a rather closed model of innovation.

4.2.3. Major Organizational Factors Influencing the Flow and Progress of Ideas

In this sub-section, the major organizational factors that influence the flow and progress of ideas within the company that could be identified in the empirical research are presented. Many of the factors that are presented here have already emerged in some of the previous sections of the empirical analysis. Here they will be presented in a structured manner and elaborated further. The listing of the factors here is in a sense a synthesis of the findings of the research – the list contains the main organizational effort areas that should be considered when attempting to enhance the

utilization of external ideas and to improve the overall innovativeness of the organization. These factors came up more or less subtly in a variety of topics, indicating their significance and wide influence area. The major organizational factors were related to the following categories that will be gone through in this section: processes; structures, roles and responsibilities; resources; management; and communication. Each of these categories will be elaborated further in this chapter, with detailed findings presented regarding each factor.

It can be noted that all the key factors that were presented in the summary of earlier research in chapter two are present in this listing. The connections between the key factors in the earlier research and the presentation of the findings of this empirical research are illustrated in the following table.

Processes	Systematization
	Knowledge management
	Evaluation of ideas
	Tools
Structures, roles and responsibilities	Roles
	Responsibilities
	Cross-functional collaboration and face-to-face communication
Resources	Time
	Investments
Management	Facilitation
	Change management
Communication	Perceptions and understanding

The rest of this chapter is dedicated to elaborating on these key areas of organizational factors that affect the processing of ideas and knowledge.

4.2.3.1. Processes

A systematic process for handling ideas would include the presenting (or receiving) the ideas, evaluating them, possibly elaborating them, and deciding on whether and how the ideas would get implemented or tried out and developed further. There were no actual systematic processes for handling external ideas in the case organization of this research. An attempt in that direction was in

place – the idea suggestion IT tool with the related, somewhat stumbling and diverse processes for going through the ideas, but it did not fulfill the purpose of or function like a systematic process for effectively handling all types of external ideas. Additionally, although externally originated ideas could be fed into the system, it was not encouraged specifically. Also the way the ideas were processed from the idea suggestion tool did not quite support externally oriented inputs, as they might be more difficult to present in clear written form, evaluate and elaborate on, as well as to decide on which department they might belong to.

The CEO's response to the question about whether there are systematic processes for handling external ideas exist illustrates the situation quite well:

This is a tough question, what should I say... we don't have any. We don't have any defined practices, as far as I know. [--] So we don't have any, and obviously there's no systematization. This is now part of this system of ours, so this probably describes the fact that this whole process of building an innovation system and modeling it is important work, because we don't have anything like that.

The CEO's comment also shows that the issue is considered important, and that it is recognized that creating more systematic practices is seen as one answer to making the organization more innovative.

This is how one of the interviewee describes how ideas are moved around in their department:

So it's basically just email, nothing more special than that, so we don't have any kind of forum as a channel for those things, where they would live on, so it's pretty much just emails where they lie...

Some departments and some individuals have more systematic ways of doing certain innovation related things, but they only concern a limited amount of issues and people. These practices have usually been formed through the actions of individuals and are not spread across the whole organization.

In the [--] department the thing is that we sell a lot of data from outside sources, and so we maybe get these ideas more easily from there, so it has developed into a more process-like system.

People in other parts of the organization are often not aware of how things are done elsewhere, and systematic sharing of best practices is not done. In part, this is probably because of the differences of

the work between functions, and the function based structure of the organization also strengthens silo based thinking.

I don't have a clear understanding of how these things are done elsewhere.

People were mainly concerned with their own responsibility area and did not necessarily even consider that people from other parts of the organization might have something useful or relevant to bring to their work. Some individuals also occasionally shared their practices with some other people, but this was mainly based on personal relationships between these individuals and not a result of following a systematic knowledge sharing process.

The following rhetorical questions posed by an employee points out how it is unclear how the processing of ideas should occur and which people should be involved at which points.

there should be more clarity, as in what are the frames and restrictions on how you can proceed and how certain things can be taken further. Like what kind of approvals you need from different people, that's something you often have to go back to.

Generating or acquiring ideas was generally not seen as an issue, but processing them and advancing them is considered to be the main problem. Several interviewees mentioned that ideas do come about, but they are easily left unprocessed properly and nothing really happens to them.

Refining the ideas, which is very important, there is usually very little time for it and the process should be better in this sense, what to do with the ideas.

quite often the ideas just remain kind of floating around, so, should there be some process that would be somehow described, in some way, so that the issues would go forward... So we are kind of, this our way of doing it, we through a lot of ideas in the air all the time, but we haven't had a person who would have had resources to take the ideas forward, so that the ideas would not always just remain hanging in the air, unless you force it through somewhere.

The previous interviewee brings up the lack of clear processes, responsibilities and resources as the major reasons for this problem. The last remark also points out the role of personal power and determination in getting ideas further.

Some resistance and disbelief against more formalized processing of ideas was brought up. The biggest reasons seemed to be mental barriers for introducing ideas 'officially', and perceiving processes as too strict and lacking necessary elements for successful idea progressing.

I think that the general atmosphere is in a very central role, and also the possibility of kind of free processing of ideas – can you throw ideas spontaneously at someone, so that you get feedback on it. Because if it's really mechanical, if we have an idea and we put it on a conveyor belt and it goes through all kinds of processes. I suspect it won't become anything particularly great.

One of the problems that came up in the interviews was that in addition to not having well functioning systematic processes for many innovation related activities, the processes and formulated practices that did exist were not always followed as they were supposed to.

There have been attempts to have common practices in this, but then getting everyone to really work in the unified way is perhaps the most challenging part...

More than one interviewee brought up a tendency of people to disobey rules and jump over processes that have been designed to facilitate innovation related activities. Not following common processes demonstrates lack of commitment, disrespect for the people who have stated that they should be followed, and discourages others from following them.

We have this tendency that we don't necessarily keep our word regarding things we have agreed on – So we have an organization where we can walk over some issue just like that and that may be the end of it. And regardless of whether there has been for instance a clear decision by the board of directors that we will do it, it can still happen that [...] we just don't.

It is very confusing, responsibilities and people's tasks... we agree on something and then it can be two months of doing something else completely, when some others have agreed somewhere in the middle that it wasn't such a good idea after all, let's do it like this instead...

The previous interviewee points out to the lack of clear responsibilities as one of the key reasons causing this problem. Another interviewee figured that poor communication was partly behind the problem. The way people were wished to operate was not necessarily stated clearly enough at any point, for which reason the employees' own judgments and preferences ruled the way things were being carried out. This interviewee called for clear articulation and sturdy management to bring order to the current random behavior:

I guess it's because no one has really said it in the first place, no one has actually said how they wish for things to be carried out or, on the other hand it tells you that things are important per se, but maybe in real life they aren't the most important ones, so we should

have someone clearly announce that this is what we do and how we will act on it, period. Not so that we improvise and skip the processes and do it our own way.

The following interviewee brought up the lack of punishments as one possible reason for disobedience of processes or rules.

And then if someone comes to tell you that from here on out we do it like this, why is it not accepted? Maybe we don't have any punishments for cases where someone doesn't follow the generally agreed rules. No one cares.

The previous comment demonstrates the frustration that the interviewee has accumulated over time as a result of repeatedly facing situations where established rules or procedures had not been followed by other employees. It is a good example of the adverse effects that unfavorable behavior of other people may have on individuals and thereby on the entire organization.

The ideas that are decided not to be acted upon immediately or soon are not handled systematically. There is no storage for ideas or a systematic practice for going through some ideas later to see if they had applicability at a later point in time, which causes a lot of potentially useful ideas to vanish.

it would help if the ideas were stored somewhere so that they would not be forgotten. The flow of emails is so huge that when you have some good idea you came up with a couple months ago, you may easily lose it among your emails and delete it before going on a holiday, so even if the idea wasn't possible at the moment, how could you return to it, maybe after six months when it would be technically possible to realize or something like that... So for instance what we have been discussing in the brainstorming meeting last week, I hope that I can keep it all in mind all the time, I try to check up on those ideas every week, but then you can easily leave some idea be, because, well, it wasn't possible yet after all because the technical platform was too challenging or something like that, so now in the middle of my own work I may forget about it completely before it comes up again in some six months.

So it's kind of like, it's all fine until the point that we reply and say thank you, we will forward this issue, but in reality it happens that we don't have time for it now, for a good idea, if it's not some visible bug in a program or something like that, it will get lost or drown underneath everything else. You could sort through them sometime and reconsider them, so we should have some kind of a common practice for that, too.

All ideas can obviously not get executed or developed further immediately, but there is a clear lack of managing the time dimension of handling ideas in the organization. In addition to over-emphasizing

the short-term when it comes to decision-making and resource allocation, idea masses are not managed over time – the time dimension of decisions is not incorporated into the process of going through ideas.

The following story brings up several problems that the organization has in idea processing. Firstly, the account points out how slowly ideas might get progressed. It also points out the significance of an individual's efforts to persistently drive the idea forward in getting it through. The usefulness of developing ideas together with other people is strongly illustrated as well.

And then there is this latest case which is actually, the idea was from outside, I brought here about a year back. But it was put into practice only this year, and before we even understood its significance in the long term for our sales, it hasn't really broken through yet, but the greatest part about it was that I got to brainstorm the idea with another unit [of the parent company], which continued to refine it into an absolutely great service combining the web and print and then it can also serve this specific field [--] So I just think that this was a great example of how you persistently process and work on the issue, and when it's come out, then ok, maybe you haven't yourself gone through too much trouble to market it, to improve it but then someone from the outside can see it as more complex and develop it into some wonderful concept. And as soon as that person saw it, they immediately discussed it with their interest groups and that they're going to have one, too. [Developing the idea further was helped by] the long explanation of why it would make sense and kind of how the product would look like, so we couldn't explain why it would be good for us to adopt it into use, but when you saw it from a long perspective and especially when you saw it from a longer perspective with the help of this colleague, then maybe it becomes this good thing, something worth a thorough innovation process.

Person dependency and arbitrariness

Getting external knowledge and ideas into the organization happens mostly in a rather random fashion. The search for external knowledge inputs is rarely systematic, although a few formal surveys are executed yearly and a couple separate investigations concerning specific topics have been carried out. These have been for the most part fairly traditional customer satisfaction surveys or the like. Customer feedback seemed to be overall the primary source of external comments that are being collected and paid attention to.

Many of the interviewees reported incidents where useful ideas or knowledge merely 'came up' in a sense as a side product of another activity.

Well it's maybe more like things that are related to free discussion, things that come up that way, and then some people can notice like "oh, that's actually interesting, I have to think about that a bit".

The gaining of external views is for the most rather passive and reactive in nature. Knowledge inputs from outside the organization are sought for and picked up to some extent at certain occasions, but the majority comes simply by passively receiving. Reacting to them is also not very systematic.

there's like no dialogue outwards on a broader scale, so it's more like when we get some feedback we respond to it and try to react to it in one way or another, but there isn't any kind of a consistent system.

Nevertheless, the interviewees mentioned looking outside for ideas or knowledge while going about their own daily work when they felt like inputs from outside would be relevant. The array of sources where they looked for the inputs was, however, not very extensive. The primary focus seemed to be on customers and competitors, and suppliers to some extent. They also rarely searched for or took notice of ideas or knowledge that did not directly concern their own work. When they did, this was usually a consequence of a more personal or direct relationship with a colleague, and common work projects or informal conversations worked as a trigger for taking notice of external information relevant for someone else in the organization. Lack of time was mentioned as a major reason for not searching for more external information.

There are no systematic processes for putting forward external ideas that are not necessarily related to the original recipients own work tasks. There is the idea suggestion tool and some meetings where ideas can be presented, but they do not really fulfill the purpose of providing a well functioning systematic means for moving all kinds of ideas forward. Sometimes ideas are presented or processed in meetings, but bringing an idea into a meeting of some kind always happens as a result of a decision that an individual makes, it is not a systematic, widespread way of going about idea sharing in the organization. This results in many ideas to be left unsaid. As one of the interviewees mentioned, several ideas result from for example meetings with external contacts, but a lot of them are never expressed forward:

I haven't had one meeting [with a client] where I didn't come up with some kind of ideas. But the thing is, how do you go from there, so that you don't just leave it at that...

The following interviewee points out how the lack of systematic processes leads to person dependency.

We don't really have a system for it [handling external ideas]. Now it's more like, I'm guessing that the majority of those ideas never get heard anywhere else but by that one person who has happened to hear them somewhere. And those ideas that do perhaps go somewhere, they will move then like, through unofficial conversations...

The flow and progress of ideas is very much person-dependent. Individuals have significant power in deciding whether an idea moves forward or not. Individuals make judgments and decisions about whether an idea is worth putting forward and who the person to be informed about the idea is. If it is not clear which department or which person would be the right one to catch an idea and take responsibility of its further development, there is a strong likelihood for the idea to die out.

So it really depends maybe too much on individual people, as to who takes them forward and how they feel about them, like "I'm now going to my summer holiday, so I don't think I'm going to take this further now..".

This means that each employee is in a sense a gatekeeper, making decisions based on their individual understanding and personal opinions. Each individual's way of working and personal networks within the company also affect how and when ideas move forward, and if they move at all. As the following account shows, the decision of to whom a certain idea should be introduced depends on the knowledge and judgment of the person who possesses the idea at the outset.

It probably depends a lot on the person actually, how it goes. It goes probably in a pretty random manner. I myself make the choice based on, I decide whose job it is in my opinion, which product manager, and then I go tell that product manager.

Also the receiving individual in the case of a presented idea has significant power in deciding whether to do something about the idea or present it forward. This commentary is a good example of the gatekeeper role of individual employees:

I can deal with these things quite independently so that I do this kind of, I call it an acid test, so if the idea doesn't pass it I won't take it forward, so in a way I decrease the workload on the CEO and the board of directors. [--] I go through the whole thing and then I just make a note on the last line about whether this fits our strategy and whether or not I'm going to take it to the board of directors. If it's good, I'll take it to the board of directors where they decide that the idea will be proceeded with.

People seemed to have a tendency to prefer presenting ideas in informal contexts to people that they know. One of the interviewees brought up how informal conversations within own department – thereby familiar people – are a convenient way to bring up and discuss ideas.

Of course it's easier within the department to throw around ideas in passing, when having coffee or somewhere like that.

It was noted that just throwing an idea to someone informally did not secure the idea's proper processing. It is left to the receiver's judgment and available attention to determine how the idea will be handled.

But of course these [ideas] that are thrown to some other department, it's completely up to them to decide whether they do something about it or not.

The following employee points out that it is difficult to get through ideas that concern several departments, implying that as systematic processes for introducing and processing ideas like these do not exist, ideas that concern several more remote parties are difficult to get through.

Of course there's also that issue, if the idea concerns many different departments, so, to make it happen... [--] So the more complex the thing is, the harder it is.

The following account points out several important issues concerning how ideas get to move forward. It affirms the person-dependency and points out the reactive nature and short-term focus. The lack of systematic processes and clear responsibilities concerning idea processing are brought up as hindering factors, as it results in a situation where more urgent and familiar matters to dominate.

earlier we have probably also had this practice where, if a salesperson received feedback from a client, the salesperson may have said that this is an important client for us and has done whatever the client wants... and that's not very consistent either, that we bow to everyone in whatever they want, it has been a little short-sighted. So the development process has been pretty much that we have received feedback on something and someone from the staff has considered it important enough to do this for that person, "a good friend of mine works there and has said so"... [--] We should have some more consistent way, for instance for how to gather them [ideas and feedback] and how to develop them together. [--] There's practically no one who has the complete responsibility of that the ideas will be taken care of and make sure that they go forward, that people do something about them.

Not having systematic processes for handling ideas leads to person dependency and arbitrariness in the flow and progress of ideas. Especially the mobility of ideas is strongly affected by personal

preferences and networks, when introducing an idea requires more personal efforts from the part of the person who introduces it. This all means that the ideas that are coming through are not primarily focused on the company's strategic goals, but they are being moved based on other forces.

Evaluation and Understanding of External Inputs

As the processing stage of handling ideas was not in a very good shape, there were also problems in evaluating and understanding the ideas that were presented. Specific efforts were not being made in order to understand more remotely originated or vague ideas, and the most easily understood ones – usually the very incremental type of ideas – were being processed and approved most readily.

The following account illustrates how systematizing work can help improve the efficiency and effectiveness of innovation and development activities. The interviewee explains how a more systematic approach has helped in addressing the relevant questions and made the progress of ideas easier. This account concerns ideas that are presented to the board of directors as structured project suggestions – a new practice that had been introduced recently.

It has already gotten easier, now that we have these tools, and certain modelings on how to think about these things, so that if we get some new idea, certain form needs to be filled and you really have to have investments thought through and you have to consider the expense structure, who will be doing it and how much it takes time and what is the expected profit and so on... So when you think of a basic salesperson, they don't think about these things. So we expect that these things have to be thought through, and if not by the salesperson, then someone else has to do it. So, when the process is more specifically defined, it really helps. We aren't quite there yet, but we're getting there, and it does make it easier – we already had one example, and another one on the way, so I could see that it was easy to comment on it because you could see it clearly the issues that needed further clarifications before they could even be commented on.

The systematizing efforts that the previous interviewee describes, however, restrict the flow of ideas. The way that ideas were being processed in the case organization favored ideas that were already quite elaborated and clear as regards implementation requirements and likely outcomes. Specific help was not provided for people to make the structured project suggestions, which means that the ideas that reach the board of directors are chosen based on the availability and enthusiasm of capable people to make them.

There was a clear deficiency of a way to evaluate and elaborate on more vague ideas. Expecting people who get or receive ideas to be able to elaborate them into clear plans and predictions is quite a lot to ask, as the following interviewee notes:

It also takes professional skills to start creating concepts, creating a product, to set prices, to commercialize, to think of support measures for the product and so on, so some individual person from sales may not necessarily have the professional skill for it.

This interviewee brings up the lack of people with sufficient skills for defining the requirements for the implementation of the ideas, and refers to a tendency of people to present vague descriptions of their ideas.

There's one person here who can make any requirement definitions. Everyone else thinks that explaining an idea vaguely on the phone should be enough. [--] They don't have the ability to write a very simple definition of requirements, why we do this, what are the requirements.

Restricting the introduction of ideas to only the ones that can be immediately presented in the form of a detailed suggestion is an effective way of confining the mobility of ideas. Particularly the kind of ideas that do not fall right into the expertise area of the person who has the idea in their possession easily get blocked this way. This indicates a need for a more elaborate way of processing ideas, as every individual in an organization who might have an idea in their possession cannot be expected to be able to build the idea into a complete plan by themselves.

The ways in which bigger ideas are processed vary across departments. When an idea is considerable enough to require a decision on the part of directors and cannot be simply implemented by the person working with the matters that the idea concerns, the amount and range of people who get to be involved in the reasoning, elaboration and decision-making regarding the idea depends on the judgment of the director in question and personal interactions regarding the issue.

Ideas that are big enough to require a decision from the board of directors, and are usually put into the form of a product suggestion, get presented in the board meeting usually by the director of the department that the idea concerns. This renders the idea's presentation quality to the interest and available time of the board member who presents the idea. This raises the concern of not getting enough information through to the decision making process.

Several interviewees pointed out the need for more skills in putting ideas into sensible concepts and building them into such packages that they can be successfully commercialized.

I feel like this making concepts, so that we would really be able to turn the ideas into concepts and take the step from having received some piece of information to actually making something happen – it's something that we should probably have more competence for.

Seeds of ideas that are not yet fully thought through but might have potential when developed further are also often left unsaid, as vague ideas are not well received. Worries about looking bad if an idea were to fail influences the willingness of people to put forward ideas as well, as brought up previously when presenting the findings regarding the use of the idea tool.

Understanding the content and seeing the potential of external knowledge inputs is not a given. Especially, if an idea is not straightforwardly related to an existing product or function, it may be difficult to perceive how it might be utilized and developed further, as noted by the following interviewee:

Especially if the idea isn't directly related to some operation we have here, so that it may even be something so new or something that we nothing existing that would define who should take the responsibility for it, so that's always challenging, how you go about starting to refine what's really there.

It was also brought up how ideas – or a lot of the knowledge inside the company – were not linked together. Several interviewees mentioned that it would be better to involve more people in the processing stage of handling ideas. Having more people from different parts and levels of the organization participating in the evaluation process would bring more knowledge and insights to the table as well as enhance the relevant information flows to the decision-making situation. Giving people the opportunity to contribute to the evaluation was also seen as showing respect for their opinions and thereby functioning as a motivating factor as well. Face-to-face communication and discussions were called for.

Also problems regarding the wider participation were brought up. One of the problems that the following interviewee brings up is the lack of cross-functional understanding. A tendency of people to bring up restrictions regarding the implementation possibilities was also identified as preventing the development of an idea or a project. Better training for the people who evaluate and develop the ideas could be in place.

I can see that we have had this problem that you would like to take the technical staff to participate, but if you get them involved at a too early stage, they will start thinking about it

in too technical terms. And then they turn ideas down, like "no this isn't possible, we can't do this". So maybe I would hope that not all functions were included right from the start, but there would be people from different functions who have some kind of understanding of the other functions' work. And then you can see and decide when is the time to bring all the parties together.

Also past failures affect the way people feel about some ideas. If something had failed before, that particular idea or a similar one might be doomed straight away with the past failure in mind, thinking that it cannot succeed now if it did not succeed before.

Here we also have the classic "we tried that two years ago and it didn't work back then". A lot of us probably still have this kind of concepts in our minds.

The interviewees had rather diverse opinions about whether it made a difference whether an idea came from inside the organization or from the external environment. Some level of uncertainty could be perceived in the responses, and many of the interviewees started their answer with 'I do not know, but...' or 'I have not really thought about it, although...'. In aggregate, people felt that internally generated ideas probably move forward in the organization more easily than external ideas. The initial hesitations in the responses indicated that advancing external ideas within the company was not a very central concern in people's minds.

Some of the interviewees pointed out that people are more likely to promote and defend their own ideas than someone else's ideas brought from outside the organization. The enthusiasm is on a higher level when the idea is a person's own creation, and in that case the reasoning behind the idea is also clearer to the promoter. An idea spotted from the external environment may be harder to justify and explain, as seeing its potential and defining its dimensions can be more challenging.

The fact that you've come up with it yourself makes it easier for you to start progressing it, as compared to if you take an idea from the outside and start working on it.

In addition to grasping external ideas and knowledge and realizing their potential, understanding what makes a desirable product for customers – or for whatever purpose the idea might be used – does not come automatically. It is always not clear what the customers might want, and it is not clear that the customer focus stays in mind when developing ideas.

I'm afraid that the essential point, the reason why the client really wants it, its value is perhaps not appreciated. I have only come to understand it myself recently, it was good, we visited [another company] and they specifically emphasized how they have learned over the

years that the essential point has to be kept along all the time, it's the main thread, everything else can be changed. But why the client really wants it, you have to hold onto that. And they said it themselves that it easily gets lost. When you have got to know the [customer] need, then when you start brainstorming about how to make it happen, it gets lost because you're so excited about your own ideas. So keeping it onboard until the end, as the leading theme, I suspect that we are not quite good at it yet.

The previous account shows the power of example. Visiting another company and hearing them tell their real-life story about a topic that is close to the concerns of the home company had made an impact on the employee in a powerful way. The following account of another employee shows the same kind of learning effect, this time achieved by doing a larger scale qualitative user study led by consulting agency.

It was quite interesting to compare things when we did, or a consultant involved in these investigations had us do it actually, so that "let's take this list of yours, the list of points to develop further in your services", we wrote it down, and when we had interviewed our clients and had the list from our clients, the users, it wasn't at all similar, and this made us realize that, we obviously also have to think for ourselves, but if we only discuss it together between ourselves as to what the client or user needs, we can easily go wrong, we also have to ask the user, "what is important to you, what kind of services and features should there be? Which are important to you, which are less important?"

The following commentary regarding the processing of the data of a user research brings up many problems regarding the processing of ideas and knowledge that exist in the company. The large amount of comments and ideas is mentioned as a situation that cannot be properly addressed, there is not enough time to go through all the comments given. This implies both a lack of time and a lack of efficient processing practices. Another important point brought up is that all the comments cannot be easily interpreted – sometimes the real meaning of the knowledge pieces is not readily apparent and they must be analyzed with more precision to grasp what the actual message could be. This refers to the challenge of understanding that is always present when dealing with external ideas.

Based on the [--] research, it actually brought a lot of things, we should do this and we should do that, which in a way are customer feedback, but we may have never received them directly through any channel. We still have many issues there that we could develop, and we got so much material that even though we have done a lot based on that, there's still a lot that could be taken into account and put into use. The way we gather customer feedback is that we do a customer inquiry on the website a couple times a year, so we can see in general

how customer satisfaction has developed. There are always open questions. We have traditionally had the problem that thousands of people participate in the inquiry, so we receive a huge amount of feedback, and there's particularly a lot of these development suggestions. To be honest, we have sometimes had the problem that we are not able to even go through all of them. Of course we have picked up a few here and there, but there are 800 open development ideas, and part of them are such that they require kind of detective work in order to understand what their point really is.

As regards evaluating ideas and understanding their content and potential, there seems to be a clear lack of efforts to grasp more remote or vague ideas –external ideas can often be of this kind. The evaluation practices foster ideas that have strong internal support and are easy to grasp. Also, there is a rather limited amount of people involved in the evaluation and decision-making situations to bring more knowledge and insights into the process.

Tools

IT tools are a major means of moving and storing ideas. They also form the basis for a systematic process for handling ideas. Therefore, the availability, use and functioning of IT tools are of major relevance when considering the mobility and processing of ideas.

There are several IT tools in the company that can be used for spreading ideas. The company's intranet is one communication forum, traditional email is being used and departments have their own management and project documentation tools. The newcomer idea suggestion tool has been introduced for the purpose of idea sharing. Several interviewees brought up problems with IT systems and tools when talking about documenting, transferring and processing ideas and knowledge.

Many problems relating to the use of the idea suggestion tool was introduced earlier. Other general problems relating to IT tools that were mentioned by the interviewees included:

- overlaps between different tools
- lack of interlinked connections between the partially overlapping tools
- lack of sufficient training for people who should use the tools
- old or poorly functioning tools
- insufficient or unsuitable use of the tools

4.2.3.2. Structures, Roles and Responsibilities

Lack of sufficient cross-functional communication and cooperation, insufficiency of dedicated roles for innovation related activities, and unclarity of responsibilities were identified as significant structure-related organizational factors affecting the mobility and progress of ideas in a negative way.

As brought up earlier, the functional organizational structure of the company causes silo based behavior, and communication between people from different departments might be scarce in many cases. This works as a hampering factor for the flow and progress of ideas, as personal relationships and face-to-face communication seemed to have major importance in the flow and progress of ideas and knowledge. The interviewees showed a preference for contacting people that they were familiar with. Also when faced with the hurries of their own daily work, not knowing who to contact often caused the idea to get buried under more acute tasks and fade away.

Well, at least I think that the first step would be that people would personally know people from other departments. For instance, I have noticed now that through my own work, I have interacted a lot with marketing, for instance with [a colleague]. Just having someone you interact with a lot alone makes it easier to throw around ideas and so on. And then on the contrary, there are some departments whose operations I don't simply know very well myself. And I don't know anyone, any person there personally. So it's probably a big obstacle in itself for many people that you don't have the nerve or the courage or you simply don't know, you have some vague idea in your head and you don't know who to talk to about it. There should probably be some kind of small groups [of people from different departments] that would be formed to kind of create these networks, if these personal networks don't come about naturally within the organization. So I think that would already help a lot.

Finding the right person to whom to present an idea might not be easy, if the person who possesses the idea does not happen to know who the relevant person might be.

Well you should know the people, you always have to ask at least one or two or even three people about who would be the best person to turn to with this and this issue. So that's the challenge, finding the right person who has the certain knowledge background.

The following account regarding a project that required participation from several departments and encountered serious problems on the way due to lack of cooperation between departments emphasizes the lack of clear responsibilities as a major source of trouble.

Well I think that there was this problem that, people were like “it’s not our business, that’s not our business, you should just do it on your own”. So that there were not systematically assigned responsible persons from the different departments. So, whether the issue is small or big, it doesn’t matter, but who is the responsible person there that will take care of it in any case, coordinates the decisions where the department’s contribution is needed and where not and so on. So maybe it was like, the thing was kind of floating around here and no one wanted to do anything about it.

The following commentary illustrates the impact that assigning dedicated responsibilities can have. Giving people specific responsibilities regarding collaboration facilitates the mutual understanding and actual cooperation between different parts of the organization.

There is a lot of work to be done on building understanding [between departments], and it’s been challenging. But also like now that we got this particularly assigned contact person, a clear change in the atmosphere took place, so that these kind of things help build understanding, when someone has the responsibility for some other department too and the other way around, so in that way we get more interaction and understanding.

Several interviewees emphasized the need for dedicated human resources to drive further development of ideas. Without assigned responsibilities and related time allocation, ideas do not go forward efficiently, if at all.

We should have someone who takes responsibility of the idea, and if the idea comes from an outsider, someone should still be found to take responsibility of it somehow in the process [--] because if not, the ideas tend to be forgotten.

The dedicated role of the innovation project manager was experienced as a great improvement to the innovative capability of the organization, as showed earlier in this chapter. Several interviewees pointed out how innovating simultaneously with regular work tasks was difficult. This point will be elaborated further under the following topic.

4.2.3.3. Resources

The resource issue can be divided into two categories: human resources, including time from any employee as well as recruiting or assigning people for certain projects or tasks; and financial resources granted for either improving the innovation context of the organization or for developing or implementing ideas. Both of these were found to be essential factors affecting the mobility and progress of external ideas as well as any innovation related work in general.

Lack of time

Lack of time and lack of human resources in general was frequently mentioned as a key barrier to innovation. It was brought up several times that a lot of ideas could not be progressed because of insufficient human resources.

The main problem here is that no matter how many more ideas we get from there, we couldn't realize them. We don't have enough people with this amount of staff that we have...

A lot of the interviewees showed a willingness to participate in innovation and development related activities, but said that lack of time came in the way. Capabilities or potential for innovation were not really seen as a problem, the restraining caused by lack of time was seen as the main issue.

So it depends partly on the fact that, because at least some of the people have as much work as they possibly can do, so if you push ideas to them on their desk, the idea may not go anywhere even if it was good and even if the person actually wanted to do something about it, they just simply don't have any time for it.

The following account from an interviewee exemplifies a situation where lack of time inhibits development activity. Hurries of daily work keep people busy and there is not enough time for innovation or longer-term oriented work.

For instance, at the moment we have a situation with [a colleague] regarding [a service] that for once we have people [subcontractors] to do things, but we haven't had the time to develop or generate ideas or write even one product proposal, so suddenly we are in a situation where they don't have anything to do, which is just incredibly, it's absolutely incomprehensible. So it's kind of expected of us, like hey, why don't you have anything. How could we have had the time for making anything...

It was also pointed out that especially bigger ideas and the ones that concern several departments are easily left unadvanced because there is not enough time to develop them. Tendency of short-term thinking and focus on each person's own current work tasks were prominent features standing in the way of innovation and development activity.

It's usually just about working hard on your own tasks, instead of even trying so much to think of how by combining things and tasks it could be more fruitful.

As lack of time was considered one of the major issues concerning the handling of external inputs and innovation activities in general, it was concluded that innovation and development activity was easily pushed aside when more urgent issues were at hand.

Of course when everyone has quite a lot of work to do, this [development activity] is something that is easy to leave out. It doesn't show right away, it doesn't cause any immediate problems.

One barrier regarding the internal mobility of ideas was the responsibility that people might feel coming along with presenting an idea. Sometimes introducing an idea means that the person who introduces it has to investigate the opportunity further, which may lead to the person not mentioning the idea in fear of getting extra work on top of the other tasks at hand.

A lot of things are left undone, because people know that they would have to do it themselves anyway, so they do kind of partial optimization in deciding what to do and what not to do...

The ways in which people were incentivized and how their performance was measured sometimes conflicted with the hopes of getting people to engage in innovation work. This problem was particularly prominent with salespeople.

As for the salespeople, I should say that we have pretty demanding goals there, both regarding activity and regarding euros, so of course, it may be more challenging. So in a way, of course you do what you're measured on, so as long as the salespeople have those sales goals to reach, so why would you take off time from that. So in my opinion, that's the dilemma there.

It was also brought up how managers' primary responsibilities lied elsewhere too, subtracting possible focus from innovation work.

Most managers prioritize it so that, and that's what they are rewarded for, taking care of their own tasks and getting good results, so they focus on that.

Several interviewees pointed out that time for innovation could in many cases be arranged, if only people really wanted to. Lack of time was also perceived as an excuse.

It's more up to the people themselves to take that time. So it's more a question of your own time management than not having the time to do it.

It was pointed out that only encouraging people to take time for innovation related activities is not enough, but taking the time should be facilitated or even in a way 'forced' instead of relying on employees' personal time management and prioritization.

I think we have a lot of development oriented people, and somehow you should be able to take the time, either by having a day every month for everyone, so you would only do that. Because it's so easy to say that take half a day for doing these things per week. Where does anyone really take it from? You should have a specific time for it for everyone, for example. We would generate ideas together or everyone on their own, or develop them, so if someone goes, hey I have this idea, could we brainstorm together on how to refine it. So you would have a specific time, because I don't think that anyone... I mean, I am doing it on the side of other work tasks myself, but by forcing it, to take half a day of your time somehow, so maybe that's not the way it works, if you don't have a specific time for it.

The interviewees pointed out that it is very hard to pursue innovation activities and the 'regular work' simultaneously.

There isn't really any room for ideas, especially if you have a situation where your thoughts are tied up in your daily work all the time. So you should be able to create visions at the same time, long-term development plans, that's simply not possible. You kind of have to get into a creative mode. You have to be able to delve deep into it before you can really get into the flow. Otherwise your thoughts are regularly interrupted, and if you feel like you have some fifteen minutes time to focus on it, it just doesn't work like that.

Problems with flexibility in assigning people for innovation related projects were voiced.

But what we are perhaps missing still is that when we start progressing some idea and someone receives the responsibility for it, we are too rigid to re-assign some tasks away from that person, so it all adds to their existing work load. So maybe the challenge is, because I think we do have some skills already, but that we should be able to be more flexible in these work arrangements in cases like this.

It was emphasized by many interviewees that ideas do not get progressed if there is no one particularly responsible for doing it. Incentive systems that conflict with participation to innovation related activities also restrain the time that people are willing to assign for innovation purposes.

Resource Allocation

Resources were more readily available for ideas that could be put into practice easily and that generate revenues or cost savings rather predictably and rapidly. It was also easier to get resources for advancing ideas that fit the current organization of responsibilities and tasks.

We do come up with a lot of ideas and this innovation activity takes place, but it's like it's then just a listing somewhere and the ideas that can't be immediately turned into money or be realized, so they just get forgotten.

An idea that is fairly vague or does not fall straightforwardly into an expertise or responsibility category is more likely to lack sufficient momentum to get processed further. All this signifies favoring incremental innovation and small improvements, leaving opportunities for radical innovation in the shadow. It also leads to omitting many idea seeds that might have great potential if developed further. Focusing on ideas that bring money in as fast as possible and that can be implemented as easily as possible narrows the possible variety of potential innovations significantly.

One reason for not obtaining resources for potential ideas might be that all the people in the organization do not know how to access the resources that may be available and what the actual criteria and priorities are that resource allocation decisions are based on. People may not even know who the person would be that could in fact make the resource decisions, as illustrated in the following commentary:

We do receive good ideas [from outside], but it's mostly a resource issue. We have many units and departments, so whose responsibility is it, who kind of owns the idea and who can best get their voice heard the loudest.

These interviewees also bring up the issue of frustration and downgrading of motivation resulting of not getting ideas forward or not knowing what to do with them:

...it obviously affects, if the ideas are just moved into some black hole and nothing comes out, you quickly start to lose interest.

4.2.3.5. Management

Facilitation

The need for facilitation is a finding that has come up in a variety of topics concerning the mobility and progress of ideas. The theoretical existence of a possibility to put forward an idea is often not enough to make it actually happen in practice.

Several interviewees brought up that rather informal situations with face-to-face communication were best for introducing and developing ideas. This kind of circumstances were perceived as convenient for voicing ideas, as the ideas do not need to be strictly structured and thought through yet.

The best kind of situation in my opinion would be some kind of an informal meeting, where everyone would be in the same physical space because I don't believe in any web-based meetings, or not being physically in the same space for exchanging ideas, I think it limits the flow of thoughts in some way. And again the point that, if you need to write it down somewhere, the idea needs to be thought through a bit further before you can do that.

It was, however, pointed out that although idea generation, exchange and development goes best in an informal setting, it should be facilitated and focused somehow.

This kind of, a free situation usually gives better results. But what is also helpful is to have someone to take the lead in the situation, and not have everyone yell over each other.

It's not enough that the CEO informs everyone in the monthly debriefing that we have this new thing [tool], or just mention that this is what we have and we should start using it. So maybe it should be brought somehow more...it might be good if it was somehow directed.

People need to be helped to understand how to work so that a relevant set of views can be incorporated into a project, it does not happen automatically. The need for facilitation came up in several contexts, many of which are pointed out earlier in this chapter.

Discipline

It takes more than just the introduction of new systems or policies to make them function as desired. In addition to clearly communicating what people are supposed to do, obedience should be required, if it is expected that everybody really follows the directions given.

It requires management, so that the [system] is actually adopted into use in practice.

Several interviewees pointed out that there was a lack of project management skills and general 'working skills' in the organization.

Some kind of basic knowledge for everyone would be good, so that people know how to behave in meetings, how to not disturb others' schedules and so on. Maybe it's about creating a set of common rules that we should then follow. Go according to a certain plan, and not improvise this way here and that way there... So that we would have common ways of how to operate, so it might be easier for everyone.

We have a kind of a culture here where we agree to have a meeting, then we agree on the next meeting and come to that next meeting to hear about what we were supposed to do...

4.2.3.6. Communication

In addition to the significance of general and particularly cross-functional and face-to-face communication within the company, two specific major issues relating to communication could be detected in the search for organizational factors that influence the flow and progress of ideas within the firm. Firstly, there is a lack of transparency regarding what happens to ideas that have been put forward and why. Secondly, a sense of clear organizational direction and priorities is missing among the employees.

Transparency

It is not clear for people why certain ideas get approved to move forward and others do not. The lack of transparency has manifold consequences for the mobility of ideas. Not knowing what kinds of ideas are favored and why they get approved increases the confusion regarding what kind of ideas to look for or offer further, and how to develop them to make them fit the broader purposes of the company.

and maybe then about prioritization, it's a big problem that people don't have a real clue of how things are being prioritized, why something is important and why something goes further right away and why this was a good idea but nothing happened... Maybe providing some kind of reasons for why some ideas get turned down, that could already be extremely helpful.

One of the interviewees also pointed out that when there is no transparency regarding how things are going, informal accounts and perceptions of individual people might affect how things are seen by others, too. Without official mechanisms for spreading fact based information of how things are going, views of what is going on might get distorted through informal mechanisms of spreading perceptions.

these things could also be followed somehow, [--] because obviously it's mainly a question of how things are presented – if we have an idea that is being implemented, then how are things communicated there in between, and it depends on who is the messenger, so the reaction can be anything... So if there's someone who all of a sudden says that everything is going wrong, then there is this huge confusion, how come this is all going wrong, even when it really isn't.. So it can be only someone's opinion, I think that we probably have a tendency to meddle into things without having evaluated the situation as a whole from an objective point of view.

There is insufficient transparency regarding both official decision-making and informal flows of ideas. Reasons for the decisions on whether an idea gets approved for further development or implementation, or whether it gets discarded or put 'on hold', are not widely communicated. The following comment on a case where an idea did not get executed despite the enthusiasm of its promoters inside the company demonstrates the unawareness of the lower level employees of the details of the decision making process in the board of directors' meeting.

In this case too, the reason [for the decision] probably was that the resources were limited or that it costs. The profit potential wasn't probably calculated, so that maybe it would have been worth it after all.

The word 'probably' shows that the employee does not know for a fact what the reasons for discarding the idea actually were. Assumptions regarding the decision criteria are manifested clearly, though, again illustrating the strong resource scarcity perception among the employees. The last sentence also points out the unsystematic and unspecified manner of evaluating and processing ideas – more specific calculations on the potential of an idea to be presented for the board of directors was not required, at least in this case. The employee could only guess what the reasoning had been that the board had made its decision based on.

A lot of times when people put forward an idea that concerns some other function than their own, they do not know what happens to it after giving it away. This is especially the case if the idea has been presented informally. Lack of transparency here also means that the person who receives the idea does not a particular pressure for doing anything for the idea – which might be different if the progress of presented ideas would be followed somehow.

It's kind of wild at the moment still, so when I think of my own way of doing it [taking the ideas directly to people], I don't really know if anything is actually done about the idea

Getting feedback and recognition for contributions was seen as important. The following account shows how it is important that people get the feeling that the ideas they voice get taken notice of. Otherwise, the willingness to contribute may fade away.

It's for sure a good thing, when changes are being made, to give everyone a chance to express their wishes and comments, and this is surely done. But in my opinion, the critical stage is when you have these ideas presented, so how are they received and do people get the feeling that they can have a real influence on things. So if the end result is that you're told that you can give proposals, but every time you notice that your thoughts haven't been

taken anywhere. If they are being noticed but they still don't have any effect on the end result, it is certainly something that can quickly erase any enthusiasm for renewal and generating ideas. So I think that the main point is having genuine interaction, so that people feel that their proposals can get through and their thoughts have a chance. That they have the possibility to have an effect on the end result with their thoughts.

The interviewee continued with bringing up the lack of communication and transparency in the idea processing, and pointed out that ideas could be better processed with more participants, or at least wider discussions should take place.

in some departments I have experienced this [the feeling of expressed thoughts having no effect, and as a result not really bothering to say them aloud at all] and then.. Maybe there's the thing that you should have something like, when you have for instance these big changes made or even smaller ones, you should really have time for it at some meeting or on some other occasion, to actually go through them in a structured way. So that if some proposals have been made, that they will really be noted and they can be discussed, and not so that if they have been sent by email or otherwise, they only reach that one manager and don't receive comments from a wider audience. In such a case, there will be no interaction or discussion about whether the ideas are viable and whether they could be useful to us. So some kind of a more interactive take on it would be needed.

Transparency also affects the next and final topic – the sense of direction and priorities that people in the organization have.

Direction and priorities

The priorities and the general direction or guidelines for the company's development does not seem to be clear for all the employees. This makes decision making and idea processing more difficult and inefficient – and thereby also possibly frustrating for the employees – and interferes with the company's strategic focus. It also affects what kind of ideas people feel that are relevant to put forward.

The following interviewee calls for more communication from the part of the top management regarding the specific direction that the company is supposed to be heading in, and points out how unclarity of this direction brings doubts into the innovation work.

Perhaps many of us in the company would like to have some kind of a more clear idea of where the company is going, to know what the direction and the goal are and have them

clearly spelled out, where do we want to go... so that clearer statements and visions would be expressed more from the management than what we have now. So we are here now and we are expected to come up with innovations, but I don't really know where we are going with the innovations, you could innovate whatever. But how relevant are they, that's probably what many of us are wondering.

The lacking sense of clear direction and priorities causes inefficient decision-making that consume unnecessary amounts of time and nerves.

In this organization, prioritization is something that is not really being done well. It's like, we constantly get new projects that all have the same importance, and then we have to wrestle many times over what the final order is. So we have a lot of these kind of problems.

One of the interviewees mentioned that each department's own strategy may not particularly consider the big picture of the whole organization or the interlinkedness of the actions of different functions. This inward focused thinking of departments can hamper the overall development of the company, as departmental priorities may not be in line with the intended direction of the company and the actions of other parts of the organization.

We have this general strategy, then each department has their own strategy and sometimes I feel like it's quite unclear, they may even contradict each other, maybe not necessarily the general strategy but the departmental strategies may be in contradiction with each other, and many seem to have the attitude that "we have to get these things", they have a limited vision of their own thing, they say "these are important, these things must be done", and they don't see the big picture in the general strategy, why should they be done. I think getting more clarity in this would be a concrete way of getting more innovations and getting things actually done.

For the employees to get motivated for innovation activities in general and to be able to focus their efforts so that they support the company's objectives, the intended direction of the company should be clearly communicated and the priorities relating to that direction should also be unambiguous. Transparency regarding the decision-making concerning the ideas that have been put forward would help people to understand what kind of ideas are favored and why, enhancing the understanding of the direction and bringing in motivation through letting people know that their contributions are taken notice of.

4.2.4. Summary

The main findings of the empirical research will be summarized here. This study was set to investigate which organizational factors affect the internal processing of external ideas and knowledge, including the mobility of these knowledge inputs inside the firm.

The main problems regarding the mobility and progress of ideas and knowledge within the organization were the following:

- lack of well functioning systematic processes (for both introducing and processing ideas)
- lack of clear responsibilities
- lack of resources (both time and money)
- unclarity of direction and priorities

These factors lead to person-dependency and arbitrariness in the mobility and processing of ideas. Additionally, the current practices of presenting and evaluating ideas essentially support mainly incremental innovations: ideas and knowledge are most conveniently presented for and developed further by people who are responsible for the particular area or issue that the idea concerns – if such a person does not exist, the idea is likely to fade away without being properly addressed. Also, the decision-making processes primarily support ideas that can be presented with clear plans and financial calculations – which can only be made for simple ideas or extensions for existing things. These factors also led to the greater probability of internally generated ideas to go forward, compared to external ideas.

A significant underlying factor in all this was the power of perceptions. The employees' perceptions of different issues seemed to guide their behavior quite strongly. The interviewees' innovation related behavior was adversely affected by negative perceptions of the following issues:

- the innovative potential of the organization
- the willingness of other employees to participate in innovation activities and to collaborate
- the value and meaning that their contributions might have

Negative perceptions relating to the above mentioned issues hindered the innovative efforts of the employees, especially concerning introducing ideas. Communication, concrete efforts and positive

experiences seemed to be a workable cure for these negative perceptions and their adverse effects on behavior.

A prominent finding was the need for facilitation, along with the importance of requiring obedience. First of all, it should be made very clear what exactly people are supposed to do and how it can be done. However, directions and systems are not automatically followed, but people need to be guided to follow them and required to act as told. A systematic means loses its systematizing edge when it is not used systematically. Not following rules also creates a vicious cycle: when part of the people do not follow the system, it does not function properly, which discourages other people from following it – if they have not already ignored it because ‘others do not do it either’. However, trying to make people follow systems that do not function well in the purpose they are created for or fit together with the employees’ other work tasks and objectives may not be wise or successful. Therefore the systems must also be well designed.

To sum up: lack of systematization, resources and appropriate management are the main factors that hamper the mobility and progress of external ideas. Perceptions work as an underlying factor affecting the behavior of the employees.

5. Conclusions

In this final chapter, the main conclusions of this study are presented. The major findings are discussed in relation to earlier research introduced in chapter two. In the end of this chapter, managerial recommendations for the case organization are presented.

5.1. Key Findings in the Light of Earlier Research

Returning to the topics for future research compiled by Fredberg et al. (2008) introduced in the end of the open innovation section, the following issues were mentioned as important questions of further investigation: *How to organize for openness? How to make sure that external knowledge is received and used properly at the right place in the organization?* This research has made an effort to address these questions. The specific focus of this study was on how external ideas move within the organization and how they get approved for development or implementation. The major findings of this study can be said to be the necessity for specifically tailored structures and processes and the appropriate management needed in order to make the organization foster the utilization of external knowledge inputs in a beneficial way.

Several authors emphasize the need for specific structures and processes for managing innovation (e.g. Chesbrough & Crowther 2006; Chiaroni et al. 2010; Dougherty & Hardy 1996; Fredberg et. al 2008). The findings of these research show that indeed, special organizational arrangements are needed for fostering innovation and giving it direction. Especially when attempting to open up the organizations stance on innovation, more formal organization of innovation related activities is needed. The findings from this research show that if innovation efforts are not managed in a more structural and systematized way, the innovation activity that takes place in the organization may be quite strongly biased towards internal ideas, and their evaluation and decision-making may be mainly based on enthusiasm of powerful individuals than what might be best for the company.

The lack of clearly systematized procedures for putting external ideas forward, as well as for processing them, was the main barrier to the effective use of the potential of the external ideas that lie within the organization. The few attempts of introducing more systematic means of doing this failed in capturing the organization's potential mainly because of unsuitable design, lack of facilitation and lack of obedience from the part of the employees.

The interplay between existing and new structures, processes and practices was brought up as an important consideration by many scholars (see e.g. Fredberg et. al 2008). Structures and processes direct the employees' attention and guide their behavior (Christensen 1997; Hamel 2007), and as

nothing in an organization works in isolation, the different guiding factors need to be taken into account when crafting new models for working. The most obvious example of the potential conflicts of old and new processes in the case organization of this study was the use of the idea suggestion tool. The tool's purpose overlapped with another IT tool that some of the departments were using, which caused partial ignorance from the part of the members of these departments as well as confusion and frustration. The current study affirms the significance of taking into account the interplay and integration of existing and new ways of working.

Chesbrough (2003) mentioned that an open innovation approach takes considerable time to implement as deeply ingrained organizational mindsets need to be overcome. This mindset issue was found to be relevant in the current research as well. An inward-focused mindset that had worked well in the past restrained both the efforts for openness and their results in the case organization. Dougherty and Hardy (1996) state that especially companies with long histories of stable operations can find it difficult to gear their organizations towards sustained innovation, and suggest many organizational efforts to build innovation into an organization. Several of these suggestions are brought up as relevant in this concluding chapter of this study. The case company has had a relatively stable history of operations before the rise of the internet, and the current changes in the business logics of the industry has forced it into a kind of situation that it has never faced before.

The NIH-syndrome did not seem to be a significant issue at the case organization. Strong resistance to ideas coming from outside the organization could not be detected, as people seemed to have a generally positive attitude towards ideas coming from any source. However, there were other kinds of barriers to the acceptance of external ideas and knowledge. These barriers were mostly related to knowledge and understanding – the limited knowledge that people within the organization have relating to ideas and information pieces coming from the external environment often results in not really understanding or seeing the potential that these ideas might have. For this reason, many external ideas or potentially useful pieces of knowledge may be left unprocessed.

However, even though clear symptoms of the NIH-syndrome did not exist, a 'natural bias' towards the greatness of one's own ideas and deeply ingrained habits in the way that work is being carried out seemed to rule to some extent at least in some cases – even if people reported recognition of the potential and importance of using external ideas and knowledge inputs as well, in their actual actions they might still show a preference for internal ideas. This is one of the reasons that bring into the picture the topic of facilitation.

The claim of strong functional boundaries hampering innovation (Dougherty & Hardy 1996) also got support from this research. The interviewees in this study showed a preference to present ideas to people that they work in close cooperation with, and they reported mostly paying attention to external ideas that concerned their own work or the work of someone they had cooperated with. This means that when the company is organized around functions and the mobility of ideas across functions is not working properly, the innovative potential of the whole organization is not widely used for the overall success of the firm.

Knowledge integration was mentioned as a central concern by several authors in the open innovation literature (e.g. Bergman et al. 2009; Gassmann & Enkel 2004; Huang & Rice 2009). Understanding knowledge inputs from diverse sources appeared to be somewhat of a challenge in the case organization of this research as well. Especially recognizing the potential and being able to develop ideas that originated farther away from the core businesses of the company or the expertise areas of the people who handle them seemed to be a challenge. Szulanski's (1996) finding of the lack of absorptive capacity as a barrier for intra-firm knowledge transfer could thereby be interpreted to get support from this study. Face-to-face communication and participative experiences were reported to be helpful in enhancing the abilities for shared understanding.

Chiaroni et al. (2010) point out that intraorganizational networks must be in place to effectively manage the externally acquired knowledge, and mention the establishment of cross-functional teams and specific organizational roles for advancing the implementation of open innovation. Cross-functional cooperation was found to be an important factor affecting the mobility of ideas and knowledge across functions in this research. The assignment of the role of the innovation project manager was experienced as very helpful, but even more assigned human resources could be appropriate to reach the innovative goals set. The unclarity of responsibilities was a major issue affecting the flow and progress of ideas, speaking for the importance of clearly defined roles and responsibilities to support innovation. Referring back to the previous issue of processes – as there were no clear processes for going through and advancing all kinds of ideas, people mostly put ideas forward by telling them to individual people. If the person originally possessing an idea did not know whose responsibility area the idea would fall into, the idea might either go nowhere, or go to the wrong person and possibly fade away without proper consideration. This organizational factor also affects external ideas more than internal ones, since ideas coming from the external environment are more likely to be somehow vague or not very easily understood by the internal members of the organization. For this reason, it is likely that finding the right person inside the organization to whom

to address the question is more difficult – and therefore, many external ideas may get lost or die out on the way.

In addition to making changes in the structures and processes of the organization, several authors point out that facilitation is needed to make people act as desired (e.g. Bergman et al. 2009; Sieg et al. 2010). This claim was very strongly supported in the empirical investigation of this study. There seemed to be generally very positive feelings about innovation and openness in the case organization, but it was shown that facilitation was needed to really get the innovative potential out of the employees.

Support from the top management was also pointed out as an essential factor for making an open innovation approach work in an organization (e.g. Chesbrough & Crowther 2006). This claim was also supported in the current study. Resource investments are obviously made by the top management, which is the obvious reason for the importance of their support for innovation. The support given from the part of the top managers also influenced the way the employees perceived the importance of innovative activity for the organization, thereby working as a motivating factor as well. But even more importantly, the support from the top management affected the employees' perceptions of the significance of their own contributions and their possibilities to make a difference, which affected their behavior considerably. Perceptions of poor possibilities for their ideas to go forward or get implemented reduced the employees' willingness and efforts to present ideas forward.

A number of previous studies point to the topic of resources (e.g. Christensen 1997; Dougherty & Hardy 1996; Hamel 2007), which was a prominent theme in the findings of this study as well. Lack of current and potential resources seemed to be one of the major problems inhibiting the movement and development of ideas within the organization. This is mainly because of three reasons. Firstly, people are busy with their day-to-day work, and do not necessarily feel that they can take the time from their regular tasks to take ideas further – consistent with the findings of van de Vrande et al. (2009). This also leads to the second reason – sometimes people do not express ideas because they know or are afraid that they get extra work with the advancing of the idea on top of their usual work. The third reason was the general perception of not having enough resources to implement the ideas, and therefore sometimes people do not see a point in expressing the ideas, if they could not be put into practice anyway. These reasons restrain the mobility of ideas, affecting the overall innovative capacity of the company. The barriers that these factors create can be seen to affect external ideas even more than internally generated ones, as internal ideas are more likely to have stronger enthusiasm and support behind them that help overcome the barriers.

Yet another issue regarding resources that affected the mobility of ideas was that resources were more readily available for ideas that fit well with the current functions or products of the company. This was partly because that kind of ideas moved more readily within the organization to face decision-making situations in the first place, but also because the evaluation criteria that were used demanded such accuracy and clear plans that for the most only incremental innovations were being accepted.

Adapting evaluation criteria to direct attention towards external sources of ideas as a measure in embracing open innovation was brought up as an important development in the literature (e.g. Chiaroni et al. 2010). This had not been done in the case organization – apart from emphasizing the importance of customer focus – and the focus on internal ideas was evident.

The aggregation of knowledge and opportunities promoted by Seshadri and Shapira (2003) and Välikangas and Gibbert (2005) was not being carried out systematically in the case organization of this study. Managing the time dimension of the processing of ideas was identified as a problem – the ideas that were not immediately approved for further development or implementation were easily forgotten, as ideas were not accumulated for later inspection. Not linking ideas with each other was also a concern voiced by the interviewees.

Many of Fairbank and Williams' (2001) findings on employee suggestion systems' problems got supported in the findings of this research: failing to generate enthusiasm or motivation to participate; rewards perceived unattractive; slow processing time and an inordinate delay in response to submitters if any response is even provided; misunderstandings regarding how the system operates or what its purpose is; mistrust; and general indifference.

As Hamel (2007) notes, new management processes never emerge fully formed, but they are formed through a process of trial and error. The case company of this study has only recently started to pay closer attention to innovation management, and is now on this trial and error learning path. The efforts that have been made show that the issue has been taken seriously, and progress has already taken place. Being a part of this study is one of the company's efforts of enhancing the innovativeness of the organization. The problems and the factors that affect them that are brought up in this research can help the organization in the learning process of becoming a more open and innovative company.

Several problems regarding the innovativeness of the case organization had been recognized by the managers and other employees, and possible solutions already exist in the minds of some of the

people in the organization. This shows that there is huge potential for enhancing the innovative activity of the organization. Nevertheless, especially managers feel that everything cannot be done at once and there are certain limits to the pace of progress and change within the organization. However, enhancing the organization's innovativeness is considered important and efforts have been made and continue to be made to improve the situation. The sufficiency of the amount of time and other resources that are being used for this can be questioned, though.

There seems to be a gap between the visions and actual thoughts and actions of the top management when it comes to innovation. The innovation related goals set by the parent organization are quite high flying, and the innovation strategy of the case company includes bold statements too. Nevertheless, the way the top managers at the case company seem to think about the firm's innovation possibilities and the achievable pace of change towards being a more innovative organization is somewhat negatively toned. The top managers do have very positive thoughts about innovation themselves and they seem to realize its necessity, but their views on implementation prospects and the likeliness of reaching certain goals appear more doubtful. It is obviously reasonable to acknowledge that things cannot change completely overnight, but pessimism or 'negative realism' can hamper development. There is also a gap between the innovation goals and the related investments, including human resources as well as funding provided for developing or implementing ideas. This can be partly explained by the initial stage the embracement of (open) innovation.

To sum up: the lack of systematic processes for handling external ideas hampers the mobility of ideas as many of them are left unsaid due to a lack of clarity concerning what to do with the ideas. Furthermore, when processes are not clear, it leaves much of the decision making and judgment regarding whether an idea would be worth putting forward or not to the individual who initially receives the idea. Introducing an idea requires more effort and is a larger statement on the part of the employee when there is no systematic process behind it that would make the act a regular, neutral procedure. In addition, when ideas are not shared through a systematic process, they can get lost or forgotten even when presented forward. When people mention the ideas to other people directly through email or face-to-face conversations, there is a strong likelihood that the ideas get pressed under more urgent matters on the receiving person's agenda or are not handled in a proper way. The receiving individual's personal judgment and excitement about the idea also have major impact on how the idea gets processed further, or if it does at all. Leaning on individuals' judgment is also not in accordance with basic innovation 'wisdom' – more people, more perspectives need to be welcomed to the processing of an idea in order to get the full potential out of it. Thereby, the lack of

well functioning systematic processes is a key barrier inhibiting the use of the innovative potential of the organization.

5.2. Recommendations for the Case Company

Based on the findings of the empirical findings and earlier research, recommendations to the case organization are presented here. First, a broader depiction of the main issues that need to be taken care of is presented, after which more detailed recommendations are given.

Drawing from the empirical research and earlier literature, three main issues can be said to be of essential importance when managing inbound open innovation. The three issues that need to be taken care of to effectively and efficiently manage inbound open innovation are:

- Understanding
- Context
- Pull

Understanding refers to justifying the sensibility and desirability of embracing open innovation, providing comprehensible strategic direction and priorities, and improving the employees' understanding of ideas and knowledge that originate farther away from their own area of expertise. In other words, making the people understand what to do, why and how.

Context refers to providing a suitable organizational environment for innovation activity and facilitating the desired kind of actions. Simply put – making innovation as 'nice and easy' as possible to ensure contribution.

Pull refers to guiding the innovative efforts into the directions that support the company's strategic goals and drawing the most potential ideas for implementation – making sure that the right things are being done and the best ideas get through.

All the three issues, or effort categories, need to be attended to ensure effective and efficient innovation activity in the organization. Each of the categories are now elaborated further and specific managerial recommendations are presented.

Understanding

The importance of ensuring understanding has to do with the guiding power of perceptions that was explained earlier. Efforts to enhance the right kind of understanding and perceptions of the

innovation related activities and general collaboration are needed for the proper functioning of any other efforts. To enhance constructive understanding in the organization, the following measures could be taken:

- Communicate the importance of and rationale for open innovation activities
- Give people concrete examples and experiences that help them widen their understanding
- Increase cross-functional contacts and collaboration to enhance mutual understanding
- Communicate clear strategic direction and priorities and demonstrate them with concrete efforts
- Ensure better transparency regarding the progress of ideas
- Maintain coherence to avoid confusion and disbelief

Context

It is essential to provide a suitable context for the employees to perform the innovation related activities that they are encouraged to engage in. Understanding and willingness are not enough to produce favorable action if the organizational context does not support it. Failing to build a supporting context risks diluting other innovation efforts and losing focus.

- Provide appropriate systematic processes for introducing and processing ideas
- Require everyone to follow the common processes and rules to ensure their smooth functioning
- Avoid conflicting incentives
- Establish clear roles and responsibilities to make things actually proceed
- Invest sufficient resources to enable the desired actions and keep up motivation

Pull

Although creating innovations requires a large mass to enable high potential ideas to emerge and get progressed, certain direction and focus is good to keep in mind and activate through specific measures to 'pull' ideas towards the strategic goals of the company.

- Assign resources according to strategic goals – people, projects, time, money...
- Make sure that the evaluation criteria are clear to everyone and decisions are made accordingly
- Provide guiding incentives and rewards

A key word regarding the management of all of the above mentioned categories is *clarity*. Clarity enhances the chances to achieve mutual understanding, it is essential for the proper functioning of the systematizing efforts, and it is needed for directing attention to ideas that support the strategic goals of the company. In addition to crafting clear strategic goals and creating mechanisms for their achievement, the resource issue must also be considered: *Match your resources with your strategy – or your strategy with your resources.*

Overall, the case company seems to have had a relatively good start in the pursuit of enhancing the innovativeness of the organization, but much still needs to be done. It is important to adapt the measures that are being taken through a trial and error learning process, as there are no general guidelines that would fit any context. The findings of this research provide inputs in this learning process.

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APPENDIX: The interview template (key question topics)

The interviewee's own work

- job description, responsibility areas
- decision-making power
- connections within the organization through work

The company and business environment

- definition of the company's industry and business environment
- biggest challenges in the business environment
- the company's current state in relation to the challenges
- the company's competitive edges

External ideas and knowledge

- own external contacts for gaining ideas or potentially useful knowledge
- potential sources (particularly relating to web development)
- specific conscious efforts for obtaining ideas or knowledge from external sources
- sufficiency of current efforts overall in the organization
- sharing of external ideas/knowledge
- documenting and saving of external ideas/knowledge
- decision-making regarding the sharing/using of external ideas/knowledge

The internal organization

- opinions of the specific innovation efforts made in the organization
- current practices for handling external ideas/knowledge
- participants, roles and responsibilities in the different stages of processing ideas/knowledge
- decision-making regarding the progress of ideas

- mobility of ideas/knowledge across functions
- collaboration between departments
- enablers/barriers for the mobility and progress of ideas/knowledge
- the company's ability to evaluate and process external ideas/knowledge
- specific challenges regarding the handling of external ideas/knowledge
- resources for innovation
- strategy, direction and priorities
- tools for sharing ideas/knowledge

Open innovation

- definition of open innovation (is the concept familiar)
- benefits that the company could achieve by opening up the innovation activities

Development suggestions

- biggest areas for improvement relating to the processing of external ideas in the organization
- suggestions for improvement
- motivational factors
- suggestions for better management