An overview of steps and tools for the corporate real estate strategy alignment process
Appel - Meulenbroek, H.A.J.A.; Haynes, B.

Published in:
Corporate Real Estate Journal

Published: 01/01/2014

Document Version
Publisher's PDF, also known as Version of Record (includes final page, issue and volume numbers)

Please check the document version of this publication:
• A submitted manuscript is the author's version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
• The final author version and the galley proof are versions of the publication after peer review.
• The final published version features the final layout of the paper including the volume, issue and page numbers.

Link to publication

Citation for published version (APA):
An overview of steps and tools for the corporate real estate strategy alignment process

Rianne Appel-Meulenbroek and Barry Haynes

Received: 26th May, 2014

Rianne Appel-Meulenbroek, Eindhoven University of Technology, Chair of Real Estate Management and Development, PO Box 513 (Vertigo 8.30), 5600 MB Eindhoven, The Netherlands. Tel: +31402472092; E-mail: h.a.j.a.appel@tue.nl

Rianne Appel-Meulenbroek is an assistant Professor in corporate real estate at Eindhoven University of Technology. She is a board member of the European Real Estate Society (ERES) and the Dutch Society for real estate (RE) researchers VOGON, and sits on the editorial boards of the Journal of Corporate Real Estate and Corporate Real Estate journal. In her research, she approaches real estate as a production factor for (knowledge) organisations and uses innovative methods of studying and measuring buildings and their usage. She focuses on how Corporate Real Estate (CRE) should be managed and how its location, building and workplace design choices add value to corporate driving forces (eg productivity of employees, innovativeness of organisations, knowledge sharing, and flexibility). She has presented her work at international scientific conferences and industry seminars, and is published in leading scientific real estate and workplace journals. Prior to her work at the university Rianne was an accommodation consultant.

Barry Haynes is a Principal Lecturer at Sheffield Hallam University. Prior to joining Sheffield Hallam University, Barry gained specific experience of managing the Head Office Buildings of a major retail company. Originally a Chartered Engineer, Barry is also a Chartered Facilities Management Surveyor through the academic route of the Royal Institution of Chartered Surveyors (RICS). Barry has acted as external examiner for the University of Reading MSc in Facilities Management, the University of Salford’s MSc & Postgraduate Diploma in Corporate Real Estate and Facilities Management and the College of Estate Management post graduate certificate/diploma in Facilities Management. He is currently a member of the editorial advisory board for the Journal of Corporate Real Estate. In addition, he has acted as guest editor for Journal of Corporate Real Estate and Facilities. He is the co-author of Corporate Real Estate Asset Management: Strategy and Implementation published April 2010 by EG Books (Elsevier), which has been adopted by a number of Universities as a core text, including the WP Carey School of Business at Arizona State University on their Real Estate MBA. Barry has a research interest in office environments and their impact on occupier behaviour. An area of specific interest is the relationship between the office environment and the office occupiers’ productivity.

ABSTRACT

Strategic thinking is a continuous process, alternating between thinking, planning and evaluating. Corporate real estate management (CREM) practitioners need to align their strategy and activities with corporate strategy during the entire process that the organisation goes through. Along the way, many different issues need to be considered, and
the right tools used to make the right decisions. This paper aims to provide an overview of the strategic thinking process, and to identify important steps to take, and possible tools to use when taking them. First, strategic thinking is discussed and where CREM should start alignment. Then, CREM literature on the activities of CRE managers and possible tools is assigned to the different steps of the alignment process. Finally, an overview is created for CREM in practice to improve strategic thinking and alignment. CREM research has identified and created many tools for CREM practitioners to use to work towards alignment. However, an overview of how to proceed with alignment during the entire strategic thinking process was lacking. This paper contains a first attempt at such an overview. This overview of steps and tools to reach alignment could be used by CREM practitioners to discuss alignment with general management. Hopefully, this will help with receiving more strategic attention and the promotion of CREM departments as strategists in CREM’s evolution. Studies on alignment of CREM with corporate strategy tend to focus on one phase of the alignment (either initial alignment or performance management). This paper extends the alignment strategy from initial alignment towards implementation and evaluation, covering the whole process while also providing an overview of existing tools and methods to use.

Keywords: CREM, alignment, strategic thinking, tools

INTRODUCTION

In today’s knowledge economy, specialisation of employees has increased the necessity to network and share knowledge. This networking has led to a growing complexity of organisations and the need to put more effort into tuning different business functions. Corporate real estate management (CREM) is one of these business functions that has been receiving an increasing amount of attention. Whereas, previously, it was considered to be a big (financial) burden, now CREM practitioners are working towards an alignment of their efforts with the central organisational strategy; however, because of the immobile character and often long-term commitments that accompany corporate real estate (CRE), this alignment is not as easy as it sounds.

In the past, CRE decisions were made ad hoc without consultation and coordination with other important business units, such as human resources (HR), information technology (IT), capital and communication. A survey of 59 leading organisations, which questioned the relationship of CREM with other business functions, showed that, in more recent years, only 40 per cent of respondents collaborated routinely with their HR, IT and finance departments. Also, in another study (of organisations from New Zealand), 80 per cent of CRE managers indicated that real estate decisions were dominated by consideration of immediate business needs and not by strategy; only 55 per cent of these respondents thought their property plan was well (or highly) aligned with the corporate strategy. So, it appears that CREM practitioners are indeed having problems achieving alignment and coordination. Also, their judgment about alignment might not reflect actual or potential alignment.

As de Vries has shown, ignoring CRE not only prevents an organisation from obtaining its potential benefits, but also can have a negative effect on the organisation. CRE is a costly resource, often the second largest behind labour cost; therefore, it is still reducing costs that is probably desired the most. But is cost reduction the best strategy? This (previous) focus on unit costs and building condition rather than overall costs and business outcomes is said to be the reason why CREM still keeps failing to capture full strategic attention. In order to be able to coordinate with other resources in current dynamic times, CREM needs to be at the strategic table.
Since companies can follow many different corporate strategies, achieving alignment means choosing an adequate CRE strategy to help support corporate goals. But many CRE departments lack the tools and training to effectively identify, shape and execute the broader business strategies that would ultimately deliver the most business impact. Previous academic research has looked into strategic alignment on the strategic level, but the models that have been developed vary in completeness and appear too difficult to be employed in practice. Academics also have tried to provide CREM practitioners with more practical tools specifically aimed at steering performance management away from a pure cost focus. But still missing is an overview of steps to take (and specifically the tools which can be used to take them successfully) to achieve alignment and implement an aligned strategy in practice. As Heywood states: an ‘informed, flexible adaptive practice to operate as a CREM professional in doing CRE strategic alignment’ may be most needed by CREM practitioners. This paper will attempt to provide such an overview to help CREM in practice go through the alignment process.

The first section of this paper briefly describes the theory on strategic thinking and alignment of CRE. Next, different tools for the necessary alignment steps are discussed for the entire strategic planning phase. The paper ends with conclusions and recommendations, containing an overview of tasks to undertake when seeking alignment.

**STRATEGIC THINKING AND ALIGNMENT OF CREM**

The word ‘strategy’ comes from the word *stratēgōs*, which means ‘a general’. The field of strategic management contains a lot of military words, like objectives, mission, strengths and weaknesses. This field started to professionalise in the 1950s with the long-range planning of demand. The increasing volatility of organisations (in the 1960s and 1970s) demanded strategic planning, evolving in the 1980s into strategic management. At that time, it became clear that a strategy continuously needs evaluation and adjustment. For the same reason, alignment of the CRE strategy with the organisational strategy also needs to be monitored.

Ramakers and Heywood compared studies on the alignment of CRE. Heywood compared ten models and Ramakers eight, of which only three were discussed in both papers. Most of the models date from the 2000s, so alignment has only recently received increased attention from academics. Heywood abstracted 15 components from the models he compared, which should be present in a complete strategic CRE alignment model. He concluded that none of the existing models included all these necessary components and some of the models are too real estate-centric.

Two important components of an alignment model are the corporate strategy and the CRE strategy (formation). Ramakers specifically looked at these two components when she compared eight alignment models and concluded that these studies show concordance in their lists of possible real estate strategies. Nourse and Roulac were the first to determine CRE strategies. Their work has been embraced by some others. Around that same time, de Jonge published a list of CRE strategies, which has been embraced by some European academics. Lindholm *et al.* combined both lists, because they covered almost the same goals, leading up to a complete overview of seven CRE strategies which show that, although the main goal for CRE might be always to limit these costs, the focus appears to be moving towards a cost/benefit ratio. ‘Benefit’ in this ratio should be seen as a broader term, rather than just direct or indirect return on investments in real estate. Lindholm *et al.*
identified five additional (output-related) ways in which CREM can add value to the organisation. Besides direct return (‘reducing costs’) and indirect return (increase in the ‘value of assets’), these are ‘promoting marketing and sales’, ‘increasing innovation’, ‘increasing employee satisfaction’, ‘increasing productivity’ and ‘increasing flexibility’.

Up until now, the alignment process has depended mainly on expert knowledge that is not available in less strategically managed CREM departments, making it hard for CREM practitioners to prove there is added value from alignment. Ramakers also concluded that, looking at corporate strategies, only half of the studies based their corporate strategies on previous work, while the others ‘made up’ their own lists. Because of this, the lists used to determine the corporate strategy differ greatly, which makes identifying clear alignment — and thus proving added value — even more difficult for CREM practitioners.

With regard to added value, already in classic economic theory in the 19th century a distinction was made between exchange and use value. With the former, the focus is on cost (the difference between output and input), so reducing cost by increasing efficiency leads to added exchange value. The latter focuses on the output: ‘qualitatively different and improved output by increased effectiveness leads to added use value’. This distinction also can be projected onto the ways in which CREM can add value. CREM can deliver added exchange value (efficiency) through ‘reducing costs’, ‘increasing the value of assets’ and ‘increasing flexibility’. Added use value (effectiveness) should be sought through ‘increasing innovation’, ‘increasing employee satisfaction’, ‘increasing productivity’ and ‘promoting marketing and sales’. While exchange value lies fully within the expertise field of the CRE manager, they definitely need to be in tune with other business functions to be able to deliver use value (eg HR, research and development, marketing and sales etc). The effect of CRE(M) on the organisation’s effectiveness is indirect and thus cannot be isolated from other variables, which makes it harder to prove its relevance.

Ramakers suggested placing the alignment of CRE in the strategic thinking map of Swayne et al., who distinguish between strategic thinking, strategic planning and strategic momentum (see Figure 1). For a long time, real estate was seen as a ‘support strategy’, determined at the time of planning the implementation of corporate strategies. Ramakers argues for it to be placed under the ‘directional strategies’ that are part of the initial strategy formulation. This is where the mission, vision, values and goals of an organisation are determined, and that is what CREM needs to support and be aligned with. Also, she recommends continuing the alignment further along the strategic thinking map towards implementation and evaluation.

Comparing the strategic thinking map with the 15 components of a complete CRE alignment model according to Heywood, this map appears to be able to cover all of them. Therefore, this paper will use this map to extend alignment from ‘strategy formulation’ into ‘planning the implementation’ and also to support the preparation of alignment during the ‘situational analysis’. The paper describes possible tools and existing studies for this entire strategic planning box of the strategic thinking map, to make application in practice easier. The next three sections will discuss each step within the strategic planning box separately (see Figure 1).

**SITUATIONAL ANALYSIS**

Most recent studies on alignment of CRE strategy focus on the ‘directional strategies’ part of strategy formulation. But, as visible in the map (Figure 1), the first step of strategic
planning should be a situational analysis. One of the major challenges for CRE managers is to create a property portfolio that not only supports the organisation’s current business activities, but also is adaptable and flexible enough to meet the needs of future business requirements. This requires the CRE manager to predict or forecast future requirements based on the best knowledge and analysis at this current moment in time. It is essential that the context in which CRE decisions are made is established. It is therefore important to understand how the business environment is changing from both an organisational viewpoint and also in light of wider trends in CRE.

CREM practitioners require tools and techniques to allow them to elevate the alignment of the CRE portfolio with the strategy of the organisation. One such technique is the CRE asset management (CREAM) strategic alignment model as shown in Figure 2.37 The model presented in Figure 2 proposes that, in order for CRE to be aligned with corporate strategy, all components need to be in alignment with each other. The ten Ps in the model can be used to evaluate the current alignment, or misalignment, of CRE with the corporate strategy. These ten Ps are as follows:

- **Planet:** This component relates to the organisation’s sustainability and corporate social responsibility.
- **Position:** The position component evaluates the business environment in which CRE decisions have to be made.
- **Procurement:** How real estate is procured can have a direct impact on the business performance of the organisation.
- **Place:** The place component can relate to both external and internal components.
- **Paradigm:** It is essential that the CRE manager understands the beliefs and values of the client organisation.
- **Processes:** To ensure that the CRE manager provides the right building with the

---

**Figure 1 Strategic thinking map**

right kind of workplace, consideration needs to be given to the work processes undertaken in the organisation.

• **People:** To ensure the optimum match between real estate provision and organisational needs for space is achieved, the CRE manager needs to establish the occupier perspective through identifying the needs and preferences of office workers.

• **Productivity:** The CREAM model proposes that optimum productivity of office occupiers only can be achieved when the workplace supports the organisational purpose and culture, work processes and individual needs and preferences of the office occupiers.

• **Performance:** To move the debate away from cost reduction it is important that the CRE manager can demonstrate performance in metrics other than just cost/m².

One of the Ps in the model — position — specifically relates to the situational analysis of the business environment. To assist the CRE manager there are a number of strategic analytical techniques that can be used to help to establish the potential changes in the business environment. These traditional techniques include political/economic/social/technological/environmental/legislative (PESTEL) and strengths/weaknesses/opportunities/threats (SWOT) analyses. In addition to these traditional approaches there is a more contemporary approach that includes scenario planning. PESTEL analysis allows the CRE manager to identify trends and drivers for change that are external to its specific organisation but may have an impact on the CRE decision-making process. The CRE manager can systematically evaluate each of these subcomponents of the PESTEL analysis with the aim of identifying specific drivers that may impact on CRE. Therefore, PESTEL analysis offers a structured way of identifying the following external factors:

• **Political:** Includes the impact of government policy and regulation. Changes in planning policy may have a direct impact on future real estate strategies.

• **Economic:** Relates to changes in interest rates, exchange rates and availability of money supplies — an important consideration when considering property procurement.

---

**Figure 2 The ten Ps of a situational analysis model for strategic alignment**

• Social: Embraces the changing workplace demographics that include population growth. Also included are issues relating to cultural differences and an ageing population that need to be considered when tackling workplace design.

• Technological: Includes factors that enable organisations and employees to use technologies in order to be more productive and profitable.

• Environmental: Embraces factors that relate to energy efficiency, recycling and sustainability, linking directly to sustainable developments and green buildings.

• Legislative: Legislative factors create the legal boundaries within which organisations have to work; for example, current lease accounting changes could impact CRE decision making.

A SWOT analysis then allows the CRE manager to link the external drivers for change more directly to their own property portfolio. The external drivers for change are captured as opportunities and threats while the strengths and weaknesses can relate directly to the property portfolio. The SWOT analysis allows the impact of the external factors to be evaluated against specific properties. In fact, a SWOT analysis could be conducted on each individual property in the portfolio as a way of establishing the suitability of the property in light of the external trends that are driving CRE. Undertaking such a portfolio review could lead to strategic decisions being made regarding which properties best align to both current and future business requirements.

The last tool in this section is called scenario planning. Scenario planning is sometimes referred to as ‘thinking the unthinkable’. This acknowledges the fact that the future may not be a linear extrapolation of the current circumstances, which gives the CRE manager the freedom to consider possible future scenarios. A useful definition is provided by Wright and Cairns:

‘Scenario thinking can facilitate “vigilance” in strategic thinking — in that alternative futures are thought through and strategic options can subsequently be evaluated against these futures. The process of scenario thinking enhances the evaluation and integration of information and promotes contingency planning for unfolding of both favorable and unfavorable futures.’

The scenario planning process is usually started by a strategic question. In answering such a question, a number of stages are followed to identify major trends that are then evaluated for levels of impact and degree of certainty, according to Wright and Cairns. From this process a number of different scenarios can be created that can be evaluated against future CRE strategies.

### STRATEGY FORMULATION

Organisations can identify their corporate directional strategy, based on the information gathered during the situational analysis. Then the most suitable CRE strategy to support the corporate strategy has to be chosen. Ramakers compared eight studies that have developed a model for aligning CRE strategies to directional strategies at the corporate level. According to her, the most complete and useful alignments are made by Nourse and Roulac and Scheffer et al. Because they use clear and relevant lists of both corporate and real estate strategies, they cover the entire step of strategy formulation in the map. Both methods indicate for each possible pair of strategies whether they should be aligned. Comparing both tools, it is clear that the authors basically make the same alignments. Nourse and Roulac take an extra step, because they also value the strength of each alignment pair (see Figure 3). Not every CRE strategy can deliver the same impact on a corporate driving force, so they distinguish three impact levels. Primary (P) means a strong alignment...
between this driving force and the CRE strategy, and thus optimal contribution to the business. Secondary (S) is the next best way to support a driving force and tertiary (T) is the third (NA = not applicable). As Heywood later confirmed, this model is currently prevailing.\footnote{45}

Although the process of aligning strategies seems clear and elaborate, the alignment itself remains questionable in all studies compared by Ramakers.\footnote{46} It is not clear why certain strategies should be aligned and others not, or what determines the strength of an alignment. Although both studies selected as the best of their kind found similar results, the alignment appears to have been based on intuition instead of research evidence. Also, Ramakers’ own attempt to find a clear alignment mechanism between corporate and CRE strategies (focusing on the Dutch care sector) concluded that, although the process of determining the alignment was clear, it did not provide a univocal, indisputable alignment.\footnote{47} So, more academic research into this alignment step is necessary for practitioners to be able to start using such models.

Awaiting such future research, this overview can be used by CREM practitioners to see which CRE strategies match the driving force(s) of their organisation, and thus it can help them to choose the best CRE strategy. Most likely, as similarly explained in the driving forces theory, there will not be one single CRE strategy that matches corporate driving forces. The information from the situational analysis could (and probably will) point towards a few relevant CRE strategies to pursue. In light of past behaviour and the current crisis, occupancy cost minimisation, for example, will be relevant for most organisations. But that does not mean some of the use value strategies should be overlooked, as it will depend on the stakeholders within the organisation and which strategy is most important for them. Cost minimisation might be desired within the scope of a chief financial officer (CFO), while employee satisfaction might match the focus of HR management. CREM should prioritise between the different stakeholders and their focus, to determine which CRE strategy will be the most important and which one(s) subordinate(s). During the next step of the strategic thinking map, it will become clear whether the chosen combination of CRE strategies can be jointly pursued or calls for opposing CREM actions.

<table>
<thead>
<tr>
<th>Real estate strategies</th>
<th>Product offered</th>
<th>Market needs</th>
<th>Technology</th>
<th>Production capacity</th>
<th>Method of sale</th>
<th>Method of distribution</th>
<th>Natural resources</th>
<th>Size/growth</th>
<th>Return/profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reduce costs</td>
<td>P</td>
<td>T</td>
<td>S</td>
<td>T</td>
<td>P</td>
<td>S</td>
<td>T</td>
<td>T</td>
<td>P</td>
</tr>
<tr>
<td>2. Increase flexibility</td>
<td>T</td>
<td>P</td>
<td>P</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>3. Increase employee satisfaction</td>
<td>T</td>
<td>T</td>
<td>P</td>
<td>P</td>
<td>T</td>
<td>S</td>
<td>T</td>
<td>S</td>
<td>T</td>
</tr>
<tr>
<td>4. Promote marketing/sales</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>P</td>
<td>S</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>5. Increase productivity</td>
<td>P</td>
<td>S</td>
<td>S</td>
<td>P</td>
<td>S</td>
<td>P</td>
<td>S</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>6. Increase innovation</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>7. Increase value of assets</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>P</td>
<td>P</td>
<td>S</td>
<td>S</td>
<td>S</td>
</tr>
</tbody>
</table>

\textit{Figure 3} Alignment with directional strategies according to Nourse and Roulac (1993); real estate strategies have been renamed by authors to match terminology used in this paper.

PLANNING THE IMPLEMENTATION

Once a directional strategy has been chosen, the next step in the strategic thinking map calls for CREM to plan the implementation and form action plans. To assist the CRE manager, a number of frameworks from academic research will be discussed, based on the list of possible CRE strategies. These include an overview of possible actions and relevant CRE aspects to think about when deciding on real estate interventions. Also, the setup of the CREM department and competitor analysis are discussed, as these can influence alignment as well.

Lindholm developed a model (see Figure 4) that gives directions for each strategy on possible actions to take. As can be seen, the directions in this model are very general and CREM practitioners will have to decide how to proceed with these actions. The actions suggested to implement exchange value strategies are more explicit for CRE managers, as they use their language and terminology relating to costs, leases and property. The use value strategies mostly ask for actions with regard to location and building/workplace choices and remain more tacit. But what are ‘facilities that allow innovative processes’ (increase innovation) or ‘locations that attract customers’ (promote marketing and sales)? These actions remain vaguer, because they depend not only on the CRE characteristics, but also on the unique characteristics of the primary process of the organisation itself. Therefore, CREM practitioners should seek collaboration with the relevant persons and stakeholders within their client organisation to make these actions more clear.

Many structural, installation and location aspects can be identified as relevant for achieving a certain CRE strategy, and thus should be discussed in meetings with these internal stakeholders. Feijts performed an extensive literature study on which CRE aspects have been proven to have an effect on an organisation. He identified 38 relevant publications of empirical studies, frameworks or experiences from practice. The authors behind these studies belong to several different research areas, like ergonomics, environmental psychology, facility management, logistics, engineering, sustainability and indoor environments. This explains why CREM has such a difficult task, because ideally CREM would need to have knowledge of all these different areas of expertise. The ten Ps model mentioned under the situational analysis section demonstrates the need for a crossing of professional boundaries to offer a truly strategic alignment solution. Skills required are very diverse, including business analysis, property procurement, facilities management and workplace psychology.

From these 38 studies, Feijts compiled a list of 51 CRE aspects that were proven to have an effect on organisational performance. These aspects were grouped by Feijts into the categories of structural, installation and location aspects. In a follow-up paper, Appel-Meulenbroek and Feijts identified how specific structural aspects could be used to implement specific CRE strategies. An ‘X’ in Table 1 means that at least one academic study has proven the impact of this CRE aspect related to this CRE strategy. For structural aspects, Appel-Meulenbroek and Feijts identified three groups of aspects that can be distinguished with regard to their potential impact on the different CRE strategies (see the three large boxes drawn in Table 1):

- The way the building is constructed (eg orientation, material properties, grid etc), with a possible impact on the exchange value strategies (organisational flexibility, costs and value of assets).
- The design of the personal workspace (eg ergonomics, materials etc) and the individual control, with a possible impact on the use value strategies (employee satisfaction, productivity and innovation) and, through this, also on costs.
Building form (representativeness and aesthetics) and layout, with a possible impact on all seven strategies.

In that paper, installation and location aspects also are summarised, but these are not related to the CRE strategies; however,
### Table 1: The influence of structural aspects on CRE strategies

<table>
<thead>
<tr>
<th>Structural aspects</th>
<th>Exchange value CRE strategies</th>
<th>Use value CRE strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Organisational costs</td>
<td>Organisational flexibility</td>
</tr>
<tr>
<td>Building orientation + expanding possibilities</td>
<td>Building location and orientation</td>
<td>X</td>
</tr>
<tr>
<td>Building age</td>
<td>Building age</td>
<td>X</td>
</tr>
<tr>
<td>Construction type</td>
<td>Construction type</td>
<td>X</td>
</tr>
<tr>
<td>Detailing of elements and connections</td>
<td>Minimal connection of elements</td>
<td>X</td>
</tr>
<tr>
<td>Building height + volume</td>
<td>Floor height</td>
<td>X</td>
</tr>
<tr>
<td>Spatial characteristics and flexible elements</td>
<td>Fixation/mobility of elements</td>
<td>X</td>
</tr>
<tr>
<td>Standardisation of elements</td>
<td>Standardisation of elements</td>
<td>X</td>
</tr>
<tr>
<td>Materials, forms and colours (building + floor + workplace)</td>
<td>Material properties (e.g. reflection, insulation)</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Construction characteristics and details</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Grid dimension + free spanning distance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ergonomics of workplace</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Materials, finishing</td>
<td></td>
</tr>
<tr>
<td>Control of environmental characteristics (floor + workplace)</td>
<td>Control of audio/visual privacy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control of indoor climate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emission of/reservoir for harmful substances</td>
<td></td>
</tr>
<tr>
<td>Amount of glass in façade</td>
<td>Amount of glass in façade</td>
<td>X</td>
</tr>
<tr>
<td>Building form</td>
<td>Representativeness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aesthetics</td>
<td></td>
</tr>
<tr>
<td>Room/workplace layout</td>
<td>Individual workplace layout</td>
<td>X</td>
</tr>
<tr>
<td>Floor layout</td>
<td>Floor layout</td>
<td>X</td>
</tr>
<tr>
<td>Position of facilities</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Accessibility</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Building depth/width</td>
<td>Building depth/width</td>
<td>X</td>
</tr>
<tr>
<td>Building layout + total amount of square metres</td>
<td>Building layout</td>
<td>X</td>
</tr>
</tbody>
</table>

**Note:** For the empty spaces in this table no studies were found that have proven the relevance of this aspect for this particular strategy, which does not mean there might not be a relationship proven by future research.

Table 2: Influence of installation and location aspects on CRE strategies

<table>
<thead>
<tr>
<th>Installation and location aspects</th>
<th>Exchange value CRE strategies</th>
<th>Use value CRE strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Organisational costs</td>
<td>Organisational flexibility</td>
</tr>
<tr>
<td><strong>Installation Characteristics and individual control</strong></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Location Parties</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximity of labour market</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Proximity of selling market</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Proximity of suppliers/sources</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Proximity of related organisational departments</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Proximity of collaboration parties</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Presence of supporting facilities</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>Accessibility</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logistic infrastructure (airports, highways, railways)/accessibility</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Facilities on site (eg parking)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extension possibilities</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>Environmental influences</strong></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Sources of noise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charisma/image location and environment</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Note: For the empty spaces in this table no studies were found that have proven the relevance of this aspect for this particular strategy, which does not mean there might not be a relationship proven by future research.

this can be done, as shown by Appel-Meulenbroek (see also Table 2). Table 2 shows how the characteristics and individual control of installations is relevant for all CRE strategies. The location aspects (parties, accessibility and environment) each show their own impact:

- proximity of other parties, relevant for added use values and reducing costs;
- accessibility, related to all strategies;
- environmental influences, mainly determining the value of assets and image/sustainability.

CREM practitioners could take up the aspects from both tables during their discussions with the different stakeholders, and thus make the actions to be undertaken from Figure 4 more clear and explicit.

Once the ‘ideal’ structural, installation and location aspects have been discussed and determined, the current CRE portfolio should be evaluated regarding the most important aspects for the chosen CRE strategies. Last, but not least, the management style and setup of the CREM department also determine which added value can be provided (eg being proactive, using economies of scale etc). So CREM has to make decisions on both these matters at this stage too. Just as there is no one CRE solution for all organisations, there is no one optimal CREM form, it depends on the chosen CRE strategy. By studying eight cases (all large and mature multinational production companies), Frederix showed that specifically the degree of (de)centralisation of the CREM team and the management form (cost centre versus a separate business unit) determine whether certain CRE strategies can be implemented. Together with the level of outsourcing and the CREM organisational structure, these aspects determine how much knowledge CREM has of the primary process and stakeholders of the client organisation. Table 3 shows how (in these cases) the design variables are related to certain CRE strategies (increasing employee satisfaction and innovation were not taken up in Frederix’s overview). What can be concluded from Frederix’s study is that the degree of centralisation relates to almost all strategies. Marketing and sales strategies benefit from a more central management, while employee productivity is best managed through a more geographically decentralised structure. It is probable that a geographically decentralised CRE structure also could relate to localised solutions from CRE managers really understanding occupiers’ needs and preferences for their workplace solutions. The degree of concentration of CREM activities also can support certain

<table>
<thead>
<tr>
<th>Table 3: Organisational design versus CRE strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of centralisation</td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>Reducing costs</td>
</tr>
<tr>
<td>Increasing value</td>
</tr>
<tr>
<td>Increasing flexibility</td>
</tr>
<tr>
<td>Increasing productivity</td>
</tr>
<tr>
<td>Promoting marketing &amp; sales</td>
</tr>
</tbody>
</table>

Note: For the empty spaces in this table no studies were found that have proven the relevance of this aspect for this particular strategy, which does not mean there might not be a relationship proven by future research.

strategies according to Frederix. The value strategy is mentioned to benefit from a separate strategic and operational level, while flexibility thrives in a combined setting. With regard to management form, the value strategy benefits if CREM is given authority to decide on investments and expenses, but flexibility and productivity are supported better when CREM is seen as a business unit that has to compete with external providers. According to Frederix, these results are not a precondition for alignment, but do make it more likely that this CRE strategy can be reached optimally. Thus the overview can help CREM practitioners with their decision making.

Frederix stated that the amount of outsourcing is not related to certain CRE strategies, but only to economies of scale and quality; however, that does make it important to establish what competitor analysis means in the context of CRE. As CRE moves to offering a range of different procurement options, from freehold, leasehold and fully serviced offices, there are also different levels of interaction with external service providers. Therefore, competitor analysis could be seen to be on two distinct levels.

1. Competition between in-house and outsourced service provision. In this level of analysis a CRE manager may wish to compare themselves against best-in-class, customer-focused landlords. In this way they can establish how well their in-house provision compares.

2. Competition between external service providers. If the CRE procurement option is to choose an outsourced service provider then competition exists between potential suppliers. It is therefore essential that the CRE manager undertakes a competitor analysis to establish which service provider best matches their need for property provision. In addition, it is also important to evaluate potential service providers as partners so that the changing demands of the property portfolio can be continually met.

Research was undertaken by CoreNet Global which aimed to establish the demands for CRE in 2020. This research identified one of the major trends as being service delivery and outsourcing. One of the outcomes of this research was the following bold statement: ‘Real estate business objectives and goals will become more integrated with procurement and, therefore, more sophisticated and complex’. This quote illustrates the increasing complexity of procurement options and therefore increasing importance that competitor analysis will play in evaluating those options.

**CONCLUSIONS AND RECOMMENDATIONS**

In general, studies on alignment of CREM with corporate strategy tend to focus on one phase of the alignment — either initial strategy alignment on an abstract level or (operational) performance measurement at the end of the strategic thinking process. This paper has tried to give an insight into the alignment strategy from initial alignment with situational analysis towards planning the implementation by introducing the strategic thinking map. Previous CREM research has identified and created many tools for CREM practitioners to utilise when working towards alignment. Assigning the existing tools and frameworks to the steps in the strategic thinking map created the checklist below with 12 tool-supported steps that may guide CRE practitioners on their quest for CRE alignment. During all 12 steps it is essential to include general management in prioritising by discussing both exchange and use value that can be added. Hopefully, this will help with receiving more strategic attention and the promotion of CREM departments towards
strategists in the CREM evolution. The alignment process should start with a situational analysis, which could be done by:

1. Undertaking a PESTEL analysis for the organisation to establish key drivers affecting its business. It is important to ensure that representatives from the strategic management team and the real estate team are present.
2. Converting the drivers into the ten most significant key issues in the environment for the business.
3. Undertaking a SWOT analysis for all real estate assets.
4. Loading the strengths and weaknesses onto a grid and comparing them to the issues in the environment. This should reveal the most significant opportunities and threats and inform the CREM alignment strategy.
5. Considering scenario planning techniques where the business environment is especially volatile.

Then, strategy formulation should take place, which is a conversion process whereby corporate directional strategies are converted into CRE strategies in two steps:

6. Transform the situational analysis into driving forces and prioritise which driving force(s) is/are most important.
7. Use the overview in Figure 3 to determine which CRE strategies are most important for the organisation, keeping priorities and the different stakeholders in mind.

Although this phase of strategic planning has been studied the most with regard to CRE alignment, the tools that have been created remain very tacit and require expert knowledge, which could prevent their use in practice. Apparently, there is still no clear mechanism for identifying and prioritising how CRE strategies line up against corporate directional strategies. Further academic research in this area therefore would be very welcome. Planning the implementation is the last phase of strategic planning. Again, several steps can be taken to walk through it:

8. Identify possible actions that could benefit the CRE strategy (or strategies) selected (from Figure 4).
9. Discuss relevant CRE aspects (Tables 1 and 2) with the stakeholders in the client organisation to make these actions more explicit.
10. Evaluate the current CRE portfolio on these CRE aspects and identify possible interventions to increase alignment and thus add value.
11. Reconsider whether the current setup of the CRE department is the best way to implement and maintain the chosen CRE strategies.
12. Perform a competitor analysis to decide how best to provide CREM and its services to the client organisation.

The tools and framework for this phase of strategic planning help CRE practitioners to identify possible actions and how to implement these actions, but they still lack support for prioritising these actions. Further research on this process of prioritising within organisations could be very interesting. Also, more research on added use value is necessary to be able to implement real evidence based design into portfolios.

The strategic thinking map does not end here, nor does the alignment of CREM. During the strategic momentum phase, actions must be undertaken and also need to be evaluated to learn from the process through post-occupancy evaluations. A lot has been published on performance measurement to make sure that the goals behind the strategy formulation are achieved after the implementation. With regard to exchange value, this performance measure-
ment is usually efficiency driven, which means it is largely within the control of the CRE department but also predominantly will take place on the operational level. Unfortunately, this is often not the place where added value is proven, but where costs are justified. To talk about adding use value, performance measurement should focus on effectiveness as well, which requires the interconnection between CRE and corporate strategy and therefore portrays full strategic alignment. As Bon states:

“The information available to an organization concerning its “good” and “bad” buildings is invaluable in guiding both new construction projects and repair and reconstruction projects. As the real property portfolio of each organization differs considerably from any other portfolio, each organization needs to develop and maintain a database with information specific to that organization.”

Only then can the iterative nature of the strategic thinking map be used to its full potential. As the first box of this map (“strategic thinking”) shows, analysing data and questioning previous assumptions will generate new ideas, both on the corporate as well as the CRE level. So, as Heywood mentioned, perhaps it is more important to adopt a strategic mindset rather than getting the alignment exactly right (as things will change anyway). Strategic management is a continuous process during which tools will have to be re-used again and again, until CREM obtains such a strategic mindset and CRE strategy alignment becomes evident and natural for general management as well.

As Tay and Liow point out: ‘firms are still very much focused on short term performance. Where benefits are uncertain and some length of time is required before rewards are reaped (eg, investing in innovative CREM tools), firms tend to be more reserved’. This statement is a clear example of the challenge that CRE managers face. The traditional method of procuring real estate or even vacating current real estate can be lengthy, depending on whether the real estate is freehold or leasehold. The concept of time lag and tension between real estate supply and organisational requirements is acknowledged by Todd and Hargis: ‘The time delay between business demand and delivery of the solution is huge. This speaks to the need for agility. The line of business often wants to see the financial impact now, but CRE often can’t do it that quickly.”

A solution proposed by Todd and Hargis, to help give the CRE manager the flexibility and agility to respond to changing business demand, is to shift from owned real estate to a model of real estate on demand. This approach would require working with third parties to provide their real estate needs; however, to ensure that any time delay is minimised as much as possible the on demand real estate would have to be fully integrated into the evaluation of the total real estate portfolio. In addition, the strategic thinking map with its CREM tools needs to be used as early in the alignment process as possible, as only then can CREM reach its full potential for adding value.

REFERENCES
(4) Heywood, C. (2011) ‘Approaches to aligning corporate real estate and


(10) Heywood, ref. 4 above.


(12) Heywood, ref. 4 above.


(16) Heywood, ref. 4 above.

(17) Ibid.

(18) Ramakers, ref. 14 above.


(23) Lindholm et al., ref. 20 above.


(25) De Vries et al., ref. 7 above.

(26) Lindholm et al., ref. 20 above.

(27) Ramakers, ref. 14 above.


(31) Jensen, ref. 24 above.

(32) De Vries et al., ref. 7 above.

(33) Ramakers, ref. 14 above.

(34) Swayne et al., ref. 13 above.

(35) Ramakers, ref. 14 above.

(36) Heywood, ref. 4 above.


(40) Ibid.
(41) Ramakers, ref. 14 above.
(42) Nourse and Roulac, ref. 19 above.
(43) Scheffer et al., ref. 22 above.
(44) Nourse and Roulac, ref. 19 above.
(45) Heywood, ref. 4 above.
(46) Ramakers, ref. 14 above.
(47) Ibid.
(50) Ibid.
(52) Ibid.
(55) Ibid.
(56) Ibid.
(57) Ibid.
(60) Heywood, ref. 4 above.