Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

Graduation Plan: All tracks

The graduation plan consists of at least the following data/segments:

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Studio	
Name / Theme	The added value of successful CRE strategies
Teachers / tutors	1 st and 2 nd mentor: Monique Arkesteijn & Ilir Nase
	3 rd examiner: Jan Jacob Trip
Argumentation of choice of graduation lab:	Within the chair of Real Estate Management (REM) at the Delft University of Technology, the focus lies on corporate real estate portfolio's, for instance the portfolio's from large (multinational) corporations, educational institutions, the government and so on. Corporate Real Estate Management (CREM) aims at integrating the several different points of view of the involved stakeholders when attuning the supply to the demand, both on portfolio-, building- and workplace level. With corporate real estate (CRE) strategies, the CRE manager aims to align the CRE as much as possible to the business aims and objectives, in order to maximize the performance and added value of the CRE to the business. The REM graduation research theme within the department of Management in the Built Environment (MBE) named 'Added value of successful corporate real estate strategies' suits the main research question of this master thesis, since this thesis aims to find out how multinational corporations align their corporate business and corporate real estate strategies in practice. What models and criteria do they use to do this, what are the differences between theory and

Graduation project		
Title of the graduation project	Corporate real estate alignment at multinational corporations -	
	Practice and theory	
Goal		
Location:	Global	
Problem statement:		

Multinational corporations play a key role within a globalizing world and due to increasing internationalization and interconnectedness of the market, it is likely that more and more companies will be moving or expanding abroad (Karaköse & Demir, 2011). Across the globe, these multinational corporations (multinationals) aim to operate as efficiently and effectively as possible. They strive to avoid risks and threats, while making use of the advantages and opportunities that they recognize in various countries and regions. However, globalization, economic progress and new technologies are driving companies to look for new market opportunities and provide new solutions and values to their customers (Ludviga, 2012). During the current time of growing internationalization of business, including the growing presence of foreign competitors in domestic markets, as well as the economic crisis, it becomes increasingly difficult for corporations to identify sources of competitiveness. This drives all corporations to reconsider and redesign their strategies.

In order for most corporations to successfully achieve their business objectives, it's essential to align their corporate real estate strategy with the business strategy, so they complement and reinforce each other (Dewulf *et al.*, 2000). In many cases multinationals seem to be less healthy corporations than successful companies that stay within or closer to their home countries (Ludviga, 2013). Therefore alignment of all corporate activities is especially important for these multinationals, in order to be able

to add value across the entire enterprise (Kaplan and Norton, 2006). Corporate business strategies define the companies' processes, customers and employees, while their real estate strategy defines the environment that houses and supports these activities. When corporations are successful in aligning both strategies, this increases their efficiency, profitability and competitive advantage (Roulac, 2001).

Alignment of corporate real estate (CRE) to the business is the main objective of corporate real estate management (CREM). However, when reviewing the current body of knowledge on alignment within businesses, this covers mainly other corporate support functions, such as HR and IT, but not CRE. Since it is the core objective of CREM, the literature on CREM does address the alignment of CRE with the business and attempts to also address the arisen imbalance, while aiming to empower the CRE function (Heywood, 2011).

CREM literature suggests many different approaches and models on CRE alignment and CRE managers indicate to be positive about their CRE alignment (Heywood, 2011). However, it remains unclear whether these are used and how. The aim of this paper is to find out what CRE alignment actually looks like in practice. In order to do this, the current state of literature, with several different theories and models will be discussed. Through multiple case studies, consisting of interviews and document analysis, the alignment of CRE and business strategies will be researched, which leads to the current state of practice. Subsequently, those states of theory and practice will be compared on both similarities and differences. The gap between theory and practice that derives from this analysis and why it exists will then be explained.

Since CREM is a multi-dimensional and complex field, a more detailed understanding of CRE alignment would be significant for both CREM theory and practice. The main idea behind this thesis is finding the gap between theory and practice and explaining the existence of this gap, in order to bring theory and practice closer together and have them learn from each other.

Research questions:

Main question:

How do multinational corporations align their corporate real estate and corporate business strategy in practice and how does this relate to theories from literature?

Sub questions:

What is the current state regarding CRE alignment derived from literature? What is the current state regarding CRE alignment derived from practice? How does daily practice relate to the alignment theories from literature?

- Which differences exist between theory and practice and how may these be explained?

Research objective:

Corporations are becoming increasingly aware of the added value of corporate real estate and it's strategic management. However, CRE alignment is still seen as a difficult subject, even though theory has written about this and many models for alignment are available (Heywood, 2011). The aim of this paper is to find out what CRE alignment actually looks like in practice, in order to get insight in the use of theory and models and to find out the reasons for and barriers to theoretical model implementation. Which aspects are dealt with and what steps are taken in CRE alignment in both theory and practice. If differences are found: why do these differences exist? This research is undertaken both to find solutions and provide recommendations for theory, assess which areas require further research in order to provide the needed solutions for practice, and reinforce the link between theory and practice. This research project will be exploratory, analytical and explanatory. First of all, the current state of theory and the models that exist for the alignment of corporate real estate and business strategies will be identified and described. Secondly, through interviews and document analysis will be analyzed how multinational corporations actually align their different strategies. The factors and steps they take in doing this will be mapped, which leads to the current state of practice. Following this, both states will be compared, which will result in the similarities and differences between theory and practice. This gap will subsequently be explained, which will be helpful for both practitioners in order to understand and apply theory better and for researchers in order to be able to understand and support practice better.

Process

Method description

In order to get an answer to the main and sub research questions, the current state of literature, with several different theories and models will be discussed, which will lead to a theoretical framework. Subsequently, the current state of practice will be defined through case studies, comprising of interviews and document analysis. Finally, the gap between theory and practice will be explained and an advice will be written for the MNC at which a graduation internship is done. This section explains in more detail the research methodology of this graduation research.

A theoretical framework will be constructed, which will be the start of the graduation period. The theoretical framework will form the scientific base from which the further research on the specific topic can be done. The results and information that is found during the graduation period, if generable, can subsequently add to this field of research. Since this graduation thesis focuses on different concepts, which are multinationals, CRE strategy, corporate strategy and CRE alignment, different literature sources will be explored on those concepts and their interrelationships, after which they will be joined together to one research subject throughout the rest of the research.

Relevant articles have subsequently been selected at first on the title, journal or authors, after which the abstract of the potentially interesting articles has been read. After reading the abstract, the articles that were still seen as interesting or important, they were read thoroughly to find out the stated problem, outcome and conclusions, gaps and recommendations and the scientific relevance. These aspects have been put in a matrix and a critical review has been made of all of these articles. Some of these critical reviews eventually have not been used within the graduation thesis, because they were out of scope, which was assessed after the scoping process during P1.

Having established the theoretical framework, case study research will be conducted in the second research phase, in order to analyze CRE alignment practice in detail and get a more in-dept understanding of how multinationals approach and do this. Case studies are a research methodology to research a (set of) events, aiming to describe and explain the subject of interest. This strategy is preferred when the research questions posed are 'how' and 'why'. The unit of analysis within case studies may vary, but in this case it will be multinational corporations. Data mostly comes from documentation, records, direct observations and interviews (Yin, 1994).

This graduation research is part of a bigger research project on 'CRE alignment in practice', currently being executed at the department of Management in the Built Environment at the Delft University of Technology by Monique Arkesteijn. The cases selected for this graduation research are therefore used for multiple projects within the larger research project. The five multinationals that have been studied are active in the technology and financial services industries. These cases have been selected by leading researcher through the CoreNet Global network, which is a wide network of multinationals, by asking several CRE managers from different parts of the world which companies (other than their own) they thought are successful in aligning their CRE or are using innovative or interesting methods to do this. This ensured that none of the researched cases would afterwards appear to not have any CRE alignment processes in place. It was important to be certain about the multinationals having CRE alignment processes in place, because the case studies had to be completed within a limited amount of time. This would make the best use of the time and resources at hand. Also, by studying these best practices, or at least cases that other experienced CRE professionals stated to find interesting and informative, most can be learned. Finally, it was important to ask CRE managers or consultants for case recommendations other than their own firm, because the managers would most likely all state that their own firm aligned it's CRE successfully.

In the discussion and conclusions, the described state of practice as well as the state of theory will be compared to find out the similarities and differences, and thus the gap between both. The existence of the gap will be explained and some potential solutions will be given on how this gap could be bridged further. Since CREM is a multi-dimensional and complex field, a more detailed understanding of CRE alignment would be significant for both CREM theory and practice.

Literature and general practical preference

This thesis aims to find out how multinational corporations in the technology and financial services industries align their corporate and CRE strategies in practice and how this relates to CRE alignment literature. In order to do this, the current body of knowledge that is available through Scopus, ScienceDirect, ERES and CoreNet databases, as well as the repository of the Delft University of

Technology has been used, to make sure this graduation research builds further on previous research on this topic and does come to the same conclusions. During the first, scoping phase of this graduation process, the main articles (with a slightly different focus) that have been studied to set the scope and specify the subject of this master thesis are:

- **CRE decision-making at multinationals:** Beating the crunch. This master thesis by R. Dalderup (2014) aims to provide insight into the role of the financial crisis in CRE decision-making on strategies of multinationals.
- **CRE alignment process:** Corporate real estate alignment strategies in higher education. This paper by R. Beckers and D.J.M. van der Voordt (2014) explores the various management approaches within the CRE alignment process in higher education
- **Comparing academia and practice:** Het gebruik van wetenschappelijke kennis bij het managen van vastgoed in de gemeentelijke sector. This master thesis by M.S. Ham (2013) aims to investigate the uptake of scientific knowledge within public real estate management at municipalities in the Netherlands.

The critical review of these articles, and all other articles that were analyzed during the first two phases, has not been added to the appendix but can be shared upon request. Some of these critical literature reviews have eventually not been used in this graduation thesis, because they were out of scope. This was assessed after the scoping process during the first three months. The remainder of the critical review of literature has been used in order to write the theoretical underpinnings found in chapter 2 and 3. The main articles that have been used to construct the theoretical underpinnings of this graduation research are (further explanation on the literature search is found in chapter 5):

- Alignment and theory in the corporate real estate alignment models. This paper by C.
 Heywood and M.H. Arkesteijn (in press) aims to deepen the understanding of CRE alignment
 by studying twenty existing alignment models, which leads to four main dimensions that
 describe alignment, which provide a basis to study alignment in practice.
- Approaches to aligning corporate real estate and organisational strategy. This paper by C. Heywood (2011) examines the existing alignment models for aligning organizational and CRE strategies, leading to 15 common components. However, the uptake or use of these models and components in practice is yet to be examined.
- Ways to study corporate real estate management in healthcare: an analytical framework. This paper by J. van der Zwart, M.H. Arkesteijn and D.J.M. van der Voordt (2009) describes the main CRE strategy models that are derived from literature, an analysis of which results in an extended DAS Frame with which the CRE strategy of an hospital in Rotterdam is studied.
- An overview of steps and tools for the corporate real estate strategy alignment process. This
 paper by H.A.J.A. Appel-Meulenbroek and B. Haynes (2014) makes a comparison of a set of
 CRE alignment models and theories, mainly focusing on the products (inputs and outputs)
 used within CRE alignment.

Reflection

Relevance

The outcomes of this research may be useful for practitioners, education and academia. First of all, CRE managers may be interested, because the case studies and cross-case analysis will provide an overview of the CRE alignment at several large multinationals, which the CRE managers can use to compare to the practices at their own corporation. Learning from the practices of other corporations could lead to new insights, innovations and strategic improvements across corporations. Furthermore, this thesis summarizes the main models and components for CRE alignment that can currently be derived from theory and explains how or why these are or aren't currently used in practice, which will give the CRE managers a deeper understanding of both theory and practice and the interrelationships. For researchers this thesis may be useful, because it analyzes and summarizes the current body of knowledge, which is used as a theoretical base to test what models, values, variables and processes are recognized in practice. With the results of the case studies at several large multinationals, academia can understand the current state of practice better and (together with practice) build further on the topic of CRE alignment, which may lead to theories and models being brought into the world with a higher uptake and use. Finally, this research can also be interesting for students or educators in order to show the current state of theory, how this relates to practice and how this may be explained. Finally, the MNC at which the graduation internship is done, will not only benefit from this research

because it will learn about the current state of theory, current state of practice and an explanation of the gap, but will also receive an in-dept analysis of their current CRE alignment practices and how to improve these, taking into account all of the earlier gathered knowledge from theory and practice.

Time planning

During the first stage of this graduation process the scope of the research has been defined, which means defining what subjects will be focused on and what subjects will not be included in the thesis, in order to make the graduation research feasible. Also, at this moment the continuous process of defining and refining the main and sub research questions has been started.

During the second stage the theoretical research has be done, in order to answer the first sub research question and describe the current state of theory. Most theoretical research will be done during the P1 and P2 period, which are the first six months of the graduation process. However, the theoretical research will continue during P3 and P4, in order to continuously update and improve the theoretical framework.

During the third stage, several case studies will be done trough interviews and document analysis of several different multinationals in different lines of business. This will lead to preliminary conclusions on CRE alignment in practice, which can be compared to the theoretical framework of the second phase and this leads to the gap between theory and practice. With this information, a graduation internship will be done at one of the studied multinationals, where a more in-dept and detailed analysis will be done on their CRE alignment.

During the final stage, the P4 phase, conclusions will be made about CRE alignment in practice, the gap between theory and practice and an advice will be written for the MNC at which the graduation internship took place, taking into account all other conclusions, on how they could improve their current method of CRE alignment. A more detailed planning schedule can be found in the report.

