STRATEGIC CORPORATE REAL ESTATE MANAGEMENT RESEARCH AND TEACHING: DEFINING DIMENSIONS OF PRACTICE

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ABSTRACT
Strategic corporate real estate management (CREM) is an emerging property discipline with a concomitant evolution in its body of knowledge. There have been past attempts to define that body of knowledge, but much of the literature examines individual practices in isolation without locating them in a coherent, overarching theoretical framework suitable for strategic CREM.

From a study of CRE and competitiveness, 179 defined practices were clustered into 11 clusters of similar practice types and linked within a framework that supported strategic approaches to the management of CRE.

This framework and its defined practices describe a body of knowledge that became the basis of teaching CREM at the University of Melbourne. A final year undergraduate Facility Management subject has included aspects of CRE since 1999, and a standalone, postgraduate CRE subject was taught for the first time in 2006. This subject emphasises strategic and competitive practices in students’ case study research.

Keywords: body of knowledge, corporate real estate, definitions, management practices, teaching

INTRODUCTION
The requirement for property for business’ operational purposes is as ancient as the doing of business itself. However, the formalisation of operational or corporate real estate (CRE) practices is relatively recent. Corporate real estate management (CREM) is an emerging property discipline that is evolving towards managing operational property more strategically. While CRE exists in its own right as a
discipline on the demand-side of the property industry understanding it should be of interest to the supply-side’s construction and design as this matches calls for the supply-side’s greater understanding of clients and their processes (Green, 1996; Green and Simister, 1999).

As a result of its evolving practice, CREM’s body of knowledge has also evolved to include more strategic management practices. There have been attempts in the past to define CRE’s body of knowledge (CREBoK) as a whole (Brown et al. (1993) is a signal example), but much of the CRE literature examines individual practices in isolation without reference to a coherent, overarching theoretical framework suitable for strategic CREM. This paper reviews those previous attempts at defining a CREBoK, as a precursor to reviewing the literature of CRE practices and presenting a framework developed for locating CRE practices for strategic purposes that usefully also defines the CREBoK. The paper goes on to illustrate this framework’s utility in CREM teaching and research.

‘BODIES OF KNOWLEDGE’

General
Bodies of Knowledge are a distinguishing feature of professions. Usually, built environment professional Bodies of Knowledge are not codified. Instead, they are more informal and ad-hoc, being embedded in the professions’ practices. The Project Management Body of Knowledge (PMBOK) is unusual as a formalisation that is applicable to built environment professionals.

Some professions codify elements of their body of knowledge in best practice guidelines, that evolve based on research, within a paradigm of evidence-based practice, for instance: the medical professions. Evidence-based practice is less well used in management (Pfeffer and Sutton, 2006), and even less well known in management in built environment contexts. Though this is changing as more research is done, many built environment fields remain under-theorised and with incompletely defined Bodies of Knowledge.

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1 Other features of traditional professions include: Academic education, a code of ethics, and remuneration on the basis of service provided to clients.
A CRE specific Body of Knowledge

There are suggestions that a defined CRE-specific Body of Knowledge (a CREBoK) would be useful (Tim Frederico, personal communication), but there have been few attempts to so. Traditional texts, such as Brown et al. (1993), Silverman (1987) and Nourse (1990), tend to define CRE practice in terms of tasks to perform. While this is useful in managing CRE operations they incompletely capture what is required for strategic CREM.

The so-called ‘Roulac Real Estate Body of Knowledge (REBoK) Framework,’ while claiming to be a generalist real estate knowledge framework, includes a CRE awareness as evidenced by its inclusion of ‘space users’ (Roulac, 1995). That ‘framework’ treats property as an artefact with a resultant spread and type of knowledge required to make RE decisions. However, as practices for managing that property thereafter are not considered the ‘framework’ could not constitute a CREBoK, because of CREM’s decision-making and ongoing management dimensions.

The evolution towards strategic CREM has enlarged what is asked of CREM, and therefore its requisite practices, with business and property skills emphasised (Kenley et al., 2000b). These practices change as CREM evolves towards strategic levels (Joroff et al., 1993). Recently, it was suggested that CRE skills now needed to include, among other things, change management, corporate strategy, customer relationship management, and supply chain management skills (Berney, 2007).

More recent CRE texts, produced at a time of greater awareness of strategy and CREM, have:

- Inferred a body of knowledge by analysing CRE in terms of property types, uses, and the institutional arrangements (Edwards and Ellison, 2003);
- Defined some dimensions of practice and illustrated the operation of practices in case studies (Weatherhead, 1997); and
- Examined the strategic orientation and environments of organisations from a CRE perspective. Illustrative case examples within chapters contain some evidence of practices (O'Mara, 1999).

Otherwise, the CRE literature tends to focus on individual practice’s operation (for example: Rodriguez and Sirmans (1996), Noha (1993), Manning et al. (1997), and
Allen et al. (1993)) without connecting to other practices within a coherent framework.

Annual surveys of CREM practices (Bon et al., 2002; Bon and Luck, 1998; Bon and Luck, 1999; Gibson and Luck, 2006) do map dimensions of practice, without necessarily providing an overarching framework that could be considered a Body of Knowledge. Starting with the same survey, Varcoe (2000b) points towards domains of CREM practice (Figure 1, below), but does so in suggesting possible trends in workplace provision. This model, cast as a general property industry one, does assume a space use (CRE) perspective, rather than an investment one. While defining domains of CREM practice, applicable practices are not noted, despite the initial connection with a survey of practices’ use.

Figure 1 Dimensions of CRE practice (after Varcoe (2000b, Figure 1))

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2 CIR© in Figure 1 stands for Corporate Infrastructure Resources, a term used by the International Development Research Council (IDRC) to suggest the integration of various ‘non-productive’ resources required by organisations in order to operate (Joroff et al., 1993; Materna and Parker, 1998). The IDRC’s successor – CoreNet Global – uses IRIS (Integrated Resource and Infrastructure Solutions) for a similar concept (Dunn et al., 2004).

3 Varcoe published within an FM labelled context, but clearly CRE is attributable, given the use of CIR.
As this paper has a CRE education focus, it should be noted that education requires some definition of knowledge for its purposes. Information management, financial treatment, strategy, personnel management and transactions have, in the past, been identified as a useful knowledge base for CRE educational purposes (McDonagh, 1998).

AIM AND METHOD
This paper aims to identify and report on the dimensions of CREM practice as a basis for research and teaching, using a coherent framework for strategic CREM.

Teaching is of most interest to this paper, but the former is also relevant. The paper is drawn from a larger study, in 2000-01, of CRE and organisational competitiveness by the Corporate Real Estate and Asset Management Research Group at the University of Melbourne (CREAM). That study surveyed the literature as a prelude to investigating links between CRE, its management, and organisational competitiveness as a basis of strategic CREM. Both ‘traditional’ practices and ‘strategic’ practices (as they existed) were included.

Anecdotal evidence from practice shows, despite many advances, the persistence of poor implementation of strategic CREM. This may be due, in part, to poor theorisation of the field, and, in part, due to inadequate education in strategic CREM. Both these inadequacies are addressed in this paper.

DEVELOPING THE FRAMEWORK
Defining and categorising the practices
As a result of the survey, 179 practices were identified. These were defined from the literature, where possible with multiple citations. This is a lexicographical process is similar to that used to create dictionaries, such as that described for the Oxford English Dictionary (Willinsky, 1994).

In an iterative, ‘grounded’ approach, similarities between the functions, or purposes, of the practices allowed higher-level categories or clusters of practices to emerge from the data of practice definitions. Often this categorisation was suggested by the citation source, for example an article of financing real estate. These clusters were similarly defined and described (see Appendix 1 for the final descriptions). After initially allocating practices to clusters, multiple-researcher consensus was used to confirm the categorisation. A categorisation example is the
‘Holding practices’ cluster related to organisation’s tenure of their operational property. Ownership and leasing practices were obvious categories, but leasehold variants such as long or short terms and synthetic leases were also included.

Eleven clusters of CREM practices of two types eventuated (Table 1, below) – those of:

- A ‘business’ nature related to organisation of the CREM function and its strategic operation; and
- A ‘property’ nature related to technical management of the CRE itself.

Table 1 CREM practice clusters

<table>
<thead>
<tr>
<th>CRE unit practices</th>
<th>Technical CREM practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic practices (of the CRE function)</td>
<td>Holding practices</td>
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<tr>
<td>Organisation practices</td>
<td>CRE financing</td>
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<tr>
<td>CRE decision-making practices</td>
<td>Accounting</td>
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<tr>
<td>Location/site selection</td>
<td>Metrics</td>
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<tr>
<td>Workplace styles</td>
<td>Information systems</td>
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<td>Information systems</td>
<td>Benchmarking</td>
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Because this survey’s comprehensiveness, the resultant clusters, which individually define dimensions of practice, collectively define the core and distinguishing Body of Knowledge specific to CRE. Domains of practice additional to CREM’s core Body of Knowledge may need to be added to complete CREM’s required operating knowledge, as discussed.

Linking to strategic management theory

Organisational strategic management theory is concerned with having and developing strategies (plans of actions and resources) for future success (Howe, 1986; Thompson Jr and Strickland III, 2003). Frequently, pyramidal or hierarchical frameworks are use to connect strategy with implementation activities (operations) – for example, Figure 2, below.

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4 Within a resource-based view of organisations, CRE is an organisational resource – the 5th resource (Joroff et al., 1993) – that is often under-recognised in mainstream management theory, such as by Kaplan and Norton (2006) who, conspicuously, omit CRE from their analysis of every other CIR© organisational resource that they think warrant alignment for enterprise success.
Classically described in strategic theory as Strategy-Tactics-Operations, the top level is about overall success (business success in this instance), the tactical, middle level is the devices used to manage and control the various functions (organisational functions, such as CRE, here) in pursuit of that success, and the lowest level is about the detailed techniques used to achieve success. This hierarchical structuring provides a logic mechanism to analyse how activities and practices contribute to strategy.

**THE CREM STRATEGIC MANAGEMENT FRAMEWORK**

Applying the above logic mechanism to the clusters of CRE practices in Table 1 allows them to be grouped according to their place in a tri-level hierarchy of strategic practice.⁵

At the highest level are those practices that make the closest link between CRE, its management and organisational strategy, as this alignment is thought to be most important (Englert, 2001; Joroff et al., 1993; O'Mara, 1999; Weatherhead, 1997). In this study competitiveness alignment was emphasised.

On the intermediate level are those devices and arrangements to manage and control the CRE function. Practices such as how CRE function is organised, within itself or in relation to the organisation as a whole, belong here, as do CRE decision-making practices. Technical practices that are similarly employed can also be argued to belong on this level of the hierarchy. ‘Holding practices’ considered earlier were deemed a Financial practice as tenure practices, in effect,

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⁵ In this, ‘Metrics practices’ subsumes ‘Benchmarking’ as this, more accurately, is a measurement (or metrics) practice.
impact on financing the business. That is, owned property, is organisational capital and may be tested against alternative investment uses of that capital.

The Operational practices of Location/site selection and workplace styles are detailed techniques required to implement organisation and its aligned CRE strategy. Their strategic importance is highlighted by the potential to inform organisation’s workplace cultural change strategies and location-based cost, or service delivery, strategies.

This CREM Strategic Management Framework (Figure 3, below) provides a comprehensive account of the areas of knowledge required by CREM in order to operate strategically. The core CREBoK from Table 1 is augmented by several other required domains of practice that are relevant to CREM but which may have their own Bodies of Knowledge, as Project Management does, which would tend to place them outside the core CREBoK defined by the 11 clusters of practice.

*Figure 3 The CREM Strategic Management Framework*

![Diagram of CREM Strategic Management Framework]

This framework provides greater utility than the other frameworks and attempts at defining a Body of Knowledge because:

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Despite the similarities, this framework was conceived independently of Varcoe (2000a&b) (seen in Figure 1). This paper’s Framework’s earliest appearance was in the University of Melbourne’s *Building Economy* notes in 1999. Varcoe’s model is appears in 2 papers published in 2000, but were probably written in 1999.
• It is an overarching theoretical framework suitable for strategic CREM that matches strategic management theory. This is important given that strategic CREM needs both business and property (technical) knowledge. Strategic management theory constitutes important business knowledge for CREM;
• Competitiveness alignment is a key theoretical position at strategic level that is crucial to strategic success of CRE(M), and permeates the thinking about teaching CREM at the University of Melbourne; and
• It is a comprehensive collation of practices and dimensions of practice with practices located relative to the Strategic Framework.

IMPLEMENTING THE FRAMEWORK IN TEACHING (AND RESEARCH)

Implementation in research
As noted above, the actual delineation of a CREBoK was a by-product of research. In that research, the defined individual practices, within their clusters, was the basis of a survey of practices’ competitive effects. (Kenley et al., 2007) reported the Technical practices’ effects, and it is expected that further papers will report other aspects of this study.

The clusters of practices were also used in research into how CREM dealt with subjectivity in CREM. An analysis of the discipline’s ‘texts of record’ demonstrated that its knowledge was reliant on Technical and Managerial practices (Heywood, 2007), whereas that research investigated subjective evaluations of the effects of the Technical-Managerial work, which was poorly treated in the literature.

Implementation in teaching

Undergraduate teaching
The CREM Strategic Management Framework has been implemented in undergraduate teaching of CREM at the University of Melbourne since 1999. In a level 4 Facility Management subject in the Bachelor of Property and Construction program the teaching comprised four hours of lectures covering four topics.

1. Introduction to CRE which:
   o Defined the term and the field, as this is frequently misunderstood, even by experienced property professionals;
2. CRE and competitiveness which:
   - Introduced competitiveness theory;
   - Discussed different perspectives on competitiveness; and
   - Showed how that applied to CRE and its management.

3. CRE practices which introduced the CREM Strategic Management Framework and its dimensions of practice.

4. Performance measurement (metrics) which:
   - Introduced issues of how to demonstrate the performance of CRE and its management for the organisation.

Since 2005, similar lectures have been presented in a third level subject – Property Management. Given this development and the introduction of a dedicated postgraduate CRE subject, review and coordination of content across the three subjects is now warranted to allow the detail and depth of the content to be progressively introduced suitably for each level, particularly in light of the University’s proposed degree structures in 2008.

Postgraduate CRE subject

The lead author was appointed in 2006 to teach a postgraduate CRE subject within the University of Melbourne’s Master of Property and Construction program. An indicative subject outline had been created that was informed by the earlier CREAM research (https://psc.unimelb.edu.au/view/2007/subject/702-663.html). Teaching the subject for the first time in 2006 meant operationalising that outline with the CREM Strategic Management Framework being important in shaping the subject’s content. Additionally, developing that outline was informed by:

- The CRE skillset including business and property skills;
- Strategic (or policy) makes a more significant contribution to success than tactical or operational aspects (Howe, 1986; Roulac, 1995; Thompson Jr and Strickland III, 2003);
- Understanding an organisation’s competitive orientation is an important means of aligning CREM practice with an organisation’s that, to date, has been poorly recognised;
- A resource-based view of the organisation; and
The full extent of Technical practices available in the Framework could not taught due to time limitations, but several practice clusters should be covered in order to equip graduates with immediately practical and useful knowledge.

Subject content
The subject emphasises strategic organisational and CREM practices with the use of competitive and strategic environmental analysis forming a prelude to managing and controlling corporate property decisions. Other content topics derived from the Strategic Management Framework included:

- CRE as an organisational resource and its management an organisational function with concomitant requirements for strategy;
- Strategic CREM, with the main CRE strategies to date from Nourse and Roulac (1993) and O'Mara (1999) and CIR as a horizontal alignment method (Englert, 2001);
- Ways of organising and structuring a CRE unit, including reference to outsourcing practices;
- Assessing CRE performance using metrics practices and some information requirements; and
- Technical practices related to:
  - Location, where practices pertaining to selecting sites or locations were examined;
  - Workplace, which covered workplace styles together with workplace change processes; and
  - Leasing, where issues relating to tenurial practices were covered, including ‘right’ leasing in terms of duration and flexibility with regard to organisational strategy.

Guided case study research of CRE organisations was the pedagogical tool for implementing learning about strategic CREM. Analysis of the organisational strategic environment set the scene for analysing and making property recommendations in one of three possible operating scenarios where CRE was an important factor. These were:

- Outsourcing the CRE function of the organisation;
- A strategic workplace facility; and
• Changing the organisational structure through something like a merger or a spin-off.

Individual work and assessment was achieved by students collaborating to research, but individually reporting on:

• The organisation’s strategic context in the first assessment task; and
• In different collaborative groups, the scenarios and their consequences in the second assessment task.

Individual analysis and recommendations was achieved in the final assessment task through the intersection of the two earlier tasks.

**CRE in Australian universities**

CRE, as a distinct discipline subject, is taught relatively rarely in Australian property and construction programs. Arguably, the University of Melbourne Master of Property and Construction program covers aspects of CRE in three subjects: the Facility Management subject that teaches Life-cycle costing and other lifetime issues for buildings, and Asset Management which deals with financial aspects of ownership or control of property as a domain of practice from the CREBoK.

**CONCLUSION**

Strategic CREM requires appropriate practices, theoretical frameworks and education to support professional practice. Research into competitiveness and CRE, representing a particular orientation to strategic management, produced a very extensive listing and categorisation of CRE practices. These clusters represented dimensions, or domains, of the requisite knowledge needed by CREM in order to operate. Together, within a three tier CREM Strategic Management Framework, the clusters define the core CREBoK, to which several other domains of practice must necessarily be added to completely describe the knowledge basis for CRE. This Framework provides a suitable overarching theoretical framework for strategic CREM practice while still respectful of practice given its grounding in

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7 The recent 13th Pacific Rim Real Estate Society conference had representation from the five Australasian universities where teaching of CRE is most evident, though it should be noted that the related FM discipline is also taught at a number of universities.
CREM practices. It provides a theoretical and practical basis for teaching of and research into strategic alignment and CRE at the University of Melbourne.

The practices are organised in the Strategic CREM Framework in such a way as to demonstrate how they contribute to strategic management of CRE at an organisational level. That strategic CREM Framework coincides with that of organisational strategic management suggesting improved alignment between the two. It also constitutes an important ‘business’ knowledge for CRE managers and has been operationalised in the education of possible future CRE managers. This teaching has emphasised development of strategic understanding of organisations and CRE as the basis of increasing the alignment of CRE and organisational strategy in future practitioner graduates of the subject.

ACKNOWLEDGEMENTS
The authors acknowledge the financial and strategic support provided by the Australian Research Council, the Property Council of Australia, the Victorian Department of Infrastructure and Australia Post as partners in the CREAM Research Group’s projects.

APPENDICES
APPENDIX 1 – Glossary of categories of CREM practice and activities
This Appendix provides definitions for the clusters of practices used in this paper. Kenley et al. (2000a) contains an earlier version of these definitions and categorisations and versions of this Appendix have been used in Kenley et al. (2007) and Heywood (2007). Both Kenley et al. (2000a) and this Appendix are not exhaustive and the categorisation warrants fuller treatment in a future paper.

CRE UNIT PRACTICES
Organisational practices (of the CRE function)
The CRE function may be organised in one of several ways as options for provision of CRE service to the organisation. These include arrangements from in-house to outsourcing, and organisational structures such as profit or cost centres, or as forms of property company, such as in a subsidiary or spin-offs (Kenley et al., 2000a). The relationship of CRE to other organisational resources through integrated resource management mechanisms such as Corporate Infrastructure Resource® (CIR) management is also now part of CRE’s action as an
organisational function (Materna and Parker, 1998). The second sub-cluster here was the CRE function’s responsibilities and activities.

**Strategic practices**
This cluster of practices includes sub-clusters for:

- The use of generic CRE strategies from Nourse and Roulac (1993) as generic approaches to how property serves an organisation. This is separate from the application of these strategies when making a specific property decision (see Location/Site selection, below);
- People involved and information used in strategic CREM; and
- How extensively it is applied to the property portfolio.

**CRE decision-making practices**
These are the practices employed in making CRE decisions and the information used in doing so. Examples of these could include Value management and Life-cycle costing practices.

**TECHNICAL CREM PRACTICES**

**Holding practices**
These are practices for CRE tenure and include freehold and leasehold options. Leasehold forms of tenure may have a range of forms depending on acquisition mode, and accounting treatment (Kenley et al., 2000a).

**CRE financing**
There are three sub-clusters of practices pertaining to financing CRE. Firstly, these include obvious organisational methods, such as debt or equity, but also include, secondly, property specific methods such as sale-and-leaseback and contemporary hybrid forms using property’s income generating capacity, for instance, securitisation and unitisation of CRE such as described by Ooi and Kim-Hiang (2002). Thirdly, there are practices, derived from CRE as a financial asset and commodity, which use property to financially support the organisation, an example of which is the potential for cash or profit creation from existing CRE assets.

**Accounting**
This cluster of practices includes 2 sub-clusters. Firstly, the practices of how CRE is accounted for, or priced against operational purposes, for instance whether property costs are absorbed as a corporate overhead, or whether business units are
charged market rents (Kenley et al., 2000a). Secondly, there are practices for measuring CRE expenses.

**Location/site selection**
These are the practices used when selecting locations to do business. This is the application of Nourse and Roulac (1993) CRE strategies at the level of deciding about a specific site.

**Workplace styles**
These practices include a range of alternative and flexible workplace practices that differ from traditional workplace models (Kenley et al., 2000a).

**Information systems**
There are two sub-clusters of information system practices. The first is the purposes the information is used for, such as strategic or transactional purposes. The second sub-cluster is a listing of IT tools that may be used in CRE, including graphical, database, and network CRE information systems. Automating processes is using IT to automatically do tasks done otherwise done manually. Informating is turning those automatic processes into data for use in managing (Kenley et al., 2000a).

**Metrics**
This category of practices is those used to create and apply various performance indicators (metrics) to CRE (Kenley et al., 2000a). Considered an emerging strategic management discipline (Frost, 1999).

**Benchmarking**
This particular cluster of CREM practices focuses on comparative performance that may be, for example, internally, externally, or process orientated.

**BIBLIOGRAPHY**


