Corporate Real Estate Management Practices in Sweden

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Master Thesis

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Stockholm, June 3rd 2011

Eric Holfert
Maria Villamide
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Abstract

Purpose – The authors want to give an actual overview of the CREM in Sweden and investigate how certain issues, such as business alignment and strategy of CREM are handled in Sweden

Importance – Scant published research in the academic field of corporate real estate management is covering the Swedish market, hence this paper tries to close this gap

Design/methodology/approach – The paper examines current literature on the topic of CREM and analyses market data gained by a survey and interviews to illustrate the status of CREM in Sweden today

Limitation – The participation rate in the survey prevents the authors from drawing conclusions significant for the whole market, a wider ranged survey including unlisted companies would certainly help enhancing this research and identify more patterns in the market

Keywords – Corporate Real Estate Management, strategy, business alignment, performance, benchmarking, flexibility, outsourcing, Sweden

1. Introduction

“Despite increasing interest in effective management of corporate real assets, there is scant published research in the academic literature in this area.”

(Pittman & Parker, 1989, p. 118)

This statement, made in the year 1989, is not completely true anymore when considered on a global scale. Vast research has been undertaken in the field of corporate real estate management (CREM) since. Especially in the United States but also in a European setting, CREM has been subject to research from different angles. Nonetheless scant published research in the academic literature can be found covering the Swedish market. Property accounts for a considerably high amount of a corporations operating costs and is suspected to contribute with roundabout 20 % to the overall costs of a company (Haynes, 2007). Taking into account the special characteristics of real estate such as immobility, durability, locational characteristics and others, a need for professional management of this resource can be established. Challenges faced by corporations today such as globalization, the effects of the recent financial crisis or the struggle of whole economies to maintain solvent are only supporting the importance of a professional management of all business branches of a company, including corporate real estate. The main purpose of this paper is therefore to close the gap in literature covering the Swedish market and answering the following questions:

1. How is CREM in Sweden organized in companies, in which role is it perceived today?
2. What are the main strategies and activities of CRE in the Swedish market and which information is gathered in order to achieve the set goals of CREM in Sweden?
3. Is CREM seen in Sweden as a management discipline supplementary or imperative to the overall business and operations?

Question 1 will be answered by investigating the hierarchy in the companies, the reporting structure, the background of the respondents and similar questions, compared to the literature. Question 2 investigates the current practices of CREM in Sweden more in detail, examining especially the current strategies and objectives and which data is currently gathered by Swedish CREM. Both questions are then put into context to answer question 3, whether or not, or to which extent, CREM in Sweden is seen as a management discipline supplementary or imperative to the overall business. That is, to which extent CREM in Sweden is seen as added value to the overall business and as a fifth resource (supplementary) or if it is handled just because every business has to be accommodated somehow and therefore some basic management of this resource is inevitable (imperative).

When compared to the literature written in the field the authors also aim to identify any different pattern of CREM in Sweden compared to other countries. Section 2 of this paper will introduce the methodology used, followed by a comprehensive literature review in section 3. In section 4 the results from the data collection are presented and analyzed. The discussion of the results is carried out in section 5 and the conclusion is presented in section 6.

2. Methodology

“The main purpose of research is to produce insights and knowledge.”

(Ghauri & Grønhaug, 2005, p. 35)

According to Ghauri & Grønhaug (2005), new insights and knowledge can be acquired and classified in four different ways: theories/models, concepts, methods/techniques and facts. The intended contribution of this paper is to reveal new facts which can enhance the existing general knowledge on the subject of CREM, and in particular to examine the Swedish case, since there are no recent facts concerning this specific market.

There are two different levels of research: conceptual and empirical. Every research deals with some sort of theory and therefore empirical research also includes partly conceptual research. The difference is that conceptual research solely stays at theoretical level while empirical research goes further and collects data to measure (Ghauri & Grønhaug, 2005). This paper can be described as empirical research, since the authors collect and analyze data after performing a comprehensive literature review with the purpose of outlining the main underlying concepts and theories.

In terms of reasoning, there are three different modes of inference: induction, deduction and abduction (Niiniluoto, Defending Abduction, 1999). While induction can be defined as “the systematic process of establishing a general proposition on the basis of observation or particular facts” (Ghauri & Grønhaug, 2005, p. 16), deduction can be defined as “the logical process of deriving a conclusion from a known premise or something known as true” (Ghauri & Grønhaug, 2005, p. 16), and abduction can be interpreted as “giving reasons for pursuing a hypothesis” (Niiniluoto, Defending Abduction, 1999, p. 436).
This paper could be described as inductive in the sense that our conclusions will be drawn from empirical observations or facts; as deductive because theories and hypothesis provided by existing literature determine to a great extent our research process even though the conclusions reached through logical reasoning are not initially aimed at accepting or rejecting these theories (Ghauri & Grønhaug, 2005); and also abductive in the way the research population was selected based on an explanatory hypothesis (Niiniluoto, Defending Abduction, 1999).

Research also can be classified into four main types according to its purpose: exploratory, descriptive, explanatory and predictive. Exploratory research is conducted when there is not much information or knowledge about a particular subject and, more importantly, when the research problem is unstructured and/or not completely understood. Descriptive research, on the other hand, is conducted when the problem is well understood, when the research problem is structured but also when further information is needed in order to describe a given phenomena. Explanatory research requires a comprehensive understanding of the research problem and its aim is to analyse and explain, whereas the purpose of predictive research is to predict future phenomena based on present or past events. This paper uses a combination of a descriptive and an explanatory approach in order to tackle a structured problem and to provide answers to our research questions.

Regarding the research methods or techniques, research can be either quantitative or qualitative. The main differences between the two categories are the procedures used and the extent to which the measurement of results is needed. In qualitative research, statistical methods and other quantification procedures are not used in order to produce findings, even though qualitative research might also quantify data. However, whereas quantitative methods emphasize testing and verification, the emphasis of qualitative methods is on understanding phenomena (Ghauri & Grønhaug, 2005). Consequently, even though survey data will be quantified, this study can be classified as a qualitative analysis.

This present study consisted of several stages. The first stage was to perform an extensive literature review with the purpose of gathering all the theoretical background necessary for conducting further work on the topic and to identify the main issues covered by literature on this particular area of research. Hence the first part of this study is a comprehensive literature review and a contribution to existing literature by providing a complete overview on the broad topic of CREM. As Ghauri and Grønhaug (2005) state, there are three main purposes of conducting a literature review: framing the problem, identifying relevant concepts and positioning the study.

- Framing the problem: The literature review allowed the authors to identify the main issues covered by existing research on CREM, reflecting the main interests of both scholars and practitioners. It also allows to perceive the different areas of concern internationally as well as the different levels of analysis and understanding of certain topics.

- Identifying relevant concepts: Among the relevant concepts identified were the different theories and frameworks concerning, for example, CREM functions, levels and strategies. All the relevant CREM issues considered by researchers were included for consideration for the design of the survey and the interview questionnaire.
- Positioning the study: The literature review also allowed the authors to identify a void in existing research. Even though the issue had been studied in several countries recently, such as the U.S., the U.K., Ireland, Estonia, Malaysia or Australia, no studies had been conducted attempting to describe and explain the current state of CREM in Sweden. No comprehensive literature reviewing all major areas of research and relevant issues has been conducted in recent years.

Following the literature review, a questionnaire was designed with the aim of discovering current CREM behaviors and practices in the Swedish market. Existing frameworks and questions were reformulated and new questions were developed and put in context to CREM. All questions were organized following a particular structure derived from the identification of several key areas covered by literature. The initial questionnaire served as a basis for both the online survey and the direct interviews. Research was designed in a way that it would allow the authors to describe current practices in the Swedish market, rather than explain them, even though some attempts were made later in this direction.

Consequently, all sources of general information are secondary in this paper, taking into account that the existing literature was retrieved from online academic databases. However, the data sources are primary since the survey and interviews were both developed and conducted by the authors.

For the purpose of this study, the authors decided to investigate only those companies listed in the Nasdaq OMX Nordic, the Stockholm Stock Exchange, for several reasons. Firstly, because the list includes a broad range of companies in terms of location, size, number of employees and industry type, which the authors believed were to some extent representative of the Swedish business environment. Secondly, and more important, because the companies’ obligations towards stockholders in theory imply that they need to handle their real estate in a somewhat more professional and efficient manner. The authors believed that the practices among these companies would be describing the “best practices” in the country regarding CREM, and superior or at least similar performance could be expected in relation to their private counterparts. Last, but not least, this particular population was selected because of time and financial constraints that otherwise would not have allowed the authors to conduct a more ambitious study appropriately. As a consequence, the authors selected all listed Swedish companies as the overall research population based primarily on these explanatory hypothesis and assumptions.

To obtain valid knowledge is one of the main objectives of research. According to Ghauri & Grønhaug, “internal validity refers to the extent to which we can infer that a causal relationship exists between two (or more) variables.” (Ghauri & Grønhaug, 2005, p. 85). In general terms, researchers must be confident that the causal relationships observed between several variables are true. In other words, that x is truly responsible (partially or fully) for any variation in y (Ghauri & Grønhaug, 2005). There are several factors that may affect the validity of results. In particular, among the main threats to internal validity are: confounding, selection bias, history, maturation, testing, instrumentation, regression and experimenter bias.

Due to the fact that the present research was defined as descriptive and explanatory and only slight attempts were made in order to explain phenomena, the degree to which internal validity is threatened is consequently low.
Regarding cofounding, for instance, the authors believe that there are no rival hypotheses to the original causal inferences to be considered in the case where causal-effect relationships were explained. Furthermore, since the study aims to describe current practices in the CREM field only among listed Swedish companies and the authors have selected all Swedish listed companies as their sample population, selection bias would not be seen as a validity threat in our study. Other threats such as history, maturation, testing, instrumentation and regression are not believed to have an important role as validity threats in the course of our study. There could be a small risk to experience the experimenter bias in this study, but then it would only occur in the interviews where the authors actively interacted with the interviewees. But since the interviews were semi-structured and obtained by two interviewers this bias should have not influenced the results to any degree.

External validity according to Ghauri & Grønhaug “refers to what extent the findings can be generalized to particular persons, settings and times, as well as across particular persons, settings and times” (Ghauri & Grønhaug, 2005, p. 86).

External validity or transferability (which is the name external validity usually has in the context of a qualitative study such as this one) is mostly related to the degree to which the findings can be generalized to the whole population.

Even though the chosen sample does not represent the whole Swedish market per se, the authors believe that an external generalization of the results and therefore the elimination of external validity threats is reasonable. As already mentioned the sample of listed companies is expected to represent a wide range of companies. In private companies (only in those with a considerable size where CRE can/should be an issue) a similar approach to the topic of CRE is expected since competition and market transparency already imply prudent asset management for each company. When corporate real estate is not managed correctly or when certain issues are overlooked, the impact on the performance of the single company is believed to be crucial simply because of the size of this asset class, in terms of cost as well as in terms of value. The topic of CREM therefore is believed to be addressed in a similar pattern (maybe with less transparency) by private counterparts and therefore the results of this study should be transferable to the private sector as well.

To enhance the reliability of this study most questions and topics addressed were developed in response to a thorough literature review (presented in chapter 3). By referring to prominent scholars in this research field and using measures already established, the authors also ensured a certain objectivity and gained proven reliability.

**2.1. Questionnaire Survey**

An online questionnaire-survey with 39 multiple-choice questions was used as method of data collection. The online survey was prepared with “Survey Monkey”, a web application specially designed for this purpose and with which our department in KTH University had already experience working with. It was designed in a way that it would not require more than 15 minutes of the respondent’s time to complete. The respondent would only have to access the web link in our email and then answer the questions by clicking on the boxes for each one of the options.
The simplicity of the method was believed to help increase the response rate considerably. In order to test for any inconsistencies in the content and check the completion time, a preliminary version of the survey was sent to an experienced CRE manager from an important non-listed Swedish company.

To the starting date of this research (January 3\textsuperscript{rd}, 2011), 253 companies were listed in the Stockholm Stock Exchange (Nasdaq OMX). Among those companies, 18 had headquarters outside Sweden (7%). These companies were excluded from the study so as to ensure that the results reflected Swedish CRE practices only. Before sending the email inviting the companies to participate in the survey, several telephone calls were made to every company in order to identify the responsible for CRE decisions within the companies and therefore to ensure that the survey was sent to the right recipients.

During the first round of calls, 49 companies (19%) claimed that they were not interested in participating in the survey. Some of them argued that they generally did not respond to surveys or that our particular research topic was not applicable or relevant for their company. Furthermore, several companies mentioned that they had no specific business unit responsible for CRE and that they were probably not able to answer the survey. After these proceedings, this non-probability-sample was narrowed down to 186 companies. In all cases, opinions were solicited only from those individuals who were in a position to know the subject areas.

Overall two rounds of calls were performed over several weeks. The aim of the second round, which took place a couple of weeks after the first one, was basically to corroborate whether the recipients had received the email with the link to the online survey. The second round also allowed us to increase the response rate by incentivating those companies from which we had not received any answers to that date. In some cases, the email had been forwarded directly to junk e-mail folders and the second call was successful in this sense. In other cases, CRE responsibles who were unavailable during the first round due to diverse personal reasons, were contacted again. In both cases, the second round proved useful in improving considerable the response rate in the sample to a final 21% (39 companies). Patterns between the responses from the first and the second round were not found.

As mentioned, the authors decided that the research population would be all Swedish listed companies. The sampling frame would then consist of the whole population with the exception of those public companies with headquarters outside Sweden. Companies explicitly refusing to participate would evidently be excluded from our sample. Because of the way it was originally conceived, ours was a representative non-probability sample of the whole population. According to Ghauri & Grønhaug (2005), “non-probability samples are easy to draw, but they might give misleading results if, in spite of our judgement, they happen to be unrepresentative of the population” (Ghauri & Grønhaug, 2005, p. 16). The authors believe that the probability that those companies refusing to participate (19%) or those agreeing to participate but not answering our survey (non-response) could have lead to a considerable non-sampling error is very low.

It needs to be mentioned here that after chapter 4.3 (CREM strategies and activities), 10 companies skipped the questions, so that the sample size for the last questions is only 29.
2.2. Direct Interviews

“Interviews are often considered the best data collection methods.”
(Ghauri & Grønhaug, 2005, p. 132).

As a final question in the survey, participants were asked whether they would be available for subsequent in-depth interviews. After analysing the results of the survey, several interviewees who had agreed to be contacted for this purpose were chosen and calls were made in order to schedule the personal interviews. Because of time and financial constraints, only those companies based in Stockholm and its surrounding area were selected. Furthermore, the survey answers were carefully studied so as to have different subjects according to different areas of interest in terms of our research. In all cases, the interviews were conducted in the companies’ headquarters. Overall, three direct interviews were conducted.

The interviews were designed so that they would not take more than 1 hour. Before the interview, a preliminary questionnaire (interview guide) was sent by e-mail to the interviewee so that he or she would be prepared to answer all questions. For each interview, different sets of questions were prepared based on the answers given in the survey. In most cases, certain areas were emphasised though all the interviews followed a template previously prepared by the authors. As it is the case in general with this technique, even though the interview followed the guidelines in general terms, the final questions were then slightly modified during the course of the interview.

Interview preparation also implied an in-depth analysis of the companies which was done mainly by studying the corporate website and analyzing several documents such as annual reports or, in some cases, written and recorded messages from the CEO or other top executives. This helped not only improve the quality of the preliminary questions but it also implied an important degree of commitment and professionalism that was very much appreciated by all interviewees. The availability of information resulting from the public nature of these companies was crucial at this point for enhancing the quality of the interview both in terms of content and climate. Furthermore, their public nature and their obligations towards international investors also implied that almost all the information was provided in English.

The questions were formulated in a semi-structured manner since the topics and questions to be covered were determined beforehand but at the same time personal and attitudinal information was included (Ghauri & Grønhaug, 2005). In several occasions, questions not included in the original interview guide were asked to participants as the interviewers considered them relevant according to the topic dealt or the information provided by the interviewee at the time. All the interviews were recorded with a digital device that allowed to accurately transcribe the interviews later and the transcription was usually done the same day so as to highlight and make notes on the important parts that would then be useful for our study.
2.3. Difficulties and Limitations

The authors faced several difficulties when conducting the research. The fact that the authors were not able to speak fluent Swedish certainly was a limitation. Even though it was never the case that we could not contact a company or the person responsible for CRE decisions for this particular reason, this proved to be a difficulty. Firstly, because it was very difficult for the authors, during the first phase of the study, to grasp the variety of positions and Swedish terms for the roles that could resemble that one of a CRE manager (fastighetschef, förvaltningsansvarig, bostadsförvaltare, etableringschef, ekonomiansvarig, etc.), especially in those companies with no specific position handling CRE decisions. Secondly, because even though in Sweden, English skills in the corporate environment are unusually good, the degree of expertise was surprisingly uneven. Therefore, the authors believe that some of the questions in the survey may not have been completely understood by all respondents in the same degree. Furthermore, some of the interviewees also showed better English language skills than others and this probably decreased to some extent the quality of the answers, since those feeling less confident about them would have probably provided better answers in Swedish. Finally, the fact that the authors had to communicate in English without English being their mother tongue may have also influenced the feedback quality.

Other difficulties faced were mostly related to the time and financial constraints. Both constraints are moreover directly related to the limitations of the study. The authors believe that with more time available in order to collect answers from the survey, the response rate would have increased considerably. Furthermore, both the financial and the time constraints did not allow the authors to conduct interviews in other parts of the country other than Stockholm and its surrounding area. The authors considered that direct interviews were much more reliable than interviews by mail or by phone. With certain financial support and extended time, the results would have been enhanced by including interviews to companies based in other cities such as Lund, Göteborg or Malmö. The authors believe that a subsequent comprehensive study could be therefore replicated including those companies. Alternatively, with more time, mail or phone interviews with all companies could also be conducted.

A third limitation to the study is that one related to its purpose. Though this study provides a comprehensive overview of all issues covered by literature on the subject of CREM, its aim is to provide answers to the research questions and not to test existing theories. Consequently, it does not provide any new insights on theoretical hypothesis or frameworks. Further studies should be able to replicate this literature review with the aim of testing the current applicability of the theories and frameworks and eventually provide new alternatives in this regard.
3. The management of corporate real estate – theoretical framework

“The research shows that despite their great value, corporate real assets are seriously undermanaged”

(Veale, 1989, p. 1)

“Research in a number of countries has shown that a significant proportion of our major corporations still fail to undertake even the basic levels of prudent asset management...”

(Warren, Simmons, & Trumble, 2007, p. 464)

These two statements were made eighteen years apart from each other. Veale made his statement in 1989, around the time when corporate real estate management (CREM) became subject of scientific research to a bigger extent, mainly in the United States. By 2007 it seems that this statement had not changed much despite the amount of research done in the subject.

CREM was defined by Pittmann and Parker (1989) as the management of real assets within a corporation, including both facilities and land. Veale (1989) acknowledges the importance real assets have for any given corporation both as a cost and as a value factor. In his study, the author was already able to predict the emergence of a new management discipline in the following years and the vast amount of literature written in the past two decades on the topic of CREM proved him right. Ever since the early 1990s the CREM’s definition has been redefined, renewed and completed by various researchers. Nourse and Roulac (1993) were among the first to define CREM in a more strategic way. They argued that only if the real assets of a company are strategically used to supplement the overall business strategy, the company could achieve sustainable success and growth. They identified eight strategies in use for real estate.

Table 1: Alternative Real Estate Strategies, (Nourse & Roulac, 1993, p. 480)

<table>
<thead>
<tr>
<th>1. Occupancy to cost minimization</th>
<th></th>
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<tbody>
<tr>
<td>Explicit lowest-cost provider strategy</td>
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<tr>
<td>Signal to critical constituencies of cost-consciousness</td>
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<tr>
<td>2. Flexibility</td>
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<tr>
<td>Accommodate changing organizational space requirements</td>
<td></td>
</tr>
<tr>
<td>Manage variability/risk associated with dramatic escalation/compression space needs</td>
<td></td>
</tr>
<tr>
<td>Favor facilities that can readily be adapted to multiple uses by corporation and others</td>
<td></td>
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<tr>
<td>3. Promote Human Resource objectives</td>
<td></td>
</tr>
<tr>
<td>Provide efficient environment to enhance productivity</td>
<td></td>
</tr>
<tr>
<td>Recognize that environments are important elements of job satisfaction and therefore compensation</td>
<td></td>
</tr>
<tr>
<td>Seek locations convenient to employees with preferred amenities</td>
<td></td>
</tr>
<tr>
<td>4. Promote marketing message</td>
<td></td>
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<tr>
<td>Symbolic statement of substance or some other value</td>
<td></td>
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<tr>
<td>Form of physical institutional advertising</td>
<td></td>
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<tr>
<td>Control environment of interaction with company’s product/service offering</td>
<td></td>
</tr>
<tr>
<td>5. Promote sales and selling process</td>
<td></td>
</tr>
<tr>
<td>High traffic location to attract customers</td>
<td></td>
</tr>
<tr>
<td>Attractive environment to support/enhance sale</td>
<td></td>
</tr>
<tr>
<td>6. Facilitate and control production, operations, service delivery</td>
<td></td>
</tr>
<tr>
<td>Seek/design facilities that facilitate making company products/delivering company services</td>
<td></td>
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<tr>
<td>Favor locations and arrangements that are convenient to customers</td>
<td></td>
</tr>
<tr>
<td>Select locations and layouts that are convenient to suppliers</td>
<td></td>
</tr>
<tr>
<td>7. Facilitate managerial process and knowledge work</td>
<td></td>
</tr>
<tr>
<td>Emphasize knowledge work setting over traditional industrial paradigm</td>
<td></td>
</tr>
<tr>
<td>Recognize changing character, tools used in, and location of work</td>
<td></td>
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<tr>
<td>8. Capture the real estate value creation of business</td>
<td></td>
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<tr>
<td>Real estate impacts resulting from demand created by customers</td>
<td></td>
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<tr>
<td>Real estate impacts resulting from demand created by employees</td>
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<tr>
<td>Real estate impacts resulting from demand created by suppliers</td>
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Another way of understanding corporate real estate (CRE) is the one described by Joroff et al. (1993), as cited in Appel-Meulenbroek & Feijts (2007). He describes CRE as part of an interwoven network built upon four other resources: knowledge, employees, technology and capital. Together these five resources are necessary within an organization to successfully transform inputs into measurable outcomes.

Figure 1: The fifth resource (Joroff et al 1993, in Appel-Meulenbroek & Feijts, 2007, p. 220)

To the extent of this research, CREM will be defined as the active management of a corporation’s real assets in order to realize maximum performance towards the overall business success while creating a productive, effective, efficient, creative and healthy workplace and maintaining generic flexibility and sustainability.

The scope of CREM also depends on the type of real estate and the purpose of its use. Different categories of CRE can be identified according to their use: commercial, retail, industrial warehousing and office (Wills, 2008). Another categorization of CRE is found in Gibson (2001). She categorizes CRE according to their flexibility requirements as core and peripheral real estate (first and second grade). Wills (2008) takes up this idea and develops it further by classifying CRE into five classes: strategic property, landmark/flagship property, core property, peripheral property and surplus property. For the purpose of this study the authors will use the categorization of CRE into different types of use according to Wills (2008).
3.1. Major research issues in CRE

After a general overview of CREM literature, it can be argued that among the main research areas covered are those related to: CRE objectives and strategies, CRE organizational and operational issues, and the availability of information issue. Each of these areas will be covered separately in the following literature overview with the purpose of outlining the main aspects that were considered in the present study.

3.1.1. CRE objectives and strategies

Research has dealt extensively with the importance of clearly defining CREM goals and objectives (Carn et al., 1999; Gibler et al., 2002; Ilsjan, 2007; Lindholm, 2008). They have mostly tried to identify the main objectives of CRE from a managerial perspective. According to this literature the operational objectives for CRE are: to facilitate any issues related to the core business, to optimize real estate resources and to be consistent with the corporate objectives (Carn, Black, & Rabianski, 1999). According to a survey by Gibler, Black and Moon (2002), CRE managers stated as top three objectives: meeting the workplace needs, meeting the particular needs of business operating divisions and minimizing the portfolio’s operating expenses. These results were consistent with previous findings but also underline the fact that CREM objectives were mostly viewed from the traditional perspective of accommodating operations at the lowest possible cost instead of focusing on issues such as productivity and flexibility (Gibler, Black, & Moon, 2002).

More recently, an explorative survey done among the 17 largest organizations in Estonia indicated that the main objectives of CRE were optimizing occupancy cost and increasing client satisfaction (Ilsjan, 2007). According to Ilsjan (2007), most companies participating in her study still regarded real estate as an operational asset rather than as a financial asset and many of them expressed their desire to concentrate on the core business rather than dealing with real estate related issues. Lindholm (2008) stated that originally CREM’s objective was to continuously provide accommodation, but that nowadays its main focus lies on outsourcing CRE services and on reducing the impact of real estate in the balance sheet. She also mentioned that there has been a shift from perceiving CRE as a tangible asset towards an intangible asset, able to provide associated benefits (Lindholm, Identifying and Measuring the Success of Corporate Real Estate Management, 2008).

Besides studying CRE goals and objectives, research has focused on the identification of different CRE strategies (Nourse & Roulac, 1993; O’Mara 1999; Hiang & Ooi, 2000; Roulac, 2001, Krum & de Vries, 2003; Lindholm & Leväinen, 2006; Singer et al., 2007; and Lindholm, 2008). A study on opinions towards CRE strategy revealed a great diversity among CRE executives (Carn, Black, & Rabianski, 1999). In their paper they mentioned already several issues such as benchmarking, flexibility, outsourcing and others, soon to be dominating the discussion around CRE. In general terms, it could be argued that different strategies toward CRE and therefore different approaches of tasks related to CRE vary within different industries and also that different markets show different patterns (Ali et al., 2006; Bon et al., 2003; Roulac et al., 2003).
Roulac (2001) argued about the risks associated with the absence of CRE strategies for corporations. He also believed that the main reason for companies not developing a formal CRE strategy was the lack of explicitly articulated strategies in terms of CRE, in many cases deriving from top management’s attitude towards real estate and their frequently used cliché: “We are not in the real estate business!” (Nourse & Roulac, 1993, p. 475).

The contributions of superior CRE strategies according to Roulac (2001) were: (1) create and retain customers, (2) attract and retain outstanding people, (3) contribute to business processes, (4) promote enterprise values and culture, (5) stimulate innovation and learning, (6) enhance core competency and (7) enhance shareholder wealth. Subsequently, the relationship between each alternative CRE strategy (Table 1) and each one of these contributions was analyzed.

According to a model by O’Mara from 1999 (as cited in Singer et al., 2007), a CRE strategy can be classified as incremental, value-based or as standardization. In an incremental strategy, the main aim of CRE is to fulfill the physical requirements of the organization, which often results in the bundling of several buildings. A value-based strategy on the other hand takes into consideration the company’s values and strategies in their real estate related decisions, by prioritizing their function and meaning towards employees (internally) as well as customers and general public (externally). The standardization strategy is aimed at setting standards in controlling as well as coordinating real estate operations together with facility design. It focuses on forecasting needs and it is based on controlling effectiveness, costs and employee’s behavior (Singer, Bossink, & Vande Putte, 2007). They further studied how CRE strategies were used by organizations in order to support their competitive strategy. In their research they implemented O’Mara’s model as a framework together with Porter’s sources of competitive advantage to develop a combined model for competitive and real estate strategies. In this process they also identified the main advantages and disadvantages of each strategy in O’Mara’s model.

Several authors have tried to identify alternative CRE strategies aimed at increasing shareholder’s value (Hiang & Ooi, 2000; Krumm & de Vries, 2003; Lindholm & Leväinen, 2006; Lindholm, 2008). Hiang and Ooi (2000) identified three major areas where CRE research should focus on from a financial perspective. According to them companies are able to maximize shareholder’s wealth by capitalizing on unrealized real estate values. The attitude of management towards CRE ownership is apparently directly related to the understanding of the objectives and implications connected to ownership. Therefore companies should not only be considered as CRE end-users but also as investors in property. They further claimed that improving the relationship between CRE strategies and financial management and between CRE strategies and the capital markets would improve understanding the benefits of superior CRE strategies for increasing shareholder’s value (Hiang & Ooi, 2000).

Research and literature have also focused on the factors that impact CRE strategies (Krumm et al., 1999; and Roulac et al., 2003) and on the contributions of superior CRE strategies to the organizational setting (Roulac, 2001; Roulac et al., 2003; and Singer et al., 2007). Krumm, Dewulf and de Jonge (1999) stated that the structure of CREM and its strategic approach are mostly determined by the reasons for introducing the CRE unit in the first place and by the initial role assigned to the department.
Regarding the contributions of superior CRE strategies, Roulac (2001) introduced the seven contributions of CRE strategies to competitive advantage already mentioned, and Singer, Bossnik and Vande Putte (2007) underlined the importance of certain CRE strategies so as to enhance the corporation’s competitive advantage.

According to O’Mara, Page and Valenziano (2002) the access to strategic planning information is crucial for CREM, but it still remains a challenge in most organizations (Allard & Barber, 2003). Furthermore, there is still very few evidence available on how CRE decisions are integrated into the overall strategic planning of organizations (Gibler, Black, & Moon, 2002). Investigating the length of CRE planning horizons, Gibler, Black and Moon (2002) identified five years or less as the common approach for organizations, highlighting the difficulty in determining long-term strategies based on such short horizons. A similar approach by Gibson (2001) recognized a trend in setting shorter planning horizons for property needs. On the other hand, Wills (2008) questioned the relevance of averaging planning horizons, since they usually vary considerably according to company type and managerial style.

Another important issue researchers have analyzed from a strategic perspective is the build vs. buy decision as well as the tenure decision. Whether companies are building or buying the premises they use or whether they own or lease them (Nourse, 1994; Rodriguez & Sirmans, 1996; and Ilsjan, 2007) are issues that many researchers have been addressing for long. A good literature overview about the build vs. buy decision can be found for example in Hartmann et al. (2010) whereas the owning vs. leasing debate is thoroughly tackled from both an empirical and a theoretical perspective for example in Rodriguez & Sirmans (1996). Even though empirical research has found that answers vary considerably according to several factors (region, industry, etc.), the main reason behind leasing premises seems to be directly related with flexibility concerns (Nourse, 1994).

3.1.2. Organizational issues

“High standing CRE organisation, (…) are indicated by fewer levels between the CRE executive and CEO, frequent CRE meetings with senior management, a broad span of control for facility and real estate operations, and an executive committee for real estate matters (…).”

(O’Mara, Page III, & Valenziano, 2002, p. 333)

3.1.2.1. Structure and administration of CRE

CREM can be organized within a company in a centralized or decentralized fashion or sometimes even through a subsidiary in what is known as spin-offs (Rodriguez & Sirmans, 1996). Empirical research demonstrates that spin-off announcements are usually associated with increases in stockholders wealth, evidencing that corporate restructuring is beneficial for enhancing firm value. This basically implies that the market recognizes the importance of a company effectively managing its real estate asset (Rodriguez & Sirmans, 1996).

According to Carn, Black and Rabianski (1999), there seems to be no agreement regarding the best placement of the CRE function within the corporation’s organizational scheme.
They suggested that the CRE function should be freestanding and independent from other organizational areas such as information systems or human resources and they also acknowledged the importance CRE executives and their important role in strategic management. O’Mara et al. (2002) have come to the conclusion that high standing CRE organizations (indicated by fewer levels between the CRE executive and the CEO among other things) usually share certain characteristics such as receiving more information on strategic planning and having more authority, power, formal policies and standards than others. Krumm, Dewulf and de Jonge (1999) argued that the main reason for the formation of separate CRE units is to coordinate real estate activities and to realize economies of scale and that portfolio efficiency and corporate profitability are enhanced by centralizing CREM operations.

Iltsjan (2007) claimed that the structure of CREM within the organizations varies considerably according to size, outsourcing strategy and the development phase of both, the organization and the market. However, the number of CREM configurations has proven to be relatively small compared to the variety of challenges and broad range of solutions faced by a large number of corporations (Krumm, Dewulf, & de Jonge, 1999). Furthermore, recent literature on the subject identified five CRE management models, which describe the manner in which CRE responsibilities are allocated within a company (Hartmann, Linneman, Moy, & Siperstein, 2010). Results demonstrate that even though the models are useful in describing practices, there is only weak statistical significance between them and that certain external factors may influence the choice for either one of them. It is therefore unlikely that a particular CRE management model could be the best approach for any specific situation. Apparently, there is no one size fits all approach when it comes to defining an organizational structure for CRE (O’Mara, Page III, & Valenziano, The global corporate real estate function: Organisation, authority and influence, 2002).

### 3.1.2.2. CRE skills and training issues

The skills and training needed by CRE managers is another area where literature has been focused on for more than a decade (Carn et al., 1999; Krumm et al., 1999; Gibler et al., 2002; Epley, 2004; Fisher, 2009). This probably comes as no surprise taking into account that the skills required for many CRE tasks have varied considerably over time and are still subject of permanent evolution due to a continuously changing environment (Carn, Black, & Rabianski, 1999). According to the results of a survey from 1999 the most important skills for CRE executives and managers were those related to financial and legal issues, communication and general management (Carn, Black, & Rabianski, 1999). These results are in line with those of Krumm, Dewulf and De Jonge (1999) who recalled that even if most CRE departments originally required technical skills for their staff, these requirements later changed towards both financial and managerial skills.

In order to be effective in the future, strategic planning and business related skills and knowledge appears to be essential for CRE managers. Research indicates that CRE managers in general have not evolved much since the 1980’s and that CRE professionals “need to develop general management knowledge and skills that will enable them to effectively contribute to the company’s productivity and profitability” (Gibler, Black, & Moon, 2002, p. 261).
When analyzing the knowledge and skills perceived as crucial to CREM in the future in four different countries (Australia, Hong Kong, US and the UK), Gibler, Black and Moon (2002) found that the highest rated skills were: strategic planning, real estate portfolio management and knowledge of the organizations among others. The ones regarded as least important were international finance and economics; tax management and foreign languages.

In a similar study conducted by Epley (2004), aimed mainly at US-based CRE managers, the author identified four main areas to be believed of critical importance for CRE practitioners: real estate market interpretation, general tools of analysis as opposed to specific tools, relationship with other personnel and the public and lease analysis. In his study, accessing and interpreting market data as well as identifying clients and their goals were the skills ranked as most important. Contrarily for example the calculating before and after tax analysis for a tenant in a lease was ranked the least important (Epley, 2004).

More recently, Fisher (2009) proposed that CRE managers should go beyond relationship management towards value management in order to raise their strategic relevance in the organization. She first provides a list of the expectations from senior management followed by a list of important issues/tasks for CRE managers to evolve into value managers.

### 3.1.2.3. Role of CRE managers and executives

The approach proposed by Fisher (2009), regarding CRE executives and managers evolving from a functional role to that one of a value manager, is a qualitative shift regarding the roles and functions of CRE executives and managers, from an operational to a fully strategic position in the organization. The standing of CREM within the organization seems to be of crucial importance towards the success of CRE (O’Mara, Page III, & Valenziano, The global corporate real estate function: Organisation, authority and influence, 2002). When CREM is perceived as more important and the CRE managers within the corporation have a higher standing, the more strategically CRE is managed and viewed as supplementary rather than imperative.

Research has extensively tackled the changing role of CRE executives and managers together with the different CRE levels and the repositioning of the CRE function (Veale, 1989; Joroff et al., 1993; Carn et al., 1999; Krumm et al., 1999; O’Mara et al., 2002; Foster & Dye, 2005; Appel-Meulenbroek & Feijts, 2007; Lindholm, 2008; Fisher, 2009; Hartmann et al., 2010).

Veale (1989) was among the first to acknowledge that the role of CRE managers should move towards the one of general management and incorporate a strategic approach by engaging in the portfolio-wide decision making process in a proactive and comprehensive manner. The development and evolutionary stages of the CRE function have also been analyzed in depth by literature. Overall, five different stages have been identified: taskmaker, controller, dealmaker, intrapreneur, and business strategist (Joroff et al., 1993 as cited in Gibler et al., 2002).

In a similar fashion, Roulac (2001) described the evolution of the role of CRE managers identifying also five different eras: custodial, entrepreneurial, administrative, managerial and strategic.
Joroff et al. (1993) claimed that in order to incorporate CRE executives and managers into the arena of strategic planning, their role should shift in several ways (as cited in Gibler et al., 2002). Further classification regarding the levels of CRE in terms of authority indentified the CREM’s role or position in the organization according to the extent in which business units are mandated by corporate rules to make use of the department or the CRE manager’s expertise (O’Mara, Page III, & Valenziano, The global corporate real estate function: Organisation, authority and influence, 2002).

Analysis done by other researchers, considered that there is a negative connotation related to the dealmaker role of CRE executives (Carn, Black, & Rabianski, 1999). They stated that even though managing negotiations will still be an important part of their role, CRE managers will likely be recognized as far more than a dealmaker in the future. It is certainly the case that the traditional role of CREM was transaction-oriented whereas later in time it changed towards obtaining maximum value for the business, and that this transformation in the role of CREM, even though sometimes underestimated, is closely related to another transformation taking place in the corporate setting (Krumm, Dewulf, & de Jonge, 1999).

Foster & Dye (2005) have tackled the issue of the shifting role of CRE towards a more strategic level through enterprise wide and cross-functional business continuity planning. They identified four different points that would help CRE managers supporting business continuity strategies. Their argument was that this will allow CRE executives to expand their role towards processes and services other than the traditional ones.

It seems that almost without exception, the aim or mission of CRE managers is to support the occupier organization, though the way in which they do so often varies. CREM’s contribution can be direct and is easily measured, for example cost reductions, or indirect and somehow hidden, for example through the impact of workplace design on employees’ productivity (Lindholm, Identifying and Measuring the Success of Corporate Real Estate Management, 2008). She further classified for her research the answers given by interviewed organizations regarding the CRE missions, into three different groups: added value creator, core business support and cost factor.

### 3.1.2.4. Business alignment

It has been argued already that CRE departments and managers should have a strategic approach towards the CRE function and that this should be consistent with the overall corporate strategy. Consequently, researchers have approached extensively the business alignment concept as it is regarded as the key to this particular issue (Nourse & Roulac, 1993; Nourse, 1994; Roulac, 2001; Gibler et al., 2002; Allard & Barber, 2003; Lubieniecki & Desrocher, 2003; Pfnuer & Armonat, 2003; Scheffer et al., 2006; McCarty et al., 2006; Singer et al., 2007; Warren et al., 2007; Lindholm, 2008; Fisher, 2009). More specifically, researchers have focused on the manner in which CRE aspects affect organizational performance, the relationship between CRE executives and senior management, together with the corporate executives’ understanding of real estate and the conflicts and difficulties faced by CRE.
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CRE decisions are effective only if they are aligned with the objectives of organizations and it is therefore crucial to determine in which way CRE strategies support overall corporate strategies (Nourse & Roulac, 1993). Moreover, dealing with CRE operations as individual transactions diminishes CRE’s capability to enhance the profitability of the company (Gibler, Black, & Moon, 2002). Research has shown that in general those companies leasing their premises are more prone to relate operating decisions to strategy compared to those owning their properties (Nourse, 1994). According to Roulac (2001), the impact of CRE on business strategy had been overlooked in the past, both by researchers and practitioners, while being focused primarily on facilities. In his paper from 2001, he extends prior research by Nourse and Roulac (1993) in a study aimed at demonstrating the positive impact of effective CREM to the overall business.

In particular, his objective was to analyze how each of the alternative CRE strategies from the original list by Nourse and Roulac (1993) contributed to competitive advantage. He concluded that superior CRE strategies can contribute to the overall organization mainly by supporting both its competitive advantage and its core competencies (Roulac S. E., 2001).

Allard and Barber (2003) provided an analysis of a survey conducted among more than 200 CEOs from the United States, with the objective of identifying those CRE practices proven to be essential to corporate strategy. Their analysis indicated that even though there is certain awareness of the strategic relevance of CRE among top executives, there is still much work ahead regarding how this alignment between CRE and business strategy can be done and on how to measure its value and communicate it to top management (Allard & Barber, 2003). In order to facilitate the refocusing of CRE activities towards this alignment, different models and frameworks have been proposed, such as the model proposed by Scheffer, Singer and Van Meerwijk (2006) or the Simplified Scorecard framework by Lubieniecki and Desrocher (2003). The argument behind these frameworks is usually the fact that it seems very hard to communicate the value of CRE and its contribution to the overall business to senior management. It is believed by some, that through communicating CRE performance in the language of top management, the in-house presence of CRE executives can be both justified and recognized (Scheffer, Singer, & Van Meerwijk, 2006).

Singer, Bossink and Vande Putte (2007) constructed a literature-based model aimed at understanding how organizations make use of their CRE strategy to support their competitive corporate strategies. They also pointed out that even if literature mostly recognizes the significant role of CRE in supporting competitive strategies, this relationship has not yet been analyzed and described in-depth. Based on a survey to senior CRE executives in Australia, Warren, Simons and Trumble (2007) concluded that there is a significant divergence in the perception of the impact of real estate to the organization between CRE and business managers. Lindholm (2008) believed that the recognition of CREM as a strategic support function is only recent and that CREM decisions are seldom based on the businesses performed within the properties. She further recognized that “little research and literature is available on the benefits of corporate real estate management from the core business of an occupier organization perspective” (Lindholm, 2008, p. 8).

As a mean to achieve business alignment, CRE managers and executives are suggested to go towards the arena of relationship management, which basically implies learning the language of the business (McCarty, Hunt, & Truhan, 2006), or towards becoming value managers, through which they will be able not only to speak the same language but to acquire the same behavior, attitudes and skills of general management (Fisher, 2009).
As mentioned earlier, the business alignment concept within CRE research has also been related to other factors such as the manner in which CRE aspects affect organizational performance. Martin and Black (2006) suggested that organizations could be able to incorporate CRE strategies within their core strategies based on the ability of CRE to support HR objectives through the workplace environment.

### 3.1.2.5. Cooperation with other business units

In order to reach a coordinated strategic approach, CRE managers should seek collaboration from other business units (Gibler et al., 2002; Foster & Dye, 2005). According to Nourse (1994), a closer relationship between CRE operations and corporate strategy can be reached by creating a facility committee including operating, finance and real estate managers. It is also believed that a corporate finance perspective would benefit the evaluation of CRE asset strategies (Hiang & Ooi, 2000). Ilsjan (2007) acknowledged in her paper that even though some authors believe accounting should play an important role in CRE (Pfnuer & Armonat, 2003), other authors (such as Carn et al., 1999) believe that this trend leads in general to organizations gathering accounting data rather than decision-making data.

Results from a study performed in Asia, Europe and North America show that even though most CRE managers work closely with legal, operations and facility units, they seldom do so with the human resources or marketing departments (Gibler, Black, & Moon, 2002). According to O’Mara, Page and Valenziano (2002), using relationship management among business units is a way of improving the sharing of planning information. They further concluded in their paper that integrating CRE to facility management will provide benefits such as a better integration of services and an improved tracking of true occupancy costs.

### 3.1.2.6. Conflicts and difficulties faced by CRE managers

Finding ways to communicate the contribution of CRE to the organization is one of the main difficulties faced by CRE managers (Allard & Barber, 2003). Some authors believed this difficulty relies on the lack of adequate CRE measures deriving from the failure in analysing and communicating CRE’s contribution to the core business to senior management (Appel-Meulenbroek & Feijts, 2007). Lindholm (2008) also acknowledged the challenge. According to her, the uniqueness of each corporation’s needs makes it very hard to develop a general model for the contribution of CREM. Knapp and Oliver (2008) believed the problem relies not only in the absence of common language between CRE managers and senior executives but also in the lack of confidence between them both. Even when adequate CRE measures and a common language are established it seems extremely challenging to link successful CREM and its contribution to the core business.

According to Manning and Roulac (2001), the CRE role has grown in complexity in order to keep up with the changing economic environment and this has induced CRE managers to pursue different and sometimes conflicting goals such as reaching for operating efficiency while focusing on property investment returns. Krumm and de Vries (2003) provided a simple explanation to why CREM in general is prone to conflict and contradiction in the first place.
They believed that from a corporate perspective, CRE decisions are based according to business needs rather than market timing. Consequently, it is seldom the case that organizations perceive CRE decisions and activities from an investor’s perspective (Krumm & de Vries, 2003).

In order to tackle these problems, various researchers have provided lists, models and frameworks including success factors or performance measurements for the CREM unit. Scheffer, Singer and Van Meerwijk (2006) specifically provided a model aimed at understanding the added value of CRE to overall corporate strategy and objectives. Furthermore, faced with what they considered a lack of adequate measures, Appel-Meulenbroek and Feijts (2007) suggested a new set of measures based on methods such as isovists analysis or visibility graphs, frequently used in other disciplines in order to succeed. Different models describing how CRE adds value to the core business, and how to identify this added value, are provided by Lindholm and Leväinen (2006) and Lindholm (2008).

3.1.3. Operational issues

Nourse and Roulac (1993) defined CRE transactions as operating decisions regarding the acquisition, control, management and disposal of property interests. They further identified fourteen different operating decisions considered critical to CRE. These decisions need to be not only aligned with the CRE strategy but also with the overall business (Nourse & Roulac, 1993).

3.1.3.1. The impact of a changing business environment

An important discussion starting by the late 90s was the issue of CREM evolution towards an established management discipline (Schaeffers, 1999; Krumm, Dewulf & de Jonge, 1999). It is argued that during the lifetime of a company, CRE functions can change and so does the management of those functions. Especially due to the changing environment CRE is faced with challenges, which demand different perspectives. Within the same company for example, the perspective towards CRE can evolve over the years from a pure cost of production approach (cost center) towards a view when CRE is handled as value adding (profit center) towards the business strategy (Hiang & Ooi, 2000). Different opinions within the literature exist whether or not to view CRE as a cost (Lubieniecki & Desrocher, 2003) or a profit centre (Martin & Black, 2006). In addition, different phases on the business cycle also have influence on certain activities towards CRE, such as outsourcing or relocating (Dettwiler, Lindelöf, & Löfsten, 2006).

Several researchers focused their analysis on determining how the changing business environment affects key CRE operating decisions. Globalization, market expansion, technological change and corporate restructuring among others are frequently referred to as the main drivers of this environmental change (Manning and Roulac, 2001; Gibler et al., 2002).

Global competition has lead businesses to emphasize productivity and quality over cost reductions and this can be directly translated to the CRE arena in terms of space provision (Carn, Black, & Rabianski, 1999).
According to Manning and Roulac (2001), CREM gained complexity with globalization as companies started seeking for operating efficiencies. Gibler, Black and Moon (2002) believed that it is through the creation of efficient, innovative, productive and flexible working environments, that companies will be able to effectively respond to a changing market and business environment. On the other hand, O’Mara, Page and Valenziano (2002) argued that cultural issues are, together with other issues special to different markets, among the biggest challenges faced by firms managing large international portfolios.

The impact of technological change on CRE operations and specifically, the interaction between technology and space utilization has for example been addressed in Carn et al. (1999), Gibson & Lizieri (2001), Gibler et al. (2002), Gibson (2003), Roulac et al. (2003) and Warren et al. (2007). In terms of technology, one of its main contributions to CRE is that it provides locational flexibility (Gibson & Lizieri, 2001). The impact of technological change in the workplace environment, in productivity and employee satisfaction was described as the main practical challenge for CRE managers more than ten years ago (Carn, Black, & Rabianski, 1999), but the pace of technological change is still likely to determine future working practices and therefore also determine CRE’s strategic objectives (Warren, Simmons, & Trumble, 2007). This change in the workplace environment will lead to an “increased integration of workplace enabling functions, including information technology and human resource management” (Warren, Simmons, & Trumble, 2007, p. 471). However, space requirements are not only determined by the impact of information and communications technology but also by new working practices resulting from corporate restructuring (Gibson V., 2001).

Some researchers believed “the impact of the corporate setting on the role and position of corporate real estate management is underestimated” (Krumm, Dewulf, & de Jonge, 1999, p. 58). Rodriguez and Sirmans (1996) studied alternative CRE acquisition and disposition strategies taking into account the implications of corporate restructuring on firm valuation using evidence from the capital markets. They argued that, in order to meet space demands, companies usually acquire or dispose space in different ways. For CRE acquisitions they identified direct purchases, leasing, mergers and joint ventures as the main strategies, whereas for CRE divestitures or dispositions they identify sell-offs, liquidations and sale-leaseback strategies. Regarding corporate restructuring, they analyzed the impact of creating a specific CRE unit within the organizational setting and the impact of spin-offs. Krumm, Dewulf and de Jonge (1999) believed that the impact of mergers and acquisitions, for instance, is not only related to a significant increase in organizational size but also to the realignment of activities that follows, including those concerning CRE. Among the findings of their paper, they argued that the internationalization of corporate activities has lead to increased outsourcing of CRE operations and that the expansion pattern of a corporation determines to a great extent the nature of CRE operations and its autonomy.

### 3.1.3.2. The impact of a changing workplace environment

A similar important aspect addressed by literature is the implementation and impact of new working practices resulting from new organizational structures (Gibson & Lizieri, 2001; Gibson, 2003; Haynes, 2008; Fawcett & Rigby, 2009).
Among the new working practices identified by researchers are: home working, hot desking, team working, outsourcing, downsizing, business process re-engineering, hotelling and workstation sharing (Gibson and Lizieri, 2001, Gibler et al., 2002; Roulac et al., 2003). It needs to be mentioned here that the terminology of different working practices to date is unclear and sometimes overlapping.

Some scholars believed that the implementation of new working practices determines the nature and demand for corporate space (Gibson & Lizieri, 2001). However, they acknowledged that the impact on the CRE portfolio is smaller than it is usually believed to be due to certain constraints affecting supply. They further identified under-investment and under-utilization of IT capabilities, management and staff resistance, and the absence of occupancy costs benchmarks as the main internal barriers to change. The process of change should nonetheless not be underestimated, as these frictions will eventually be overcome (Gibson & Lizieri, 2001).

Gibson (2003) addressed the implications of flexible working practices on the workplace design and space provision. She argued that the challenge for CRE is to provide space that adequately supports the ever-changing business environment. In order to do so CRE managers need to understand the working processes actually taking place in the organization if they are to provide appropriate space (Gibson V., 2003). Haynes (2008) reviewed in his paper the literature linking working patterns with office layout and agreed with Gibson (2003) that in order to effectively identify the needs of office occupants, different working practices need to be categorized and analyzed.

### 3.1.3.3. Workspace management

The approach towards workspace management varies considerably across organizations (Iljan, 2007) and is something usually handled by small departments (Fawcett & Chadwick, 2007) rather than by centralized units. Knapp and Oliver (2008) provided an overview of the associated benefits of occupancy planning programs. Results show that through the implementation of occupancy planning programs, companies obtain better data and forecasts and, hence are more prone to improve overall space utilization. Recent work by Fawcett and Rigby (2009) analyses the cost-effectiveness of alternative workstation sharing strategies. They concluded that workstation-sharing strategies need to be determined case-by-case if the focus is on cost-effectiveness, implying that there is no single appropriate workspace-sharing solution for all organizations.

From the year 2000 onwards, more and more literature about CREM investigates especially the office as the dominating real asset of the 20th century’s businesses. In a survey of 45 organizations in the United Kingdom, Gibson and Lizieri (2001) explored the “extent to which [...] new management practices had been adopted [...] and how this had affected demand for business space” (Gibson & Lizieri, 2001, p. 66). They found out that businesses adapt rather slowly towards new working practices and that the impact of new working practices as well as new technologies seems to be rather small on CRE, despite the occurrence of those topics in literature at that day.

Traditionally, demand for office space was based only on employment forecasts while office space per worker was taken as given (Hakfoort & Lie, 1996). Hakfoort and Lie (1996) further provided an economic explanation to office space demand per worker.
Their results show that workspace demand is a function of rent, expected business growth and uncertainty, the lease period, the substitution possibilities and of other associated costs. These results also confirm certain space consumption patterns by industry type.

The demand for business space was transformed by the implementation of new working practices and an overall reorganization of the businesses (Gibson & Lizieri, 2001). Fawcett and Cadwick (2007) modeled floorspace demand for organizations with employees usually working at off-site locations. They developed an innovative space-planning method and through practical experimentation were able to conclude that even though it is possible to reduce floorspace demand in this sort of organizations, it is hard to reach a perfect fit between workspace demand and supply due to the presence of relatively uncertain patterns of activity. They also acknowledged that the relevance of workspace management increases significantly as workspace is managed more effectively (Fawcett & Chadwick, 2007).

The risk of office space demand exceeding supply related to the implementation of new working practices such as workstation sharing is addressed by Fawcett and Rigby (2009). They highlighted the importance of carefully studying the risks attached to this sort of strategy, warning managers to be completely certain about the cost reduction potentials of workstation sharing before implementing such a policy in the organization. Niemi and Lindholm (2010) addressed the qualitative aspect of demand. Based on several interviews performed in selected Finnish organizations, they investigated the main methods used in order to determine office occupiers’ needs and preferences.

Especially in the office sector cost reductions through space reductions seem to be a viable approach for CRE to contribute to the overall business success (Hakfoort & Lie, 1996). But more often in the literature it is mentioned that “companies need to realize that they are not dealing with simple cause and effect linkages” (Martin & Black, 2006, p. 53). The argument is that especially knowledge workers need a productive working environment and therefore might value for example a less efficient space in terms of utilization more productive for their specific task.

To enable a cost efficient occupation of office space while at the same time creating a stimulating work environment can be viewed as one essential task for CREM today. One researcher, advocating the shift from cost-reduction towards the human resource factor is Haynes (2007, 2008). But other researchers as well he discovered that “since there is no uniformly accepted way of measuring productivity, by definition the range of studies claiming to have measured productivity are going to present contrasting results” (Haynes, 2007, p. 458). Balancing both can be the way to sustainable performance of CRE and certainly needs to be carried out individually on the firm level. Fawcett and Chadwick (2007) estimated a considerable amount of space saving opportunity if both, the time-space efficiency and the physical layout of office space are improved when new working practices such as hot desking, hotelling, home working or teleworking are in place.

### 3.1.3.4. Productivity and Performance

Performance of CRE has been the topic of various researches but still remains ill defined for different reasons. Nourse (1994) attempted addressing the problem to some extent and tried to identify issues related to property performance but due to a very limited amount of companies in his investigation, his research has not been too reliant.
Hakfoort and Lie (1996) investigated office buildings performance. They narrowed the scope for CRE performance and only related it to office space per employee.

Every CRE has to be viewed individually with partly unique demands from each single corporation towards its attributes. But “many corporations still lack sufficient insight into the impact of corporate real estate decisions on corporate performance.” (Scheffer, Singer, & Van Meerwijk, 2006, p. 188) Most researchers however agree on the fact that CRE is more than just a financial contribution to a company’s overall performance and that it has many non-financial factors which directly affect performance as well (Krumm & de Vries, 2003).

CRE productivity and performance could be summarized by the following question: “Can a marginal increase in space costs produce an increase in productivity that recaptures the marginal costs plus a profit?” (Carn, Black, & Rabianski, 1999, p. 287). Underlying this question is an important conceptual consideration regarding the significance of CRE decisions, their impact on the overall business and the need to consider them as more than just mere corporate costs because of the benefits they can provide in terms of productivity and performance. At this point, it is necessary to say that the terms productivity and performance are sometimes vaguely defined and/or understood. To the extent of the present study productivity will be defined as strictly related to the relation between output and input, and performance acts as an umbrella term including other factors such as profitability, productivity, quality, speed, delivery and flexibility (Tangen, 2005).

The contradictory or conflicting approach towards CRE and CREM as whether it is a cost or a value-adding activity is addressed extensively in existing literature. Haynes (2007) argued about the existence of two paradigms emerging from the quest for productivity improvements: the control paradigm and the enabling paradigm. The control paradigm is aimed at improving productivity, based on achieving greater efficiencies mostly through cost-reduction strategies, whereas the enabling paradigm includes the human dimension and is aimed at improving productivity by acknowledging the human asset and the creation of knowledge. More importantly, his results suggest that significant real estate cost reductions can be easily outweighed by small increases in employee productivity (Haynes, 2007).

Appel-Meulenbroek and Feijts (2007) identified 51 different “CRE aspects that were proven to have an effect on organizational performance” (Appel-Meulenbroek & Feijts, 2007, p. 220). Such a comprehensive list already shows the difficulty research has with measuring the performance of CRE on a company’s overall performance. All those effects can have different dimensions and could probably be measured differently in different organizations. Morgan and Anthony (2008) identified in their research seven approaches aimed at enhancing workplace performance. Haynes (2008) furthermore studies the impact that workplace design and office layout have on productivity and determines the importance of linking office layout to working patterns.

Two outcomes from an enhanced workplace are positive changes in employee behavior, enhanced employee satisfaction and productivity better decision making, collaboration and cross selling; improved retention and recruitment; reduced churn costs; and positive client feedback (Morgan & Anthony, 2008).
As did CREM evolve, so did the debate around performance of CREM. Morgan and Anthony (2008) called the change which organizations had to face, the evolution of workplace. It can be seen in Table 2, their idea constitutes both, the rising demands towards the workplace over time and the challenges CREM therefore had to face in its evolution.

Table 2: Performance criteria organizations should meet (Morgan & Anthony, 2008, p. 28)¹

<table>
<thead>
<tr>
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<th>Till 1950s</th>
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<td>Healthy</td>
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</tbody>
</table>

³.1.3.5. Flexibility

Since Carn, Black and Rabianski (1999), the discussion of flexibility and workplace in the literature started to emerge. Various authors have identified different aspects and contributed with their surveys and case studies to a better understanding of the subject. It seems that although the requirements towards and the variety of the function of CRE increased with time, the management of CRE has not gone the same way in its evolution (Gibler, Black, & Moon, 2002) and therefore the potential of CRE as an asset contributing to a corporation’s success still lies fallow.

Even though real estate is a rather inflexible asset, CRE managers are permanently searching for increased flexibility in the properties they manage (Gibson V., 2001). Acquiring flexible buildings has a twofold advantage for corporations. On one hand it provides companies the possibility to adapt the building to new uses at a relatively low cost in the future and on the other hand it allows the business to sell any surplus space at a more favorable price if eventually needed (Nourse & Roulac, 1993). The flexibility issue became central to CRE managers mainly because of an increased awareness of the liabilities associated with the properties (Gibson V., 2003).

Hassanain (2006) analyzed the reasons for providing sustainable and flexible workspaces. He identified both external changes beyond the scope of the organization and internal pressures as the main forces behind the overall change in the workplace. He further identified eighteen factors that facilitate the provision of flexible workspaces and categorizes them according to whether they are related to the planning of the building, to the layout of the physical workplace, to IT networking and to the building service systems.

¹ Edited for 2000 and further by the authors
Gibson (2001) argued that real estate is usually considered as a physical, a functional, or a financial asset. Consequently, she defined flexibility from a property perspective according to those considerations as physical flexibility (referring to the amount and use of space and the range and adequacy of the building services offered), functional flexibility (range of activities the property can support and its ability to adapt to new working practices and technologies) and financial flexibility (type of tenure and contract terms the company has in relation to the facilities in which it operates).

Gibson (2003) also addressed the flexibility issue from an organizational perspective. She identified different types of organizational flexibility: flexibility at a strategic level, in the range of jobs core staff is required to undertake and in the size of the peripheral workforce due to the increasing trend of outsourcing non-core functions; flexibility due to the emergence of work-balance issues, which has allowed the workforce to adopt flexible working patterns mostly in terms of working hours and location; and flexibility due to the emergence of remote working practices, which allow employees to work regardless the location of the offices. Consequently, three different types of flexibility were identified: contractual flexibility, time flexibility and locational flexibility (Gibson V., 2003). Her conclusion was, that while contract and time flexibility are prone to have a small impact on CRE and the overall demand for office space, locational flexibility is likely to have the biggest impact on CRE practices and decisions because it has led to the development of new working practices (Gibson V., 2003).

### 3.1.3.6. Outsourcing

The decision to use external service providers is another important research area within CRE (Rodriguez & Sirmans, 1996; Carn et al., 1999; Krumm et al., 1999; O’Mara et al., 2002; Ilsjan, 2007; Jacobs et al., 2007; Fisher, 2009; Hartmann et al., 2010). Even though the use of external service providers usually implies considerable cost savings, it is not only related to them (Carn, Black, & Rabianski, 1999). In fact, having external service providers, in general may lead to higher costs in the case the fees charged exceed the internal costs of training and providing accommodation. Firms usually decide to use external providers in order to outsource non-core activities (Carn et al., 1999; Krumm et al., 1999). However, merely outsourcing in the quest of operating efficiencies is no longer acceptable since a decrease in real estate costs may be associated with a reduction of the competitive business position (Krumm, Dewulf, & de Jonge, 1999). According to Rodriguez and Sirmans (1996) it is uncertain how the market evaluates outsourcing or simply, under what circumstances the outsourcing of CREM is able to provide wealth increases to stockholders.

Krumm, Dewulf and de Jonge (1999) argued that outsourcing has changed the whole purpose and structure of CRE departments while also increasing the need to justify its in-house presence. According to Carn, Black and Rabianski (1999), organizations need CRE managers even in the presence of outsourcing, in order to perform several roles, for example to manage and quality control the outsourced services.

Some authors believe the most important benefit from outsourcing is that it has allowed in-house CRE managers to focus on key aspects of their activities such as business alignment and other strategic CRE tasks (Fisher, 2009).
Ilsjan (2007) identified two stages in the evolution of outsourcing: the first one starting in the 1970s when companies began outsourcing CRE services in order to emphasize their core competencies and a second stage emerging during the mid 1990s when companies began searching for advanced partnerships or taking back in-house certain CREM activities due to a renewed emphasis on service quality and to balance quality and costs.

Jabobs et al. (2007) identified three stages in the evolution of outsourcing. While the first stage (task outsourcing) was aimed at seeking external providers for highly repetitive tasks only would translate into time and cost savings, the second stage (transactional outsourcing) incorporated the feedback from the service supplier and consequently process refinement and customization. The last stage (integrated outsourcing) incorporates the notion of in-house CRE managers as strategic partners outsourcing certain activities while providing integrated solutions.

It could be argued that those CRE activities and services related to building design, maintenance and cleaning, workplace design, transactions and operational services are among the most outsourced ones (O’Mara et al., 2002; Ilsjan, 2007). Different drivers for outsourcing from an end-user perspective have been identified by Jacobs et al. (2007) and recent research shows that the outsourcing intensity is directly related to the degree of responsibility for CRE functions. In most cases, the current outsourcing practices of any given company (whether CRE services are provided in-house or externally) are likely to continue in the future (Hartmann, Linneman, Moy, & Siperstein, 2010).

### 3.1.4. Availability of information

“Many research studies emphasize the importance of information as one prerequisite for efficient CREM”

(Ilsjan, 2007, p. 259)

#### 3.1.4.1. Information management

Despite being usually underestimated, the availability of information is in fact one of the main factors affecting CREM performance (Ilsjan, 2007). Enhanced CRE information is essential for organizations in order to make informed strategic decisions and adequately respond to the marketplace needs (Roulac, Adair, McGreal, Berry, Brown, & Heaney, 2003). Among the first comprehensive surveys regarding CRE practices where those carried out by Harvard University and the MIT in 1981 and 1987 respectively. Veale (1989) argued that one of the most relevant results from the MIT study was the acknowledgement that corporations did not gather relevant and/or sufficient information regarding their real estate assets, which led in most cases to assets being undermanaged. More recent research by Knapp and Oliver (2008) evidenced that even though many CRE managers are aware that part of the information they handle is inadequate, they are still unable to correct this due to certain budgetary or manpower constraints. According to Ilsjan (2007) the main problems CRE managers face are not related to the technical maintenance of databases but to the quality of the information and the manner in which corporations make use of it.
3.1.4.2. Information on costs, productivity and performance

Real estate executives are constantly looking for strategies in order to reduce occupancy costs as they are the first priority in terms of superior CRE performance (Noha, 1993) and because they are typically one of the largest sources of overhead costs for most corporations (French & Wiseman, 2003). Also surplus space is usually analyzed when no additional cost reductions seem available (Knapp & Oliver, 2008). Consequently, organizations gather information on vacancy and churn rates together with data on unnecessary expenses and space redundancy in order to manage their real estate portfolios efficiently.

Retrieving occupancy data is frequently very hard, especially for large organizations and it is usually the case that “inaccurate numbers lead to uninformed real estate decisions, and uninformed decisions are almost always bad ones” (Knapp & Oliver, 2008, p. 196). Occupancy costs for instance are usually measured on an employee rather than workplace basis, which is inadequate for organizations implementing workstation-sharing strategies (Fawcett & Rigby, 2009).

Pittman and Parker (1989) were among the first researchers to develop a model of corporate real estate effectiveness. The model includes nine independent variables related to the organization, the resources, the operating style and the incentives used. They have seen this as a first step for establishing objective measures for CRE performance. Similarly, Veale (1989) tried to identify in his paper the main factors determining the CREM unit’s effectiveness. In order to assess the performance of the real estate assets it is essential to keep record on significant issues such as lease dates and commitments among others (Veale, 1989).

Carn, Black and Rabianski (1999) recognized the important role of productivity information regarding net present value decisions, while Krumm and de Vries (2003) intended to highlight the role of CREM in the performance of an organization both in financial and non-financial ways. They claimed that the difficulty of understanding the contribution of CRE to corporate performance can be explained by its ambiguous role. On one hand CRE has a direct financial impact whereas on the other hand there is also an indirect impact of CRE much more difficult to grasp. They believed that value based metrics already applied in corporations as a way to assess corporate performance would be beneficial for the assessment of CRE performance as well. A CREM shift in perspective from a real estate investment portfolio analysis to a corporate real estate portfolio analysis is necessary to fully understand the effects if CRE within the organization (Krumm & de Vries, 2003).

According to French and Wiseman (2003) the affordability ratio (total occupancy costs / revenues) is one of the most accepted proxies for performance among corporations. Lindholm and Leväinen (2006) provided a list of strategies aimed at increasing shareholder value and claim that shareholder value in general can be increased both through revenue growth and productivity. They further developed a list of potential measures to be used in order to assess each of these strategies. Lindholm (2008) later has built on this model when identifying the added value of CREM and tried to validate it and assess its applicability through a case study in a real life organizational setting. The study concluded that even though the model was useful in defining the CRE strategies that are important to the core business, the implementation of measures was not as successful as “it seems almost impossible to find one or two right CREM measures, which could indicate the CREM performance comprehensively” (Lindholm, 2008, p. 62).
She believed that the measures available are mostly operational tasks indicators rather than measures aimed at assessing strategic CREM performance and consequently makes a case for developing innovative CREM performance measures.

According to Martin and Black (2006) the utilization of inappropriate performance measurement metrics along with the failure of top executives to acknowledge the important role real estate plays in the production function are indeed the main reasons for CRE strategies not being aligned with overall business strategies. Their paper illustrated how both strategies can be aligned in order to boost productivity and enhance employee loyalty, satisfaction and retention. Among the flaws of performance measurements are the lack of objective assessment, strategic alignment and clarity (Varcoe, 2002).

Despite the shortcomings or weaknesses of existing performance measurements (Varcoe, 2002; Martin & Black, 2006; Lindholm, 2008), results obtained by other researchers suggests that organizations are able to acknowledge the benefits of enhancing the workplace even in the absence of reliable performance measurements (Morgan & Anthony, 2008). They argued that: “occupiers rely on their own experiences in evaluating their progress towards high-workplace performance and are not constrained by any lack of evidence of a direct link between workplace and individual productivity” (Morgan & Anthony, 2008, p. 27).

With the aim of understanding the costs and benefits of CRE decisions, Becker and Pearce (2003) developed the Cornell balanced real estate assessment model (COBRA©), a tool aimed at measuring CRE performance taking into account a company’s ability to attract and retain personnel and the extent to which this staff is able to work productively. They measured productivity based on net income per employee rather than salary costs and headcounts in order to identify the contribution of the staff to the corporation’s bottom-line net income. Haynes (2007) acknowledged the COBRA© model for including the impact of HR costs but argued that the true impact of CRE on individual productivity is not taken into account in this model. In his paper entitled “Office productivity: a shift from cost reduction to human contribution”, he made a case for considering the human dimension when measuring productivity. His remarks followed those by Gibler, Black and Moon (2002) who acknowledged in their paper the potential CRE has in achieving productivity improvements through employee satisfaction. Morgan and Anthony (2008) warned however about the fact that even though satisfaction with the workplace is currently taken as a proxy for productivity, employee satisfaction does not necessarily imply increases in productivity and “the link between user perception and productivity remains unclear” (Morgan & Anthony, 2008, p. 29).

3.1.4.3. Information on value

“Real Estate accounts for 25 to 40 percent of the total assets of major (...) corporations.”
(Rodriguez & Sirmans, 1996, p. 13)

Whether CRE is considered as a cost or as a profit center (Veale, 1989) or whether internal rents or chargebacks are in use or not (Knapp & Oliver, 2008), organizations need sufficient and reliable information on value in order to assess CRE performance.
Ilsjan (2007) argues against the adequacy of balance sheet valuations because of the lack of consensus regarding rules and interpretation while acknowledging the overall consensus in accepting market value as the relevant approach in the presence of comparables and the cost-based approach in the case of special-purpose properties. French and Wiseman (2003) believed that the importance organizations give to occupancy costs make them more aware of how much they are willing to pay for the space they use and that consequently there has been a convergence between value in use (price of production as determined by the labor theory) and value in exchange (market value as determined by supply and demand factors).

### 3.1.4.4. Benchmarking

Noha (1993) was among the first researchers identifying CRE practices in different firms. He investigated US based companies and their behavior towards CREM to establish the best benchmarking practices at the time. His study had however the shortcoming of mainly considering the companies’ occupancy costs as the main CRE performance benchmark; nonetheless it helped to create awareness of this issue.

Benchmarking can be defined as the search for best practices within a particular industry leading to superior or enhanced performance (Camp, 1989; as cited in Noha, 1993). Wills (2008) provided an alternative definition. He described benchmarking as “a process of comparing a set of performance figures and ratios, either within an individual large operation, between different organizations in the same industry, or even between similar processes in different industries” (Wills, 2008, p. 44).

Benchmarking CRE success still remains hard to achieve. In his paper, Varcoe (2002) identified more than 50 different measures which all are in use to measure performance of CRE in different companies. This overview was gained by observing the practices of US companies at that time and probably if far from being complete considering the global CRE function.

Implementing the benchmarking process has four associated benefits from a CRE manager perspective: (1) the possibility to identify and measure superior performance, (2) the chance to prioritize areas of opportunity, (3) the identification of solutions (practices and processes that will improve performance) and (4) the opportunity to empower the real estate function by communicating results in the language of senior management and helping them understand the past and future contributions of CRE to the overall business (Noha, 1993). Wills (2008) considered that an additional purpose or benefit of benchmarking performance is maximizing shareholder wealth. The benchmarking process itself has been described as an iterative four-step process by Noha (1993).

Research has found that benchmarks focusing on productivity and profitability are in general more important than those focusing on costs, that reliable benchmarks are usually industry specific and that they are used differently by different firms (Carn, Black, & Rabianski, 1999). Results also suggested that assessing performance based on benchmark data alone is of limited value (Morgan & Anthony, 2008). Wills (2008) pointed out that the main difference between benchmarking the performance of standard commercial property and the properties any given organization uses for its own operations relies on the fact that in general these are not income-generating properties. He further argued that other performance indicators should be used and consequently suggests in his paper a number of key performance indicators that companies could use in such cases.
3.2. Corporate real estate management internationally

"The most significant innovations in CRE research have been undertaken in the USA whereas in a European context the concept is relatively underdeveloped" (Roulac, Adair, McGreal, Berry, Brown, & Heaney, 2003, p. 32).

As mentioned before CREM has been researched mostly in the United. Usually by the use of surveys, researchers have tried to identify current practices within one or more industries, usually restricted to one country.

Pittmann and Parker (1989) investigated the opinions of 105 CRE executives in the US concerning organization of CRE within the companies. They found out that good communications with top management as well as to the business units is seen as highly important for CRE departments (Pittman & Parker, 1989). The standing of the CRE unit within the organization as one crucial factor for success was revealed in a similar study (Veale, 1989). Another study investigating the topic of occupancy cost as to identify benchmarking possibilities between companies was also based on the US (Noha, 1993).

For developing their model of CRE objectives and strategies (Table 1), Nourse and Roulac (1993) investigated the practices of a few selected companies, also based in the US (also Nourse, 1994).

Recent research in CREM issues includes Bon, Gibson and Luck (2003) who investigated CRE practices in Europe and North America between 1993 and 2002; Roulac, Adair, McGreal, Berry, Brown and Heaney (2003) who investigated CRE in Ireland; Ali, Mc Greal, Adair and Webb (2006) who investigated CRE strategy in the United Kingdom and Malaysia; Ilsjan (2007) who examined CREM in Estonia; Warren, Simmons and Trumble (2007) who determined CRE practices in Australia or Hartmann, Linneman, Moy and Siperstein (2010) who studied CRE professionals in Europe and North America. Sweden might have been included in some studies (Bon et al, 2003; Hartmann et al, 2010) but so far has not been subject to a specific investigation on its own (in English language).

The study conducted by Bon, Gibson and Luck (2003) is one of the few ones where answers of a survey could be compared to each other towards their annual response. They were able to identify trends in a span of nine years (1993-2002) and found out that for example CREM has become more strategic and structured in this time, indicating a higher professionalism of CREM (Bon, Gibson, & Luck, 2003).

Roulac et al. (2003) studied the level of attainment of CREM in Ireland. They interviewed 27 companies and their main results were that CRE is still undermanaged in Irish companies at that time. CRE is still seen as a cost centre rather than a profit centre and the “significance of issues such as property performance measurement, benchmarking and property research, which are at the core of CREM, are not fully appreciated or acted upon” (Roulac, Adair, McGreal, Berry, Brown, & Heaney, 2003, p. 41).

In 2006, Ali, McGreal, Adair and Webb published a paper where they compared CREM strategies between Malaysia and the United Kingdom. They studied 149 companies (100 in the UK, 49 in Malaysia) and compared the results between two time periods (1998 and 2003).
Their main result was that a big majority of the companies investigated had a CREM strategy in place which can be compared to the framework from Nourse and Roulac (1993, Table 1) and that a development towards a more strategic approach of CREM has taken place in the years between (Ali, Mc Greal, Adair, & Webb, 2006). They also tried to connect their findings to the financial performance of those companies but this attempt can be seen as rather open to criticism.

Another recent study investigating the situation of CREM in a specific country is the paper from Ilsjan (2007). She interviewed the 17 biggest organizations in Estonia in order to identify any specialties of the Estonian market compared to CREM in the literature.

Warren, Simmons and Trumble (2007) did a similar study investigating the key issues faced by the CREM in Australia. They collected 65 responses in an online survey, evaluating the trends in Australian CRE industry. They stated that even though CREM perceives itself as well established in Australian companies it still struggles for full recognition in upper management. The reason for this seems to be the struggle of incompatibility between the need for the delivery of cheap workplace sand to the ambition of delivering productive workplaces (Warren, Simmons, & Trumble, 2007).

One of the latest published studies investigating CREM was published 2010 by Hartmann, Linneman, Moy and Siperstein. They conducted an empirical survey between 74 European (2 of them Swedish) and 38 North American companies, comparing the organisation of CREM identifying 5 different organizational models.

4. Analysis of CREM in Sweden

The total sample for this analysis consists of 186 listed companies. The response rate for this sample is 21% with 39 companies having answered the survey. Of those 39 respondents, 31 answered the survey completely, meaning that every single question was answered. Complete answers account for approximately 80% of the companies and this should be taken into consideration when some of the graphs or tables do not contain a full set of 39 responses.

Regarding the reasons why several questions were not answered by some respondents, the authors can only elaborate on possible explanations. Among the possible reasons for this could be the fact that probably the survey might not have been applicable to their company or that the authors might have been unable to identify the right person as addressee beforehand. In this respect, two of the respondents, for example, did not answer most part of the questions. For those two cases the authors can not argue for reasons and they are excluded when explanations for skipped questions are given in the analysis.

The survey consisted of four different sections: background of the respondents, status of CREM within the organizations, CREM strategies and the office environment.
4.1. Background of the respondents

The first part of the survey was aimed at determining the current status and background of the responding companies in order to get a first general overview and to help categorize results. The sample can be categorized into 5 different types of industry as shown in Figure 2. 2 companies answered the survey completely anonymous and therefore could not be categorized.

![Type of Industry Diagram]

**Figure 2: Type of Industry**

As a means to understand the relevance CRE has for listed companies in Sweden, the respondents were first asked about their size. Knowing the number of employees instead of for example the amount of total revenues or other financial data allows categorizing by physical size. Most companies in the sample, approximately 32%, have between 100 and 500 employees in Sweden. The fact that almost 40% of the companies have more than 500 employees would already indicate a need for a professional management of CRE (Figure 3).
The results show no coherences according to industry type. The largest companies according to the number of employees are spread across all sectors: the industrial and manufacturing sector as well as the service sector. The same is observed for smaller companies since they were also to be found within all sectors.

In this particular case, and as the authors were informed later, the fact that one company did not answer this question was due to the fact that the sales workforce in that particular company increases considerably during certain periods, so the respondent was unable to give an accurate number for the survey.

Another indicator of the companies’ size, strategies and their need for a professional management of CRE is the amount of buildings that the surveyed companies currently occupy (Figure 4). Two-thirds of the companies currently occupy more than 10 buildings. While only 5 companies (14%) occupy a single building, almost 75% of the respondents need to manage 5 or more buildings. In the authors eyes this fact should advocate the need for professional CREM. 1 respondent skipped this question. The reason for this is probably the lack of information since the respondent belonged to the accounting unit of the company.
According to the results by industry type, the health care industry is the one occupying the least number of premises. All 4 respondents belonging to this industry in the sample currently occupy only one to three buildings. Furthermore, their number of employees indicates that the companies vary considerably in size, with one company in the “11-50 employees” range, two in the “51-100 employees” range and the fourth in the “101-500”. Contrarily, the industrial/materials sector occupies in general more than 10 buildings, with only 4 exceptions among the 16 companies belonging to this group.

The total approximate floor space occupied varies to a great extent with the biggest answer of over 2,500,000 m² being more than 15,000 times bigger than the smallest answer of 165 m². 12 respondents have skipped this question, presumably due to the fact that they did not have the approximate number handy when answering the questionnaire. An average of the answers has not been made due to the fact that the numbers where too far away from each other. However, results confirm the hypothesis that the companies in the sample represent a wide range of companies in terms of physical size (Figure 5).
The analysis of total floorspace occupied according to industry type does not lead to any relevant conclusions. Whereas the highest average of occupied floorspace per industry is found in the financial sector, the company occupying the most floor space belongs to the telecommunications / IT group. There are also big differences when categorizing the group into amount of buildings occupied. Whereas one company occupies 11,000 m² in one building another occupies only 4,000 m² in more than 10 buildings (Table 3). It could be argued, hence, that there seems to be no observable relationships between floorspace utilization and industry type within the sample. Furthermore, results from the sample do not show any clear relationships between total floorspace occupied and number of buildings.
### Table 3: Approximate total floor space occupied per industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Industrials/Materials</th>
<th>Telecommunication Services/IT</th>
<th>Health Care</th>
<th>Financials</th>
<th>unknown</th>
<th>Consumer Discretionary/Staples</th>
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<tbody>
<tr>
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<td>1 050 1 800 4 000 7 000 16 300 100 000 250 000 700 000 800 000 905 000</td>
<td>700 3 000 60 000 70 000 650 000 2 500 000</td>
<td>1 400 3 500 11 000</td>
<td>165 400 000 520 000 1 500 000</td>
<td>35 000</td>
<td>40 000 500 000</td>
</tr>
<tr>
<td>buildings</td>
<td>5 1 &gt;10 2 &gt;10 &gt;10 &gt;10 &gt;10 &gt;10</td>
<td>1 2 &gt;10 &gt;10 &gt;10 &gt;10 &gt;10 &gt;10</td>
<td>1 2 1</td>
<td>1 &gt;10 &gt;10</td>
<td>8</td>
<td>&gt;10 &gt;10</td>
</tr>
</tbody>
</table>

Total floorspace per employee, however, reveals that there is a clear relationship between total floorspace occupied and number of employees. There are only four exceptions among the 27 companies answering this question and in those cases this can be attributed to the fact that these are either real estate or portfolio companies owning large amount of properties while being comparatively small in terms of their workforce.

Regarding property type, half of the participants occupy mainly offices, while industrial premises come next accounting for almost 40% of the responses. Retail and other property types account for just over 10% in the studied sample (Figure 6). When analyzing size according to property type, both the highest and the lowest amount of total floor space occupied is found in office space.
A somehow surprising result from the survey is that there is no clear relationship between industry and main property type in the sample. Results show that 7 respondents belonging to sectors other than the industrial and materials mainly occupy industrial premises. A subsequent study of these exceptions done by the authors confirmed this hypothesis that the explanation to this is that many companies categorized as consumer discretionary, consumer staples and telecommunications and IT are basically also industries that might require an intensive use of industrial premises.

Furthermore, 8 out of 16 companies within the industrial and materials sector mainly occupy office premises. A possible explanation to this might be that the nature of the industrial activity might lead to an outsourcing of activities that, in turn, results in office space being the main type of premise occupied by the companies. Some companies labelled as industrial might as well be providers of a wide range of services requiring an intensive use of office space.

The location of premises according to property type is shown in Figure 7. Companies were allowed multiple answers in this question since some of them presumably had one or more property types in several locations. Results show that offices are mainly located in the city centre as well as in suburbs. This might come as a surprise at first but considering multiple answer options one becomes aware that obviously many companies have their office premises in the same location as for example their industrial premises, usually located in suburban locations.

Among the 37 companies answering this question, 16 respondents (43%) had only one main premise type. 21 out of the 37 respondents (57%) gave multiple answers, indicating different types of property under management. Of those 21, 16 companies (76%) had all their different types of premises at the same main location, for example offices and retail premises in the city centre, leaving only 5 companies (24%) who have allocated different types of property at different sites.
Figure 7: Main location of premises according to main property type

Not surprisingly, there are no retail premises located in business parks in the sample studied. However, results indicate that those companies occupying retail premises mostly locate these premises in the suburbs or in rural areas rather than in the city centre. A straightforward explanation would be that the difference in the price per square meter might be determining to a great extent that larger retail areas are mostly located in places other than the city centre. However, two other feasible explanations would be that some companies might produce products aimed to be sold outside the city centre, and that some of the listed portfolio or real estate companies might own large areas of retail space (shopping centres or malls) in the suburbs. Somehow expected are the results for industrial premises, mainly located in suburban or rural areas, as well as the results for “other” property types such as research or training facilities, mostly located in the suburbs and rural areas.

Regarding the chosen type of ownership by listed companies in Sweden, results of the survey are to a great extent the expected (Figure 8). Results show that office premises are mostly in leasehold while industrial properties are mainly under freehold. The reason is mainly, that industrial premises are to some extent more unique, tailor-made or customized towards the needs of the occupier, while office buildings can be standardized more easily and are therefore easier to exchange. Other premises such as research facilities seem to have the same unique characteristics as industrial buildings and therefore have a bigger amount of ownership as well. Furthermore, results show that all companies with retail premises in the city centre lease completely their space and that in the suburbs and rural areas no clear patterns can be found as companies are both owning and leasing these types of premises.
Figure 8: Type of ownership according to property type

From all 39 companies in our sample, 3 provided no answers to this question. 13 companies declared owning or leasing only one type of premise. In 11 of these cases, the property type being offices located mostly in the city centre and the suburbs. This result implies that most listed Swedish companies occupying only office space tend to lease the premises they use and that the location for the offices is, as expected, usually the city centre or its surrounding area.

Out of the 33 companies in the survey using office space (only or as a complement to other property types), 11 own or mainly own the offices while 22 lease or mainly lease them. There seems to be no clear patterns between the tenancy type of offices and their location or between tenancy type and industry. There seems, though, to be only three exceptions to this. Firstly, that all 5 companies with offices located in business parks fully or partially lease their premises. Secondly, that all 4 health care companies in the sample locate their premises in the suburbs or in business parks and that they are in general under leasehold contracts, with only one exception to this. And finally, that 6 out of all 7 telecommunication companies included in the survey fully lease their office premises regardless of their location.

More importantly, according to the answers provided by the companies, it is usually the case that companies occupying more than one type of premise share the same behaviour towards tenancy in all of their premises. Out of all answering companies, the remaining 23 companies occupy more than one property type. In almost all cases, the companies follow the same tenancy policy for all of its premises regardless of their location. This unexpected pattern among all listed Swedish companies has only 5 exceptions. 4 of those 5 exceptions are industrial companies owning their industrial facilities (in suburbs and rural areas) and leasing their offices in the suburbs.
The only exception to this is a telecommunication company leasing office space in a business park and leasing all of its industrial premises. Even though Nourse (1994) argues that the reasons behind the leasing decision seem to be directly related with flexibility concerns, this might not be necessarily the case in Sweden. During one of the interviews, the CRE manager of Scania AB, declared: "We have taken the decision to own in order to be flexible to use the premises in the way we want". He further added: “Industrial buildings are close to production since we say it is important we own the buildings to have full control. We make changes very often (lines, machines) so we shall own all our facilities. Offices are usual right next to the plants. Service shops are rented so I am not responsible for that. My role is to be the (tough) owner of the premises”. This opinion is in line with the results obtained by previous research performed in Ireland were “most of the interviewees felt that it was important for the company to be able to exercise a certain amount of control over their land holdings so that they could be flexible to the needs of their business at any particular time” (Roulac, Adair, McGreal, Berry, Brown, & Heaney, 2003, p. 36).

4.2. Role and status of CREM within the organization

This part of the survey was designed to find out about the role and status of CRE within the organizations and to investigate its importance for listed companies in Sweden.

To find out how professionally Swedish listed companies handle their real estate they were asked if they had a specific unit dealing with real estate decisions within their organization. While the majority of 23 companies (59%) had a specific unit dealing with CRE decisions, the remaining 41% (16 companies) handle real estate decisions somewhere within another unit. In 22 out of 23 cases where companies had a separate business unit dealing with real estate, the person answering the survey belonged to this unit.

Among those companies with over 1000 employees (14 companies), only one (belonging to the industry and materials sector) declared not having a specific business unit handling specifically CRE decisions. The range of companies between 1000 and 100 employees (13 companies) seems to be an exception in this sense since there are only 5 companies in the sample having a separate business unit to handle their real estate operations. Finally, among those companies with less than 100 employees (10 companies), 7 declared having a specific unit handling their real estate related decisions.

Regarding the amount of buildings and total floorspace area occupied, among those companies occupying more than 10 buildings (24 companies), only 5 declared not having a specific CRE unit within the organization. However, results do not show any clear links between occupying more buildings and having a CRE unit in place. Out of the 16 companies without a CRE unit, 8 occupy 5 buildings and more. Having more than 1 or 2 buildings under management seems to be no reason for those companies to have a business unit in place dealing only with the issues of CRE.

Finally, it is usually the case among Swedish listed companies in the sample, that those occupying more than 2000 square meters (22 companies) handle their real estate from a separate unit. There are only 3 exceptions to this, very different in size.
In cases where no such CRE unit was in place the authors tried to find the person responsible for such decisions. Out of the 16 companies declaring not having a specific business unit handling real estate within the organization, only 5 stated the role of the respondent in the company and answers varied considerably. Among the positions in charge of handling CRE decisions independently from a specific business unit were: Holding Manager for Sweden, Manager of Energy and Property, HR and Facility Management Manager, CFO, and Accounting Responsible. Results confirm the existing trend addressed by literature of relating CRE operations with other operational and functional areas such as accounting or human resources. Again in this case, no visible patterns were identified for different industry types.

The size of the real estate units is shown in Figure 9. The question was addressed only at those companies that had earlier stated having a specific CRE unit in place. Results show that the size of these departments in 40% of the companies is only between 2 and 5 persons. Out of the 5 companies declaring having only one person in their CRE units, 2 belong to the health care industry and 3 to the industrial and materials sector and they all report directly to the CFO. The financial industry seems to have larger CRE units. In 4 out of 9 cases where the CRE units have more than 16 employees, the companies belong to the financial sector. The Telecommunication Services and IT industry and the Industrial and Materials industry follow the financials with 3 and 2 cases respectively.

Considering the fact that no specific relationship was identified between industry type and company size the fact that the financial sector employs a larger amount of employees within their CRE units might come as an unexpected result. A possible explanation to this could be that financial companies have a stronger interest in their CRE operations in the sense that they may look at them from an investment perspective, where the return of real estate needs to be assessed and compared to other types of investments. In such cases, companies from the financial sector would be more likely to have larger CRE units in place, compared to other sectors.

![Figure 9: Employees belonging to the real estate unit](image)
The respondents were then asked how many years they had in the field of CREM. Out of 32 respondents, most (14 respondents or 44%) have more than 10 years of experience in this field. A smaller amount (11 or 34%) have between 5 and 10 years of experience in CREM and the least experienced, with less than 5 years, only accounted for 7 responses (22%). This indicates that most companies acknowledge the importance of CREM and have experienced managers in place handling CRE decisions. An interesting result is that the companies having a specific CRE unit in place usually have more experienced managers as a responsible for CRE. 12 out of 14 who have above 10 years experience belong to the CRE unit and only 3 persons in this unit have less than 5 years CRE experience. 7 respondents did not answer this question; all of them belonging to the group of companies with no CRE unit in place. This could be related to the fact that these respondents do not consider their duties being only and specifically related to CREM.

It could be argued, that real estate management as a path of studies is considered to be relatively new. Therefore, and in order to test this assumption, the respondents were asked about their educational background (Figure 10). Even though only 3 (8%) of the respondents have real estate as educational background, all of them have more than 10 years of experience in CREM, they manage more than 10 buildings, over 400 000 square meters mainly of office space, and 2 are members of professional real estate organizations (Fastighetsägarna and ASPECT respectively). Furthermore, all 3 managers with real estate background belong exclusively to companies where they are part of the CRE unit with more than 16 employees, clearly evidencing a higher degree of professionalization in these particular cases. Results show that there is absolutely no connection between these respondents with real estate as educational background and the industry type since they all belong to different industries: namely, Financials, Industrials and Materials, and Telecommunication Services and IT.

However, the largest group of respondents has a technical background (civil engineering, for example), and the remaining 2 members claiming to be part of a professional real estate organization belong to this group, though these are mostly organizations within the construction sector. Other educational backgrounds of CRE managers are economics, finance, and law. It is not surprising that among CRE managers only 1 respondent has law as educational background. It is somehow unexpected, though, that the category “Other” accounts for almost 22% of the respondents (8 companies). This leads to the conclusion that the CREM profession includes a wide range of professional coming from different educational backgrounds other than real estate, technical, economics, finance and law. 2 respondents belonging to companies without CRE units skipped this question. A change in those backgrounds over the years would be an interesting field for further research. The authors expect a higher degree of respondents with real estate background over the years.
As stated before, an important indicator of how professionally CRE is currently managed in Sweden is the managers’ membership to professional real estate organizations. Only 4 respondents (11%) belong to any kind of professional organization and two have real estate as background. The vast majority of 33 out of 37 answers (89%) state that they are not members of any real estate related organization. This could be seen as an indicator of either a low degree of professionalization within most CRE managers or as an indicator of CRE managers disregarding the importance of belonging to this kind of organization. Either way, the fact that CRE managers do not belong in general to any professional organization, is prone to affect the development of the CRE manager profession in Sweden, especially in terms of disregarding the advantages of knowledge spillovers and networking.

The reporting structure for CREM is displayed in Figure 11. The graph indicates on which level CREM is considered within the organization and the distance between CRE managers and senior executives. With 15 out of 34 (44%) respondents, most of the CREM units report directly to the Chief Financial Officer (CFO). An important number of companies (20%) report directly to the Chief Executive Officer (CEO), and a least important number (6%) to the Chief Operating Officer (COO). Together, reporting to CEO, CFO and COO accounts for 70% among all answering companies, which evidences the high standing or CRE within listed companies in Sweden. Furthermore, and besides the fact that, in general, Swedish companies tend to have flatter organizational schemes than their international counterparts, this indicates that CREM is considered as an important management discipline, being placed at high levels within the companies’ organizational structures, directly under senior management supervision.

The remaining 30% is divided between the categories Board of Directors (12%) and Other (18%). Regarding the reasons why some CRE responsibles report directly to the board is the fact that some of the respondents were the CEOs themselves. Especially in the case of small companies, it is the CEO the person answering the survey since he or she is the one responsible for CRE related decisions. Other answers to where the CRE responsible reports to included: Plant Manager, Chief Group Shared Services, Production Manager, Site Manager, Purchasing Manager and Head of Networks.
Figure 11: Reporting structure for CREM

A clear pattern for different company sizes is not visible in terms of the reporting structure for CREM. Although in companies with less than 500 employees the CRE unit are more likely to report to the CEO directly it is not necessarily the case that larger companies prefer reporting to the second level (CFO). The same conclusion can be drawn when considering buildings under management. Even though two third of the companies with more than 10 buildings under management report directly to the CFO, this is also the case for some smaller companies. Furthermore, there does not seem to be differences according to industry type; neither does the reporting structure seem to depend on property types or types of ownership. Overall, these results clearly indicate that the organizational structure of companies is a very unique characteristic and that no clear patterns can be seen for the reporting of CRE throughout the respondents. 5 companies decided to skip this question; all of those 5 had no CRE unit in place dealing with real estate issues.

Another indicator of the importance of CRE as management discipline is the time interval in which the CRE unit or responsible reports results to top management (Figure 12). Most companies (66% or 21 respondents) report CREM results on a monthly basis to upper management. Almost all of the 32 respondents (91%) report CRE results at least semi-annually. None of the surveyed companies reports CRE results on a yearly basis and only 3 respondents report their CRE results within no specific intervals or stated that they report on demand or ad hoc.
All 7 respondents who skipped this question have no specific unit dealing with CRE issues in place and therefore this question might have not been applicable to them. As it was the case before, no clear patterns can be identified for different industry types or any other categorization.

Business alignment is another important area related to the professionalization of the CREM discipline (see chapter 3.1.2.4). When asked if they were regularly briefed on corporate goals and strategies, 26 companies (90%) answered yes and only 3 out of 29 responses (10%) stated that this was not the case. This result indicates that CREM among Swedish listed companies is perceived as a valuable management discipline for top management. However, the fact that among those 26 companies being regularly briefed on goals and strategies, 12 (46%) do not have a written mission statement or business strategy in terms of real estate (see following section) certainly evidences the need for further professionalization of the CREM activity among Swedish organizations.

In order to determine the role and status of CREM, survey participants were also asked about the proportion of total real estate costs in relation to annual costs in their respective companies. Literature suggests that even though real estate has in general large positions in most balance sheets, it is usually not considered as an important cost factor in the annual calculations because of its minor importance against other costs of production. As displayed in Figure 13, for 17 companies out of 28 who answered this question (61%), this statement can be seen as true: their real estate cost accounts for less than 10 % of total annual cost.
Overall, no specific relationships were found that would allow establishing a relationship between this and previous questions. For instance, no clear patterns were found among industry types, tenancy types or sizes (amount of buildings, areas or number of employees). Results confirm certain hypothesis though. Both companies where total real estate costs account for more than 50% of total annual costs are real estate companies owning a 100% of their real estate portfolios and employing over 16 employees in their CRE units and they report quarterly. However, ownership does not necessarily imply higher real estate costs in relation to total annual costs. The one company declaring having real estate related costs compared to total annual costs between 30% and 50% is a retail company leasing most of its premises.

4.3. CREM strategies and activities

This section is aimed at examining current CRE strategies including the overall strategy and topics such as the outsourcing of real estate related activities and the use of performance measurements.

As a means to find out what strategies the companies pursue, survey participants were first asked about the existence of written mission statements or business strategies in their organizations, specifically in terms of real estate. Out of the 30 respondents answering this question, exactly half of them have such a written mission statement or business strategy whereas the other half stated that no such written strategy for CRE exists up to the date of the investigation. Industries that have no written mission statement belong primarily to the Health Care sector (4 out of 4), Telecommunications and IT sector (4 out of 8) and Industrials and Materials sector (7 out of 16).
9 respondents decided to skip this question and results indicate that these companies belong both to the group having a CRE unit in place and to the group of companies not having one. Furthermore, respondents skipping this question do not belong to any industry in particular nor do they have a particular size. It can only be speculated why some companies decided to skip this question. One hypothesis is that the person answering the survey was not aware of the existence of such statements or that they did not want to disclose this information.

From this part of the survey onwards those 9 companies (and one more) stopped answering questions. The authors believe that the disclosure principle seems to be more likely in this case. The subsequent data therefore is only valid for a smaller sample of 29 respondents. The sample size reduction from this point onwards makes it harder to identify significant patterns. Nonetheless the authors believe that most of the findings provide valuable insights for the topics being addressed and therefore are worth reporting and analyzing.

As a means of understanding the main CRE strategies and their relevance for Swedish listed companies, participants were asked to rate the importance of 9 different CRE objectives/strategies for their company on a 5-point likert scale. The results can be seen in Figure 14. The list of objectives/strategies in the chart were first developed by Nourse & Roulac (1993) and were also used later by other authors, such as Ali, Mc Greal, Adair, & Webb (2006). The authors slightly modified the original list in order to increase the respondents’ understanding. Not all strategies seem to have been familiar to the respondents so that not all answers sum up to 100%. In total 28 companies replied to this question.

Among the real estate objectives or strategies that the survey participants were requested to rate were: (1) Facilitate and control production, operation and service delivery; (2) Occupancy to cost minimisation; (3) Increase functional, physical or financial flexibility; (4) Promote human resources objectives and influence workplace performance; (5) Promote marketing message; and (6) Promote corporate social responsibility. The rating scale consisted of 5 measures of importance, ranging from unimportant to very important. The authors choose percentages for this graph to visualize the trends for the ratings in a better way. The numbers of answers are however given in the analysis.
Facilitating and controlling production, operation and service delivery is to some extent the most important strategy/objective according to the respondents. 71% (20 answers) believes this is important or very important for CREM and no one considers this as being of little importance or unimportant. The next strategy/objective in terms of importance is occupancy to cost minimization (69% or 19 answers believe this is very important or important), together with the strategy/objective of increasing the functional, physical or financial flexibility of CRE (65% or 18 answers marked this as very important or important).

Among the intermediate objectives стратегий in terms of importance are to promote human resource objectives (61% or 17 companies believe this is very important or important) and to facilitate managerial processes and increase interaction or knowledge spillovers (50% or 14 respondents believe this is very important or important).

While 25% (7 answers) of the companies consider the promotion of sales and selling processes as very important, more than 50% (15) of the respondents consider this objective as moderately important, of little importance or unimportant. CRE as a promoter for marketing messages is, according to the respondents, the least important of all objectives, with 64% (18) of the companies considering it moderately important, of little importance or unimportant. Finally, the relatively new subject of CRE as a means to promote corporate social responsibility is seen by half of the companies as being very important or important. Patterns to specific industries or other categories are not clearly visible.
Companies were subsequently asked about the performance measurements in use for CRE at the time of the survey. The answers are displayed in Figure 15. 29 companies gave multiple answers. The performance measurement tool used by most companies is real estate related costs.

According to 20 respondents (69%), this method is used to evaluate the performance of CRE. Space utilization ranks second with 17 companies (59%) using this measurement to find out about their CRE performance. Satisfaction measures such as employee and/or client satisfaction (25%) and real estate related returns (14%) seem to play less important roles as CRE performance measures.

![Figure 15: CRE performance measurements](image)

A somewhat surprising result is that 7 companies declared not having any performance measurements in place for their CRE, especially because within those 7 cases, there are companies with written mission statements for CRE and specific CRE units or departments. No distinctions between industries can be made for this issue. Companies who use space utilization employ in all but one case other performance measurements as well. Companies making use of real estate related cost as a performance measurement usually have a second measurement in place (18 out of 20 respondents). There is no company in the sample employing satisfaction measurements as the only performance indicator.

To get an idea what the performance measurements are used for, the companies were asked which CRE performance benchmarks they use. The answers are displayed in Figure 16. Real estate related cost is still the most used measure for most companies (58% or 16 out of 28 answers), followed by space utilization, which is used by 10 companies (36%).
According to the answers given by survey participants, companies using certain measurements for real estate performance do not use them when it comes to benchmarking performance. When comparing both answers, all measurements (space utilization, real estate related costs, real estate related returns and satisfaction measures) scored less answers. Underlining this result is the fact that 11 companies (40%) claim not using benchmarks for real estate performance. Most companies though have benchmark measures in place, which partly represented the measures they used for performance. The fact that in both cases real estate related costs and space utilization were far more often used as measures for real estate performance or as benchmarks indicates that real estate is still seen as a cost centre rather than as a profit centre.

However, when the companies were asked if they use an internal rent system where business units are charged for the amount of space they specifically use, 23 out of 29 companies (79%) stated that they have such systems in place. Without any exception, all companies within the Industrials and Materials sector, for instance, charge their business units for the amount of space they use. This result is somewhat contradictory to previous results since this would imply that CRE managers perceive real estate as a profit rather than as a cost centre. The authors believe that there might be an important reason underlying this contradictory result. As literature suggests, unless real estate is seen as an investment opportunity it is very difficult to measure return related to real estate. Nonetheless, an effective way of achieving high space utilization levels, usually required by senior management, is to introduce internal rent systems, This would explain the high number of companies having such a system in place without this necessarily implying a profit centre point of view of CRE from senior management.

Together with benchmarking, flexibility is a recent and important issue concerning the CRE debate. As a consequence, respondents were asked about their willingness to pay for a more flexible property. Following the discussion from academic literature, flexibility was divided into physical, functional and financial flexibility. The answers are displayed in Figure 17. More than half of the respondents are willing to pay a premium for more flexibility in each of the 3 categories.
There are only slight differences between the results among the 3 flexibility categories. The authors believe that this is no indicator of any flexibility type being more desirable than other by the respondent companies. However, the fact that many companies would be willing to pay for more flexibility and that some even would be willing to pay up to 10% or more to achieve higher degrees of flexibility might be an indicator that the supply in the market is not adequately meeting the demand. Patterns between different industries or other categories are not visible in this case.

Survey participants were also asked to evaluate the potential of different cost reduction strategies in order to acquire further insights regarding their view towards CRE. The companies were asked to rank the potential of 7 different cost reduction strategies for CRE on a 5-point likert scale, with values ranging from no potential to great potential. The results of the 28 responses are displayed in Figure 18. As before the authors choose percentages in the scale to better visualize the trends.

The cost reduction strategy with the greatest potential according to the respondents is space utilization and occupancy planning. 64% of the survey participants (18 out of 28) evaluate this as a strategy with great or at least much potential for their company and only one company identifies little potential for this strategy. Among the most important cost reduction strategies is also the reevaluation and renegotiation of contracts, which is directly related to the already discussed willingness to pay for higher degrees of financial flexibility. 54% (15 out of 28 respondents) see this as a strategy with great or much potential. To relocate, sell or sublease surplus space is seen as a beneficial cost reduction strategy by a lower number of companies. While 67% (18 responses) identify relocating as a strategy with somewhat potential, selling or subleasing surplus space is only seen by 57% (16 responses) as a strategy with at least somewhat potential. A reason behind this might be that it is not that simple to relocate major part of the corporate premises, neither can complex properties easily be divided and sublet in many cases. The usage of computer aided tools such as computer-aided-facility-management (CAFM) tools is not seen as a relevant cost reduction strategy by many participants. 46% state that this strategy has no potential at all or only little potential for their company.
The authors believe that many companies might already have such tools in place and therefore might see no further potential in introducing yet another one. However, the applicability of these tools in the Swedish CRE environment might still need to be determined and could be proposed as an area of further research. Finally, outsourcing and sale-leaseback strategies are seen by most companies as having no cost reduction potential and rank last on this scale. 65% (18 out of 28 responses) think that outsourcing has little or no potential to reduce costs and 68% (19 out of 28) have this opinion towards sale-leaseback strategies. Only 3 respondents see outsourcing as having great or much cost reduction potential while 2 respondents have this opinion about sale-leaseback strategies.

![Figure 18: Potential of different cost reduction strategies](image)

As mentioned already for other issues, the fact that only 28 respondents answered the question makes it harder to draw conclusions and identify patterns for different categories such as type of industry since the variables to be taken into consideration are various and then do not allow drawing conclusions with statistical significance. However, even without an investigation into the respondents’ background the results allow to visualize a trend.

To find out which activities CREM consists of today, the respondents were requested to tell which CRE activities they handle in-house and which have been outsourced among a list of 6. In those cases where the companies do not perform any one of the activities, they were requested to state this as well. Similar categorizations of CRE activities can be found in Roulac et al. (2003), Epley (2004), Bon et al. (2003) and Gibler et al. (2002). The results are displayed in Figure 19.
Results indicate that two activities handled in-house by most companies are occupancy planning with 86% (24 out of 28 companies) and corporate finance with 79% (22 out of 28 companies). Only 1 and 2 respondents respectively stated that these are not part of the activities handled by their companies, whereas the remaining companies have them outsourced.

Facility management and project management are core activities for CREM as well with 96% (27 out of 28 companies) handling these activities within CREM. The difference is here that both activities are also the ones being mostly outsourced by the organizations. Survey results indicate that 46% (13 out of 28 companies) have both of these activities outsourced.

Performance measurements and benchmarking as well as marketing and image building, on the other hand, show a slightly different pattern. While most companies handle these operations in house (32%), many state that these are not part of their companies CRE activities (41%). It is noticeable, though, that out of 11 companies stating that marketing and image building are not part of their activities, 7 companies have at least one other activity not being part of their CRE business.

Furthermore, 5 companies handle all activities in house and for 50% of the respondents, all 6 of the mentioned activities are part of CREM, whether in-house or outsourced (one respondent has outsourced all six activities). With 20 out of 28 companies having outsourced at least one activity (71%) an important conclusion can be drawn regarding the important role of outsourcing CREM activities among Swedish listed companies.

When asked how satisfied the companies were with their outsourced CRE activities on a 5-point likert scale ranging from very satisfied to dissatisfied, all respondents claimed being at least moderately satisfied, satisfied or very satisfied with the outsourced activities. This question had only 23 respondents.
Probably some companies, having already answered which services they outsourced, did not want to disclose their degree of satisfaction or dissatisfaction with a contractor in order to protect third parties. Overall, most companies are satisfied with the outsourced services (13 respondents) while 3 companies claimed to be very satisfied with their service provider.

Survey participants were also asked if they plan on outsourcing further in terms of CRE activities. 68% of the companies (19 out of 28) stated that no further actions were planned in the future. 29% (8 out of 28) plan on further outsourcing activities and only one respondent stated that they plan on taking back in-house activities previously outsourced. This is a congruent result taking into consideration the high satisfaction rate for outsourced activities. This result may also indicate that outsourcing certain real estate related activities has been a common practice for many years among Swedish listed companies, being this one of the reasons why many companies are satisfied to date with the distribution of CRE activities.

Furthermore, regarding the following statement: “Outsourcing has changed my job in the sense that it became more strategic”, no respondent disagreed and only 2 respondents (8%) slightly disagreed. However, 44% of the respondents are undecided regarding this question. To the reasons behind this, the authors can only speculate. This could either mean that it is very difficult to determine the effects of outsourcing regarding the daily practices of the CRE unit, that respondents are unable to identify any differences because outsourcing has been done for a long time in their companies, or that they do not believe their job has any strategic relevance for the company. Further research should try to consider the effects of outsourcing CRE activities on the strategic role of the CREM unit and CRE managers.

Finally, the respondents were requested to identify a trend for the next 5 years concerning the real estate demand of their companies. The answers can be seen in Figure 20. 19 respondents out of 29 (65%) identified an increasing demand for their companies real estate needs. 6 (21%) believe that the demand in the next 5 years be similar to their current demand and only 4 (14%) predict a contraction regarding their companies’ real estate needs.
Even though, this is a very small sample to draw conclusions, all 4 companies predicting a contraction in terms of their real estate needs belong to the Industrials and Materials sector or to the Telecommunications and IT sector. Among the reasons behind this might be growing competition, movement of jobs to other countries or implementation of new working practices such as teleworking (mainly for the Telecommunications and IT sector), among others. Most of these issues will be covered in the following and last part of the survey.

4.4. Workplace issues and the office environment

The last section of the survey included questions regarding the office environment and relevant workplace issues. The authors were especially interested in the office sector since they believe that most relevant transformations in terms of CREM are prone to happen within the office sector and that, as seen in the literature review, a relevant part of recent research and studies are being conducted in this direction. Furthermore, it is also the case that all the investigated companies have office space at least as part of their premises, being this one the most common property type amongst all industries. Consequently, companies, which are mainly occupying property types other than office space (see Figure 6) were also capable of answering to the survey questions related to the office environment.

Respondents were first asked if they were satisfied with the current space utilization within their office portfolio. Out of 27 responses, only 15 (56%) answered with yes and 12 respondents (44%) declared being dissatisfied. This is an unexpected result considering that office premises are usually easier to trade compared to other property types and are also easier to adapt according to the organization’s needs. The authors would have certainly expected a higher satisfaction rate of companies with their current space utilization. In this regard, no specific relationships could be observed between the dissatisfied companies and industry types, tenancy types, size or location.
The companies were then asked to estimate their current excess space in their office portfolios. As shown in Figure 21, only 6 out of 27 respondents (22%) have not identified any excess space in their office portfolio or are unaware of the amount of excess space in their office portfolios. Out of these 6 respondents, 4 are satisfied with their current space utilization.

As expected, all 5 respondents estimating their current excess space above 10% also acknowledge not being satisfied with their current space utilization. However, out of 8 companies reporting a current excess space between 5 and 10%, only 2 are dissatisfied with their current space utilization. One would assume that companies having identified excess space are not likely to be satisfied with their space utilization. Expanding real estate needs in the next 5 years that would require holding some excess space back as a reserve, might be one reason. Results show that this is indeed the case for 7 out of 8 of these respondents. However, there are also cases where the respondents have identified excess space, estimate a contraction of future real estate needs in the next 5 years and are still satisfied with their space utilization. The authors can only speculate for reasons why this is the case. Maybe these companies are already planning a relocation of its office premises in the near future or they simply believe that it is more cost efficient in the long term to hold excess space even in the event of currently having an inefficient use of office space.

As it was addressed already in the literature review, in order to enable CRE managers to make the right decisions concerning office portfolios, the availability and quality of information is essential. Therefore, managers need to base their decisions on a good dataset. The companies were therefore asked if they collect certain data or not. A summary of the data currently collected by the companies on a regular basis is found in Figure 22.

Survey results indicate that two third of the respondents (18 out of 27) monitor employee satisfaction with the workplace and the office environment on a regular basis. A smaller percentage (44%) stated that they measure occupancy cost per employee on a regular basis (12 out of 27 respondents).
Companies measuring occupancy cost per employee were in general the same ones monitoring employee satisfaction, with only one exception. Only 2 companies out of 25 (8%) measure productivity per workplace on a regular basis. However, 65% of the companies perform regular headcounts in their premises. This seems especially important when new working practices are in place to find out about the time management for workplaces, as mentioned in (Fawcett & Chadwick, 2007).

The final survey questions were aimed at investigating different working practices. The authors were especially interested in analyzing four different kinds of so-called new working practices: namely home working, teleworking/virtual office (remotely from any location), hot desking (unallocated workplace with no reservation required) and hotelling (unallocated workplace with reservation required). Figure 23 shows which working practices have been incorporated by the respondents in the last five years.
Most respondents (20 out of 27) have introduced teleworking or virtual offices as a working practice. Homeworking also seems to be a common working practice among Swedish listed companies (in 15 out of 27 companies). Other practices involving desk sharing (hot desking and hotelling) are less popular and have only been introduced in 4 and 2 companies respectively. Overall, 6 companies report not having implemented new working practices in the last 5 years. Different kinds of working practices have not been mentioned by any respondent. A connection to data collection practices such as headcounts or employee surveys is not clearly visible.

The final survey question was aimed at CRE responsibles identifying future CREM trends regarding future implementation of new working practices. Results show (Figure 24) that the only new working practice identified by survey participants as a trend for the future is the implementation of teleworking. The remaining 3 new working practices (home working, hot desking and hotelling) are not identified as a future option by most companies.
Half of the companies (10) who already implemented teleworking/virtual office practices identified this as a future trend to further introduce this practice. The same can be said for companies having already introduced home working and/or hot desking methods. The other half having already introduced these methods seem not to plan to widen the implementation of those practices.

### 5. Discussion

The results from the analysis will now be discussed and answers for the research questions are given. Especially the results from the interviews will be displayed in this chapter and influence the answers to the research questions. While working with the topic the authors have realized that question 3 (CREM as supplementary or imperative to overall business) can be seen from 2 points of view. From one side the answer to this question can be given as a conclusion when answering questions 1 and 2. Nonetheless there can be some causality threat that because of a certain answer to question 3, the answers to question 1 and 2 are depending on how CRE is viewed in Sweden. For example the status of CREM within an organization can be used to conclude on the point of view towards CRE but it can also be the case that, because CRE is only viewed as imperative, CREM fails to gain a certain status in an organization. This interdependency has not been given enough attention in previous literature and it can be viewed as a research issue on itself. For the purpose of this paper, the authors got the feeling from the interviews that the answers to question 1 and 2 are the reason why CRE is viewed as whether supplementary or imperative. Therefore question 3 is answered separately as a conclusion to the answers 1 and 2 and will appear in a separate chapter (6).
5.1. Role and status of CREM within the organization

“High standing CRE organisations receive more strategic planning information, have more authority and power, and more formal policies and standards.”


The authors tried to find out, if CREM in Sweden has a high standing within the organizations, therefore answering question 1 from the beginning of this paper.

1 How is CREM in Sweden organized in companies, in which role is it perceived today?

The question concerning the organization of CREM within the companies can be answered relatively easy. A majority of 59% has a specific unit in place dealing with CRE issues and from the reporting structure it is clear that usually (64%) this unit is placed on the second or third management level under the CEO, indicated by the units reporting to the CEO respectively the CFO directly. Even though these numbers could be a bit higher they confirm the opinions of O’Mara et al (2002) and Carn et al (1999) among others that CRE should be best placed independently from other business areas and centralized under top management. As far as the authors can see there have been no spin-offs of CRE departments into a subsidiary, as for example mentioned by Rodriguez and Sirmans (1996) in the Swedish market and concluding from the survey and especially from the interviews CRE departments are usually organized centralized in Sweden, confirming common standard as mentioned before. Roulac et al (2003) found out that 65% of Irish companies had a specific CRE department in place, dealing with real estate issues. This is a similar number but was drawn 8 years ago. The authors therefore did expect that more CRE units nowadays are in place given the discussion around the topic and the published research related to this issue.

When comparing the size of the CRE department to other countries in published literature the less importance CRE seems to be given in Swedish companies becomes more obvious. In Sweden 60% of the companies state that less than 5 employees are responsible for CRE. In Ireland 42% had between 8 and 20 employees (Roulac, Adair, McGreal, Berry, Brown, & Heaney, 2003), in Estonia 35 employees deal on average with property issues (Ilsian, 2007) and in another study the average was 25 in the year 2002 for North American and European countries (Bon, Gibson, & Luck, 2003). While Bon et al or Ilsian argue that a trend towards more outsourcing explains diminishing numbers of employees within the CRE department this cannot explain the explicitly smaller CRE departments in Sweden per se. Most companies in Sweden handle their main tasks in-house (see Figure 19) and only a small part (29%) has plans on outsourcing further.

Another indicator of the role or CREM in Sweden is the experience of the managers handling CREM and their educational background. 44% have more than 10 years experience in real estate but only 8% have a specific real estate background, usually the persons responsible for CRE originated in technical or financial backgrounds. This number is comparable to figures drawn in Ireland by Roulac et al (2003). They reported 46% of respondents with expertise more than 10 years in CRE. Considering the usually high management position on second or third level this can be seen as somewhat imperative taking into account the expected career path.
The low amount of managers with real estate as their educational background can then easily be explained since only recently study programs specifically designed for real estate were embedded in European countries. Different backgrounds then real estate therefore are not unusual. Ilsjan (2007) for example reported very different educational backgrounds for CRE managers in Estonia as well.

Supporting the opinion that CREM in Sweden has a lower standing than in other countries is the percentage of companies having a membership in a professional real estate organization. Only 11% in the sample are members in such an organization while 83% of the CRE responsible had a professional membership (Roulac, Adair, McGreal, Berry, Brown, & Heaney, 2003). Since it was not within the scope of the study the authors cannot argue if this is the case due to no presence of suitable organizations or other constraints such as financial support from the company. Either way, if there is demand for such organizations there certainly would be options available and if the companies see use in such a membership they certainly would enhance the motivation of their CRE employees to join such organization, enabling interaction and knowledge spillover. The low percentage in the sample therefore allows the authors to assess this with low demand for it, whether from the employees side or the company’s side does not matter.

But there are also other indicators outlining that CREM in Sweden has certain advances compared to other countries. 50% of the companies investigated state that they have a written mission statement for CRE in place. In Ireland this is only the case for about a quarter of the companies (Roulac, Adair, McGreal, Berry, Brown, & Heaney, 2003). 90% state that they are regularly briefed on corporate goals and strategies and 66% report in a monthly interval to upper management. Roulac et al (2003) state that reporting intervals in Ireland differ quite much and seem to be longer. For the United Kingdom and Malaysia Ali et al (2006) found out that reporting of CRE results in general is usually “less clearly” or “clearly” defined. Although they don’t state intervals, it seems as if Sweden is some edge ahead when it comes to reporting CRE results. There seems to be no lack of communication between Swedish CRE executives and their upper management, which already has been identified as a major issue for under-management of CRE in organizations by many authors.

It therefore seems that Swedish CREM, although some issues need reevaluation and improvement, is to some extent perceived as a relatively high standing management topic within the organizations but that the role in general when for example compared to different categories in literature can for example be described as more functional than a value manager (Fisher, 2009). The shift of this role as mentioned in several papers (see 3.1.2.3) can be seen as still on its way rather than already accomplished.

How is CREM in Sweden organized in companies, in which role is it perceived today?
CREM in Sweden seems to be perceived as a relatively high standing management topic. Today’s role of CREM can be described as more functional but a shift towards value management is visible.

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2 For example 2001 at the university of Stuttgart/Germany

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5.2. CREM strategies and activities

The main strategies and activities undertaken by listed Swedish companies in terms of CREM will be discussed by giving an answer to question 2:

2. What are the main strategies and activities of CRE in the Swedish market and which information is gathered in order to achieve the set goals of CREM in Sweden?

Based on the survey results, facilitating and controlling production, operation and service delivery is the most important strategy/objective for CRE responsibles among Swedish listed companies, while occupancy to cost minimization and increasing flexibility (functional, physical and/or financial) are also considered important strategies or goals, in a second and third place respectively in terms of importance. These results are consistent to some extent with those from Gibler, Black and Moon (2002) and indicate that the traditional perspective of CRE managers in charge of meeting operative needs at the lowest possible cost is also valid for Sweden. However, the desire to increase flexibility through CREM also provides some insight regarding a somehow new perspective towards CREM.

According to results from previous research performed in the UK and Malaysia (Ali, Mc Greal, Adair, & Webb, 2006), results in Sweden do not differ significantly from results in these countries. Analysis of CRE strategies in company reports indicates that the CRE strategies more frequently used in the UK are facilitating and controlling production, operation and service delivery followed by promoting sales and selling processes, capturing the real estate value creation of the business and occupancy to cost minimization. The results from Sweden however are more in line with those from Malaysia, since the study, at the same time, indicates that facilitating and controlling production, operation and service delivery is also considered as the main strategy followed by occupancy to cost minimization, resembling the results obtained in Sweden. Malaysia and Sweden, though, differ in the third CRE strategy, as in Malaysia it is capturing the real estate value creation of the business. Results are different in other European countries such as Estonia, where occupancy to cost minimization was the main CRE objective, followed by increasing client satisfaction, increasing productivity and increasing employee satisfaction (Ilsjan, 2007).

The common argument “We are not in the real estate business!” (Nourse & Roulac, 1993, p. 475) also seems to be determining CRE strategies in very different ways. After performing some interviews to CRE managers from public companies in Sweden, it became evident that the way companies not having real estate as their core business handle their CRE strategies and objectives vary considerably. Whereas in the case of Byggmax AB (retail), CRE is mostly concerned with finding suitable locations for future commercial premises or shops at the lowest possible prices, in the case of Niscayah AB (services) CREM’s focus is on the analysis and negotiation of lease contract terms as tenants for their office premises and on the implementation of improved CRE strategies with the help of external service providers. In the case of Scania AB (industrials), CREM is mostly concerned with providing suitable office and industrial buildings according to production needs and to reduce the excess space as much as possible in their own existing portfolio.
The strategy of Byggmax AB, for example, is typically the one described as incremental by O’Mara in her paper from 1999 (as cited in Singer et al., 2007), where the main aim of CRE is to fulfill the physical requirements of the organization which often results in a bundling of buildings. In the case of Niscayah AB, however, an attempt was starting to be made at the time of the study towards changing from an incremental towards a standardization strategy, based on standardizing and controlling CRE operations by forecasting needs and controlling effectiveness and costs (Singer, Bossink, & Vande Putte, 2007).

Real estate related cost is the most commonly used performance measurement among Swedish listed companies, followed by space utilization. Other performance measurements such as employee and client satisfaction or real estate related returns do not seem to be so important in Sweden. However, the fact that almost half of the companies measuring CRE performance based on real estate related cost also use real estate returns or employee and client satisfaction as performance measurements indicates that these companies acknowledge the importance of considering real estate as more than just mere corporate costs. This somehow evidences the recognition of the benefits that real estate can provide to the overall performance of the corporation. Results in Sweden resemble those obtained in Estonia (Ilsjan, 2007) and other parts of the world, where performance measurements are also mostly cost related.

Regarding the performance benchmarks used among Swedish listed companies, the results are similar to the main performance measurements used: real estate related costs and space utilization. However, almost half of the companies (40%) declared not using any performance benchmarks. As it was already stated in the analysis, this evidences that many companies measuring performance do not benchmark this results against competitors, that the overall view of real estate is that of a cost rather than a profit center, and that many companies are either not interested in measuring performance against competitors, are not capable in terms of resources, or have not yet recognized the benefits this information can provide to the corporation; benefits explained by several authors (Noha, 1993; Wills, 2008).

The first option, not being interested in benchmarking CRE performance was one of the results from a survey performed almost ten years ago among CRE-responsibles in Europe and North America. Results indicating that even though ongoing performance measurements were conducted by almost 75% of the organizations, the popularity of performance benchmarking had declined compared to previous years (Bon, Gibson, & Luck, 2003). Further research on the subject could try to analyze the reasons behind this in Sweden and/or in other countries.

In terms of performance benchmarking, a very small amount of Swedish listed companies benchmark performance based on real estate related returns (only 4 companies within our sample) though benchmarks focusing on productivity and profitability have proven to be more important than those focusing on costs (Carn, Black, & Rabianski, 1999). Unsurprisingly, the companies benchmarking performance based on returns mostly belong to the real estate industry or have real estate as core to their businesses.

Among the companies interviewed for the present study, Byggmax AB uses internal benchmarks among its 56 stores in Sweden. They identify those stores with worse financial performance and search for new locations within the area where to move. The CRE responsible explicitly said that they do not measure performance against competitors.
Niscayah AB differs from Byggmax AB in the sense that they do not use performance measurements or benchmarks but are planning to start implementing both within three or four months with the help of external property consultants. Scania AB uses real estate related costs as performance measurement in order to charge internal rents to business units for the amount of space they use. They are aware of practices in other companies but benchmark internally on an annual basis in different countries as they replicate the same practices all over the world. The CRE manager further explains: “I have discussions with other companies as well. In maintenance we make some comparisons to other companies to know we are on the right level but it is very difficult to compare building maintenance because the calculation differs (...). If you compare with others they may calculate different”.

Scania AB is not the only company in our sample using internal rents. According to the results obtained, almost 80% of the surveyed companies in Sweden, and especially those from the industrial and materials sector, charge business units for the amount of space they use. This is also the case for Niscayah AB. However, this does not imply that CRE is seen as a profit center. It rather implies that internal rents are used to achieve certain requirements from upper management such as maintaining high space utilization levels. In Scania AB, for instance, internal rents are used in order to cover costs. As our interviewee explains: “We cover costs. We let out all factories and things to our different units. The rent they pay to me is to cover my costs. So we have cost-based rents. The purpose and the meaning of this is that everyone should be clear of how much it costs to use the square meter so that they save money for the company. We do not have any profit in my department, the cost is zero”.

Results regarding internal rents are in line with the conclusions from the already mentioned survey analyzing practices in Europe and North America. Even though the data obtained in these studies shows a strong fluctuation in the use of internal rents from 1993 until 2002, 70% of the companies in the study considered them useful (Bon, Gibson, & Luck, 2003). In Ireland, however, internal rents are not considered a priority or not implemented by half of the surveyed companies (Roulac, Adair, McGreal, Berry, Brown, & Heaney, 2003), whereas in Estonia, though not actively used, the implementation of internal rents is believed to be a useful tool towards reaching higher levels of space utilization efficiency (Ilsjan, 2007).

The results regarding the flexibility issue indicate a higher interest on behalf of Swedish listed companies compared to the results from a survey performed in Australia in 2005, where only 16% of the respondents claimed to be willing to pay a premium higher than 5% for more flexible properties (Warren, Simmons, & Trumble, 2007). In Sweden and according to the results from our survey, almost 27% of the respondents would be willing to pay more than 5% premium in order to increase their flexibility at least regarding one of the three mentioned aspects.

As mentioned already, the tenure decision is very much influenced by the flexibility requirements of the corporation. However, as it was shown in the case of Scania AB, some companies would rather own in order to achieve the flexibility degree needed. Nevertheless, most companies in Sweden pursuing increased flexibility would rather lease their premises. As the responsible for CRE in Niscayah AB explains: “We are not owning any premises. We don’t want to own anything. We want to lease it. (...) We want to have smaller offices and we want to have more flexible space than we had before”.

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The tenure decision, the flexibility issue in physical, functional or financial terms, together with the decision to outsource CRE related activities, are all very much related to the cost reduction strategies implemented by the companies. According to listed companies in Sweden, the cost reduction strategies believed to have the greatest potential are (1) space utilization and occupancy planning and (2) the reevaluation and renegotiation of contracts. The interviews provided very interesting insight regarding this particular issue.

In relation to the flexibility issue and its important role as part of the CRE cost reduction strategies, the responsible for Niscayah AB explains one problem they are trying to overcome: “We have a tradition that literally everyone had their own room, even here in Stockholm, which is quite expensive, to be sitting one by one. (...) I would say we have identified at least 10% excess space. But I think it is also about how the office looks like rather than the space. As I said, we have rooms instead of open spaces and we can improve efficiency by just changing the way we sit”. Regarding space utilization and occupancy planning as an important cost reduction strategy, the CRE responsible for Scania AB explains: “We optimize all the square meters we use. Every square meter is discussed with production units. We are in some way tough owners. In order to save as much as we can we must use our areas effectively”.

Even though 65% of the surveyed respondents believe outsourcing has little or no potential to reduce costs, only 6 companies in the survey declare handling most of their CRE related activities in-house. This result might be indicating the difficulty to assess the cost reduction potential of activities already being outsourced. However, among the companies recognizing its potential is Niscayah AB. As the interviewee clearly says: “Cash flow is very important for us. We have a quite clear strategy that we want to outsource everything that we can. (...) We are planning to outsource further activities in the future.” Niscayah AB is among the group of companies in our survey (29%) planning on outsourcing further real estate related activities in the future. Only one company from our sample declared planning on taking back in-house some of the activities that had been outsourced. This result is in line with the previous findings indicating that in most cases, the current practices in terms of outsourcing are likely to continue in the future (Hartmann, Linneman, Moy, & Siperstein, 2010).

Scania AB is among the 6 companies in our sample handling all their CRE activities in-house. When asked about the reasons for this, their CRE responsible said: “Control over the whole chain. (...) That is the reason why we have full control with our own people. No discussion with other companies regarding responsibilities. It has always been like this in Scania (...) and also because of security reasons.”

However, even though many companies might consider the outsourcing of CRE activities as a means to reduce costs and concentrate on their core businesses, it is still uncertain according to existing research on the subject how the markets evaluate outsourcing or under what circumstances it implies wealth increases to stockholders (Rodriguez & Sirmans, 1996). Furthermore, the use of outsourcing through external service providers might lead to higher costs in the case fees are higher than the costs of training and providing accommodation to existing personnel (Carn, Black, & Rabianski, 1999). Results in other countries show that after a trend during the 90’s where companies in Europe and North America shifted from outsourcing to performing CRE activities in-house, the increase had leveled off by 2002 (Bon, Gibson, & Luck, 2003). Clearly, future research at an international level would shed more light regarding this particular issue.
While many companies have introduced new working practices, the amount of staff affected by this is very low, usually ranging from only 5 to 10%. This result is in line with other research (Gibson, 2001). One of the difficulties of implementing such working practices among companies in Sweden might be related to the perception employees have of these working practices in different areas throughout the country. As the CRE responsible for Niscayah AB explains: “We have introduced hotdesking as a working practice for some of the technicians. We have a room full of workplaces. They just go there and sit and they have no places reserved for them. In Stockholm it has been possible but in the countryside it has been more difficult.”

Niscayah AB has also considered other working practices as teleworking or homeworking; the climate in the northern parts of Sweden being one of the major reasons for implementing such practice. As the interviewee explains: “Some technicians are stationed at home. We are discussing if that is going to be increased or decreased. But we have traditionally technicians working from home, and that is especially in the northern parts of Sweden”. However, regarding the shift from this being an optional practice to an established policy, the responsible says: “I don’t think we are ready to force people to work from home. I think Niscayah still has to offer places for them to work because we are not ready for that”.

Byggamx AB shares somehow the same view regarding the implementation of new working practices as Niscayah AB. As their CRE responsible explains, they have implemented both teleworking and hotdesking in their offices: “I can login to the intranet or main system and I can do that from all around the world. We also have 3 or 4 workstations for hotdesking and it is very rare that employees do not find a place to work. The guys always have their computers with them but they always find a place to work”.

A somehow opposite view is that one from Scania AB. Being a much more centralized company than Niscayah AB, his CRE responsible explains: “We do not implement new working practices such as teleworking in our company. (…) You need to be here to meet people. Of course you can do it some days, but our way is that we are close to each other all the time. Production is close to R&D, the main office is close to the factories, we are close to each other all the time. We have discussed that and it is also a security question”.

The results for Sweden are in line with those obtained in Europe and North America in 2002, where three quarters of the organizations had implemented teleworking practices. Hotdesking or other desk-sharing policies, however, was implemented in less than half of the companies in Europe and North America in 2002 and the results are considerably lower for listed companies in Sweden today (Bon, Gibson and Luck, 2003). In particular, among the results reported for Australia, Hong Kong, U.K. and the U.S. in 2000, the results from Sweden reflect mostly those from the U.S. where 27.6% of the companies had not implemented teleworking at all and almost 70% had not implemented desk-sharing policies. Results in the U.K. being the most outstanding, since 60.6% of the companies had not implemented teleworking but half of them had implemented some sort or workstation sharing strategy (Gibler, Black, & Moon, 2002).
To summarize the answer for the research question 2:

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<th>Question</th>
<th>Answer</th>
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<tr>
<td>What are the main strategies and activities of CRE in the Swedish market and which information is gathered in order to achieve the set goals of CREM in Sweden?</td>
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<tr>
<td>CRE in Sweden is mainly focused on functional tasks such as facilitating production and occupancy to cost minimization. Cost also dominates the discussions around CRE performance and information gathered in the portfolios. Sweden is mostly in line with other countries when it comes to activities but more and different information is gathered to analyze CRE performance abroad.</td>
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6. Conclusion

Asking direct questions whether or not CREM fulfills a supplementary or imperative role in the companies and if they are perceived as an important management discipline by upper management is quite difficult and would most likely have not given correct results. The authors therefore used the other questions which can be used as indicators to conclude and answer question 3 from above.

3 Is CREM seen in Sweden as a management discipline supplementary or imperative to the overall business and operations?

Furthermore the question whether or not it is supplementary or imperative cannot be answered completely. It is rather the case that from all the observations made, the authors are able to identify a tendency in one or the other direction.

Facts which support the view of CREM as supplementary are a high organizational level of this management discipline within the organizations, the formation of separate CRE units in a majority of the companies, the high percentage of companies with an explicit written mission statement for CRE, the reporting structure which seems to be more frequent in Sweden, the high willingness to pay for extra flexibility and the advanced stage of outsourcing.

Issues supporting the view of CREM as imperative are that less separate CRE units are in place than expected, the small amount of employees dealing with CRE issues in Sweden compared to other countries, the main objectives which see CRE more as imperative, the type of performance and benchmark measurements in use, and the lack of interest or knowledge to enhance the view of CRE as a profit rather than a cost centre.

After assessing all the issues covered in the paper and balancing whether CREM is viewed as imperative or supplementary the result for the Swedish market is that there seems to be a tendency for the view of CREM as imperative to overall business rather than supplementary.

But even if there might be a slight tendency for the imperative view there still can be seen a trend into a more supplementary direction. Or to stay with the citation from chapter 5: those CRE units who don’t receive enough strategic planning information seem to be in the minority; formal policies and standards seem to be in place for most companies and therefore CRE organizations in Sweden could be seen as “high standing”.
Another important conclusion of the research is that Sweden does not differ much from other countries investigated in previous literature.

Is CREM seen in Sweden as a management discipline supplementary or imperative to the overall business and operations?

There is a tendency supporting the view that CRE is more seen as imperative to the overall business and operations. Nonetheless a tendency into the direction of a supplementary view can be seen. In the future the authors expect that the value adding nature of CRE is recognized further and the view therefore should shift to supplementary.

Though this study provides a comprehensive overview on the Swedish market of all issues covered by literature on the subject of CREM, its aim is to provide answers to the research questions and not to test existing theories. Consequently, it does not provide any new insights on theoretical hypothesis or frameworks. Further studies should be able to replicate this literature review with the aim of testing the current applicability of the theories and frameworks and eventually provide new alternatives in this regard.

With a bigger population investigated in further research, probably more pattern will be visible between different industries and types of companies and significant differences could become visible. It would be also interesting to see how the covered issues in Sweden change over the next years to better identify trends. The applicability and impact of computer based tools on CREM for example can be an interesting field for further research. Also the connection of CRE to a company’s performance and the effects different CRE strategies have on the annual results of a company could be topic to further discussion. A detailed view on the information gathering of organizations and their different definitions of certain measures regarding CRE could also help to shed more light on this topic.

Managerial implications of this study can be drawn in line with the shifting view of CRE. When CRE is viewed as a fifth resource instead of a fifth wheel on the wagon, the value adding characteristics of CRE is recognized on a wide range throughout the companies and a willingness emerges to manage this resource appropriately, CREM can become further beneficial for most of the companies. The sentence “We are not in the real estate business” cannot be accepted as an excuse for not managing CRE in a more modern way. Most of the companies are not in the law business neither in the finance business; still both topics are recognized widely as important and receive attention from upper management accordingly. It would certainly help CRE to gain further attention if improvements were made to measure the success and the added value this resource can contribute to the overall business. But because of all the special characteristics of CRE and the interwoven network, in which it functions, plain and objective measures are hard to obtain and therefore the translation of CRE´s contribution is hard to articulate. Certain researchers already tried to address this and certainly will address it further, so that it will be only a matter of time when CREM will get the attention it deserves.
Bibliography


Appendix
Appendix 1: online questionnaire
Corporate Real Estate Management Practices in Sweden

1. Background Information

This part of the survey will help analyse the background of the respondents.

1. How many employees does your company currently have in Sweden?

- [ ] less than 10
- [ ] 11 - 50
- [ ] 51 - 100
- [ ] 101 - 500
- [ ] 501 - 1,000
- [ ] 1,001 - 5,000
- [ ] 5,001 - 10,000
- [ ] 10,001 - 50,000
- [ ] more than 50,000

2. Does your company have a specific unit dealing with real estate decisions?

- [ ] Yes
- [ ] No

3. If your company has a specific unit dealing with real estate, do you belong to this unit?

- [ ] Yes
- [ ] No

If no, please specify your position in the company:

4. How many employees belong to the real estate unit or department (only if applicable)?

- [ ] 1
- [ ] 2 - 5
- [ ] 6 - 15
- [ ] 16 - 25
- [ ] > 25

5. How many years of experience do you have in the field of corporate real estate?

- [ ] less than 5 years
- [ ] between 5 to 10 years
- [ ] more than 10 years
Corporate Real Estate Management Practices in Sweden

6. What is your educational background?
   - Real Estate
   - Economics
   - Finance
   - Law
   - Technical
   - Other

7. Are you a member of any professional real estate organisation (e.g. RICS, ASPECT)?
   - No
   - Yes
   If yes, please specify in which organisation(s):

8. How many buildings is your company currently occupying?
   - 1
   - 2
   - 3
   - 4
   - 5
   - 6
   - 7
   - 8
   - 9
   - 10
   - >10

9. What is the approximate total floorspace area occupied by your company (in square meters)?

10. What is the main property type currently occupied by your company?
    - Office
    - Retail
    - Industrial
    - Other

11. Where are the premises/buildings mainly located according to their property type (only if applicable)?
    | Property Type | City Center | Suburb | Business Park | Rural Area |
    |---------------|------------|--------|--------------|-----------|
    | Office        |            |        |              |           |
    | Retail        |            |        |              |           |
    | Industrial    |            |        |              |           |
    | Other         |            |        |              |           |
Corporate Real Estate Management Practices in Sweden

12. Which proportion of the premises is owned according to their property type (only if applicable)?

<table>
<thead>
<tr>
<th>Property Type</th>
<th>100% owned</th>
<th>mainly owned</th>
<th>mainly leased</th>
<th>100% leased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offices</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

13. To whom does the real estate responsible in your company report to?

- Board of Directors
- CEO (Chief Executive Officer)
- CFO (Chief Financial Officer)
- COO (Chief Operating Officer)
- Other (please specify)

14. How often does the real estate responsible in your company report results?

- Monthly
- Quarterly
- Semiannually
- Annually
- Other (please specify)
Corporate Real Estate Management Practices in Sweden

2. Real Estate Strategies

This part of the survey will help analyse current corporate real estate strategies.

15. Does your company have a written mission statement or business strategy in terms of real estate?
   - Yes
   - No

16. Are you regularly briefed on corporate goals and strategies?
   - Yes
   - No

17. What is the approximate proportion of total real estate costs in relation to total annual costs of your company?
   - Below 10%
   - 10% - 30%
   - 30% - 50%
   - Above 50%
   - I don’t know / We don’t collect this information

18. Which of the following performance measurements for real estate do you employ in your company (multiple answers possible)?
   - Space utilisation
   - Real estate related costs
   - Real estate related returns
   - Satisfaction measures (employee and/or client)
   - No performance measurements

19. Which of the following benchmarks for real estate performance does your company use (multiple answers possible)?
   - Space utilisation
   - Real estate related costs
   - Real estate related returns
   - Satisfaction measures (employee and/or client)
   - No benchmarks
## Corporate Real Estate Management Practices in Sweden

20. What is the usual planning horizon for main real estate decisions in your company (e.g. relocation, contract reviews)?

- 6 months
- 1 year
- 2 years
- More than 2 years
- No specific planning horizon

21. Does your company charge business units for the amount of space they use?

- Yes
- No

22. Has your company relocated major parts of its operations in the last 5 years?

- Yes
- No

23. Is your company planning on relocating major parts of its operations in the next 5 years?

- Yes
- No

24. How important are the following real estate objectives / strategies for your company?

<table>
<thead>
<tr>
<th>Objective</th>
<th>Very Important</th>
<th>Important</th>
<th>Moderately Important</th>
<th>Of Little Importance</th>
<th>Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitate and control production, operation and service delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupancy to cost minimisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase flexibility (functional, physical and/or financial)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Promote human resources objectives and influence workplace performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitate managerial processes and increase interaction / knowledge spillover</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote sales and selling processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote marketing message</td>
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<tr>
<td>Promote corporate social responsibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No objectives / strategies</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
**Corporate Real Estate Management Practices in Sweden**

### 25. Would your company be willing to pay a premium for a more flexible property?

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>Yes, less than 5%</th>
<th>Yes, between 5% and 10%</th>
<th>Yes, above 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical flexibility (flexible configuration of space)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functional flexibility (flexible range of business functions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial flexibility (flexible contracts)</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### 26. How does your company evaluate the potential of the following cost reduction strategies?

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Great Potential</th>
<th>Much Potential</th>
<th>Somewhat Potential</th>
<th>Little Potential</th>
<th>No Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space utilization and occupancy planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reevaluation and renegotiation of contracts</td>
<td></td>
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<tr>
<td>Relocation</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Sale or sublease surplus space</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Early leaseback</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outsourcing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of computer aided tools</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 27. How does your company handle the following real estate related activities?

<table>
<thead>
<tr>
<th>Activity</th>
<th>In-house</th>
<th>Outsourced</th>
<th>Not part of our activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupancy planning (workplace and personal management)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance measurement and benchmarking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility management (including maintenance and security)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate finance (asset, legal and fiscal management)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project management (project development, construction and relocation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing and image building</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 28. How satisfied is your company with the current outsourced services/activities (only if applicable)?

- Very Satisfied
- Satisfied
- Moderately Satisfied
- Barely Satisfied
- Dissatisfied

### 29. What is your company’s strategy regarding real estate activities in the future?

- Further outsource activities
- Take back certain activities in-house
- No actions planned
Corporate Real Estate Management Practices in Sweden

30. Outsourcing has changed my job in the sense that it became more strategic.

- Strongly Agree
- Slightly Agree
- Undecided
- Slightly Disagree
- Strongly Disagree

31. Which trends do you identify for the real estate needs of your company in the next 5 years?

- Contraction
- Stagnation
- Expansion
Corporate Real Estate Management Practices in Sweden

3. Workplace Issues and Office Environment

This part of the survey will help analyse current practices related specifically to the workplace and the office environment.

32. Is your company satisfied with the current space utilisation of its office portfolio?

☐ Yes
☐ No

33. What is the current excess space in the office portfolio of your company?

☐ Less than 5%
☐ Between 5 to 10%
☐ Above 10%
☐ We haven’t identified any excess space

34. Does your company monitor employee satisfaction with their workplace and the office environment on a regular basis?

☐ Yes
☐ No

35. Does your company measure occupancy cost per employee on a regular basis?

☐ Yes
☐ No

36. Does your company measure productivity per workplace on a regular basis?

☐ Yes
☐ No

37. Does your company perform regular headcounts in your office premises?

☐ Yes
☐ No
Corporate Real Estate Management Practices in Sweden

38. Which of the following working practices has your company incorporated in the last 5 years (multiple answers possible)?

- [ ] Home working
- [ ] Teleworking / virtual office (remotely from any location)
- [ ] Hot desking (unallocated workplace, no reservation required)
- [ ] Hotelling (unallocated workplace, reservation required)
- [ ] None of the above
- [ ] Other (please specify)

39. Does your company plan on implementing any of the following new working practices in the future?

<table>
<thead>
<tr>
<th>Practice</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home working</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teleworking / virtual office (remotely from any location)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hot desking (unallocated workplace, no reservation required)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hotelling (unallocated workplace, reservation required)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None of the above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>