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The sustainable competitive advantage model for corporate real estate

Sustainable competitive advantage model

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Christopher Heywood

Faculty of Architecture, Building and Planning, University of Melbourne, Melbourne, Australia, and

Russell Kenley

Australian Graduate School of Entrepreneurship, Swinburne University of Technology, Melbourne, Australia

Abstract

Purpose – This purpose of this paper is to propose a model for the relationship between corporate real estate management (CREM) practices and an organisation's sustainable competitive advantage. Corporate real estate (CRE) plays an important but poorly recognised role in organisational competitiveness.

Design/methodology/approach – The model was developed from the strategic management, organisational competitiveness, and CRE literatures. A total of 162 CREM practices from the literature were connected, where possible, with cost, innovation and differentiation sources of sustainable competitive advantage. Clustering similar practices allowed the summarising of competitive effects in those clusters and each of the sources of sustainable competitive advantage. Technical CREM practices were the focus of analysis as they constitute the traditional core of CREM.

Findings – Many gaps were identified in the theoretical connections between practices and sources of sustainable competitive advantage. Overall, cost dominated as the mode of competition most affected by the practices. Cost, innovation and differentiation made roughly equivalent positive contributions, but cost was most negatively affected by CREM practices.

Research limitations/implications – The model is conceptual and provides a framework for aligning CREM practices with an organisation's competitive strategies, to build CRE-based strategic capabilities for competitiveness, and to optimise practices' competitive effects. The holistic model directly links core CRE techniques with business outcomes and establishes a framework for further exploration of this important relationship.

Originality/value – Organisational competitiveness, CRE, and CREM are seldom studied. This paper provides a useful connecting framework for CRE researchers and practitioners to research and advance efforts to realise CRE value for organisations.

Keywords Competitive advantage, Real estate, Corporate strategy, Sustainable development

Paper type Conceptual paper



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Introduction

Background to the research

Organisational competitiveness has been a feature in the general and strategic management literature as an explanation for organisations' success. A landmark author in this field is Porter (1980, 1985) who explicitly introduced notions of competitive strategy, competitive forces and competitive advantage.

Despite the attractiveness presented by models of competitiveness, the relationship, or contribution, of corporate real estate (CRE) to organisational competitiveness has rarely been considered (Roulac, 2001). For example, Porter (1985) and Kaplan and Norton (2006) – two landmark strategic management texts – argue for the alignment of organisational functions to provide value over and above that created by the disparate parts, and do so for every organisational resource except CRE, despite CRE being considered the fifth organisational resource (Joroff *et al.*, 1993).

However, several themes have emerged in the CRE literature that seek to connect CRE with organisational success. These include:

- the alignment of CRE and organisational strategy (Englert, 2001; Nourse and Roulac, 1993; O'Mara, 1999a; Roulac, 2001; Scheffer *et al.*, 2006);
- the recognition of the strategic management of CRE for improving business outcomes (Joroff *et al.*, 1993);
- identification that many organisations now have CRE strategies (Ali *et al.*, 2006);
- the value of CRE to the organisation (Lindholm and Levainen, 2006; McDonagh, 2002);
- the contribution of spatial network analysis methods to organisational performance (Appel-Meulenbroek and Feijts, 2007);
- that CRE is embedded in the organisational value creation and value chains (Roulac, 1999);
- the integration of CRE and other organisational infrastructure resources to provide additional value to the organisation (Dunn *et al.*, 2004; Materna and Parker, 1998); and
- The management of relationships between corporate real estate management (CREM) and organisations (McCarty *et al.*, 2006).

Manning and Roulac (2001) identified a need for business-centric CRE research. They dimensionalised CRE on external-internal organisational and business-real estate dimensions (Figure 1).

The bulk of the literature they surveyed was in either the external-real estate quadrant (2), as real estate strategies, or the internal-real estate quadrant (4) through real estate support to the organisation, at a tactical level. Additional emerging issues in the second of these quadrants and in the internal-business quadrant (3) with CRE as a business input has also been identified (Carn *et al.*, 1999). Almost no academic research was identified in the external-business quadrant (1) (Manning and Roulac, 2001). The situation has improved since 2001, but there is still limited research published in the area of CRE from a business perspective, though the contributions noted above remain useful.

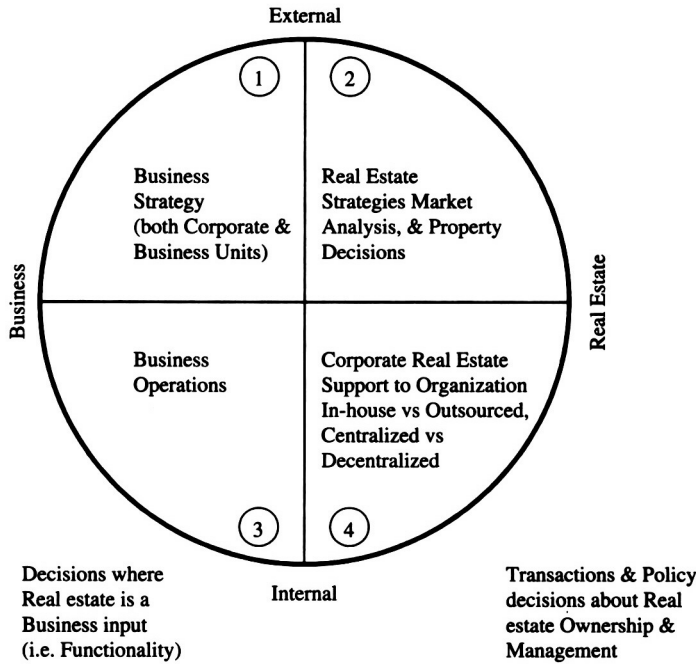


Figure 1.
The CREM and research framework

Source: Manning and Roulac (2001)

Paper's aims

As there is increasing interest in the relationship of CRE to organisational performance, this work aims to contribute to finding more business-centric ways of considering CRE and its management, with the intention of identifying the particular contribution to organisational competitiveness.

Specifically, this work aims to provide a direct, explicit connection between CRE and organisational success using models of competitiveness drawn from management theory. This will allow CRE practitioners to better align their behaviour toward supporting organisational competitiveness.

Competitiveness and CRE

This paper describes a model that connects CRE's management practices to an organisation's sustainable competitive advantage. As CRE is the second largest organisational resource, it should play an important role in organisational competitiveness, yet there remains a dearth of research and practice. The model was developed from the strategic management, organisational competitiveness, and CRE literatures and connected 162 CREM practices to three sources of sustainable competitive advantage. Practices are defined here as activities, or methods of executing activities, which may be customary actions or established methods of proceeding (*Oxford English Dictionary*).



Organisational competitiveness

There are many theories and concepts related to organisational competitiveness. These include:

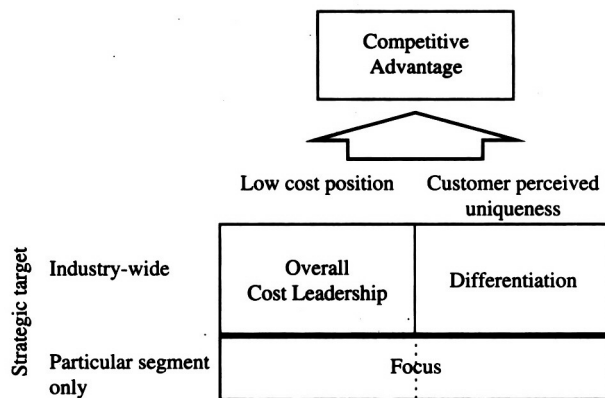
- definitions of what is competitiveness;
- perspectives on how organisations achieve it; and
- approaches to the basis of competitiveness.

There are at least two definitions of organisational competitiveness. The first, a market-based position, defines competitiveness, or an organisation's market position, as its ability to generate performance superior to other organisations with similar value offerings in the market (Gatignon and Xuereb, 1997; Hamel and Prahalad, 1994; Han *et al.*, 1998). The second is where competitiveness is equated to an organisation's sustainable growth rate relative to its competitors. Generally, an organisation outperforming its competitors can be said to enjoy a competitive advantage over them, and is superior in dealing with competitive forces (Bartol and Martin, 1994).

Perspectives on competitiveness can be characterised as inside-out or outside-in relative to the organisation itself. An inside-out perspective is one where an organisation's internal environment – resources and capabilities – are used to account for its competitive position (Rumelt, 1984; Teece, 1984). For example, profits are the ultimate return for the resources owned or controlled by the organisation (Grant, 1993). Other inside-out perspectives include: value-adding in a value chain (Materna and Parker, 1998; Porter, 1985; Roulac, 1999), and core competencies of the organisation (Prahalad and Hamel, 1990). Outside-in perspectives include competitive forces in the organisation's environment (Porter, 1980), analysis of individual organisations' competitive positions (McAleese, 1989), and market approaches that are either customer or competitor orientated (Bradmore, 1995; Day, 1997).

Porter's classic model of competitive advantage shows cost and differentiation as primary sources with focus sitting as a particular segment orientation beneath them (Figure 2).

Cost as a source of competitive advantage is based on overall cost leadership with efficiency, tight-cost control and cost minimisation the themes of the entire competitive strategy. Differentiation as a source of advantage arises from an offering that is perceived



Source: Porter (1985)

Figure 2.
Sources of competitive advantage

industry-wide as unique. Forms of differentiation include brand, technology, customer service and the like. Ideally, several of these dimensions are present at once. Focus is a competitive strategy based on serving a particular target very well with the advantage accruing from greater efficiency and effectiveness in this target than competitors (Porter, 1985). As focus draws on both cost and differentiation, this makes the latter two the only actual sources of competitive advantage (Grant, 1993; Lewis, 1993).

Ordinarily, however, competitive advantage is temporary, being lost through:

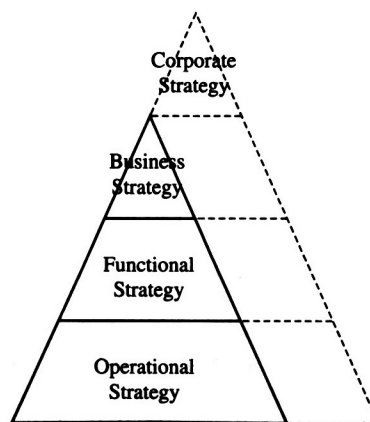
- environmental change;
- competitor strategies;
- imitation of capabilities; and
- speed of business cycles.

Enduring success requires sustainable competitive advantages and implies continuous improvement and innovation (Han *et al.*, 1998; Lewis, 1993). Given the transience of any advantage, business strategy becomes the means to create competitive advantage faster than one's rivals mimic your current advantages. Indeed, the management of such change becomes an innovation-based source of competitive advantage (Porter, 1998). Changes for strategic advantage include: technology, people and culture, strategy and structure, and products and services (Daft, 1998). CRE has a role in all of these.

Business strategy is also where internal and external perspectives of the organisation's competitive position are resolved into their action plans. The purpose of strategy, and probably its most important outcome, is that it produces sustainable competitive advantage through leveraging organisational sources of advantage.

The models of strategic management that coordinate strategies across layers of organisations frequently employ triangular models with business strategy at the apex, operational strategy the base, and functional strategy an intervening layer. Figure 3 is a typical example, adding corporate strategy for diversified, multi-business organisations (Thompson and Strickland, 2003).

Business strategy is the basis of achieving competitive advantage. Functional strategy is the "game plan" for a particular function, such as CRE, to establish or strengthen



Source: Thompson, Jr and Strickland III (2003)

Figure 3.
Layers of organisational strategy

capabilities that enhance competitiveness. Operational strategy encompasses the narrow initiatives and approaches for handling daily operating tasks that have strategic significance (Thompson and Strickland, 2003). They are the function's particular activities and practices that support their overall strategic direction.

Organisational strategies, at every level of implementation, have the purpose of:

- building valuable organisational competencies and capabilities;
- crafting moves that create sources of competitive advantage; and
- integrating functional department strategies (Thompson and Strickland, 2003, p. 55).

Strategic competencies and capabilities may be either resource-based, or organisational routine-based and must be rare, valuable and imperfectly imitable (Lewis, 1993). The moves crafted for competitive advantage are those actions and decisions taken in the management of the organisation, and CRE is a necessary organisational function that requires coordination with other functions.

With a resource-based view of an organisation, the organisation is defined in terms of what it can do (Grant, 1993), and its long-run strategic success is based on strategies for managing their unique resources (Wernerfelt, 1984) with durable, or sustainable, organisational competitiveness determined by the inimitability of those resources. Organisational resources could be tangible, such as raw materials for production, or intangible, such as knowledge or management processes uniquely held within the organisation (Hall, 1993; Itami and Roehl, 1987; Michalisin *et al.*, 1997).

In a resource-based view, CRE (the overlooked "fifth resource" (Joroff *et al.*, 1993)) is an important organisational resource on, at least, two levels. First, CRE is a tangible resource providing the physical environment, dimensionalised as location (place) and workplace (space of production) (Roulac, 2001), with a capacity to influence individual and organisational behaviour (O'Mara, 1999b). Second, CREM practices, which are of most concern to this research, may also be an intangible resource facilitating business strategy but this is ambiguous given they also constitute organisational routines.

An organisational routine-based explanation of strategic capabilities for CRE-based competitive advantage most clearly incorporates the CREM practices as activities, or methods of executing activities – organisational routines. These are difficult to replicate by competitors but are also difficult to change in new circumstances (Grant, 1993). CREM practices are diverse and traditionally encompass practices related to technical issues of managing the physical environment (real estate's place and space) as well as the financial implications of CRE, but more recently have included business-related practices at strategic or organisational levels.

Competitiveness in the CRE literature

The connection of CRE to organisational success has emerged in the literature. Spatially-oriented resource-based practices were recently found to have significance for organisational performance by Appel-Meulenbroek and Feijts (2007) who identified 51 practices which may be classified as design and technical issues – characterised as structural aspects, installation aspects and location aspects – space and place.

More commonly, financial practices have been pervasive in academic CRE research as the connection between CRE and organisational performance. While CRE and business strategy is less well researched in academia it may be considered more useful

to CRE practitioners seeking increased performance for their organisations (Manning and Roulac, 2001).

The specific connection of CRE and organisational competitiveness, while rare in the CRE literature, has received some consideration. Roulac (2001) theorises contributions of space and place to seven sources of competitive advantage that are more tactical means of competitive advantage rather than strategic ones (within a strategic, tactical, and operational conceptualisation of strategy). Burns (2002) hypothesises that CRE may contribute to competitiveness through value creation as both a tangible, physical asset and also as an intangible asset through support of workforce and organisational climate. Three broad competitive strategies, or modes of competition, for organisations – cost, differentiation, and focus – derived from Porter's work, have been used to analyse the tangible environments' competitive contribution (O'Mara, 1999b; Singer *et al.*, 2007). O'Mara (1999b) examines CRE and competitive advantage from the perspective of Porter's five external competitive forces and how real estate responds to them to facilitate competitiveness.

These contributions to competitiveness derive mostly from the physical environment itself; though CREM practices may also provide competitive value to an organisation.

Joroff *et al.*'s (1993) conception of the highest level of CREM practice as a business strategist is an implicit connection to competitiveness in the CRE literature as it clearly connects with strategic management's business strategy and its search for sustainable competitive advantage. The identification of practices applicable to evolutionary levels of CREM on the way to business strategist also makes an implicit connection to organisational routines as contributory bases to competitive advantage.

A critique of Appel-Meulenbroek and Feijts (2007), and others like them, is that they offer only a partial encapsulation of CREM practices. Their design-based practices are certainly within the orbit of, and important to, CRE, but they are specialist domains of practice with their own contribution to organisational routines and are not business strategy.

This observation is informed by further research undertaken by the Corporate Real Estate and Asset Management (CREAM) Research Group which developed a strategic CREM framework to encapsulate the domains of practice required to achieve strategic CREM (Figure 4), and which conceivably define the CRE body of knowledge (Heywood and Kenley, 2007).

Varcoe (2000) independently conceived a similar model identifying domains of practice that emerged from thinking about a survey of practices' use, but does not connect those domains of practice to specific practices.

The strategic CREM framework illustrates that CREM encompasses many areas of knowledge and domains of practice. Some of them constitute entire professional domains of practice, for example: facility management, design occupancy planning, project management, and transactions. An important part of CREM's development is defining what constitutes its core skill-sets and establishing what are the skill-sets that it utilises from other, allied professional bodies of knowledge. The framework, above, and its domains of practice with their constituent clusters of practices that are discussed below, are the authors' suggestion as to what constitutes strategic CREM.

In summary, the connection between CRE and competitiveness has been limited. Where it exists, concepts of competitiveness and competitive advantage are rarely

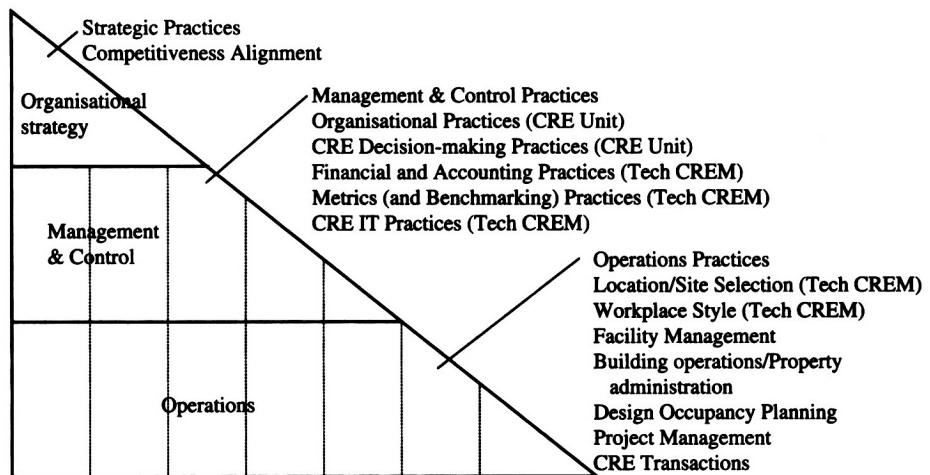


Figure 4.
The strategic CREM
framework

defined and few models of competitiveness are employed. The theory has also concentrated on the tangible real estate and not the particulars of CREM's practices. The resource-based view of organisations, in use in the field, is rarely clearly articulated as such, nor is it considered that CREM provides intangible benefit from its organisational routines.

A new model for CREM contribution to organisational competitiveness

Origins

The CREAM Research Group at the University of Melbourne developed a theoretical model depicting the relationship between CREM practices and organisational competitiveness (Figure 5). This was designed to provide a more comprehensive approach to managing CRE for organisational competitive advantage.

As noted earlier, this model is informed by both the strategic management and organisational competitiveness literature, and the identification that a business strategist level of practice was required for evolved CREM (Joroff *et al.*, 1993).

Being a CREM Business Strategist is a particular orientation to the business and CRE. It implies strategic domains of knowledge and practice, as Joroff *et al.* (1993) certainly suggest. Both the resource-based view and organisational routines approaches to competitive advantage clearly fit those strategic business knowledge domains as the concepts are found in that literature.

The sustainable competitive advantage model for CRE

Integrating both the resource-based and organisational routines-based views of organisational capabilities for success underpins the new sustainable competitive advantage model for CRE (Figure 5). The model contains layers of connected strategic activity that provide sustainable competitive advantage derived from possible sources of sustainable competitive advantage. This framework connects practices, as organisational routines or operational strategies, through layers of strategic activity, and coordination to produce organisational competitiveness.

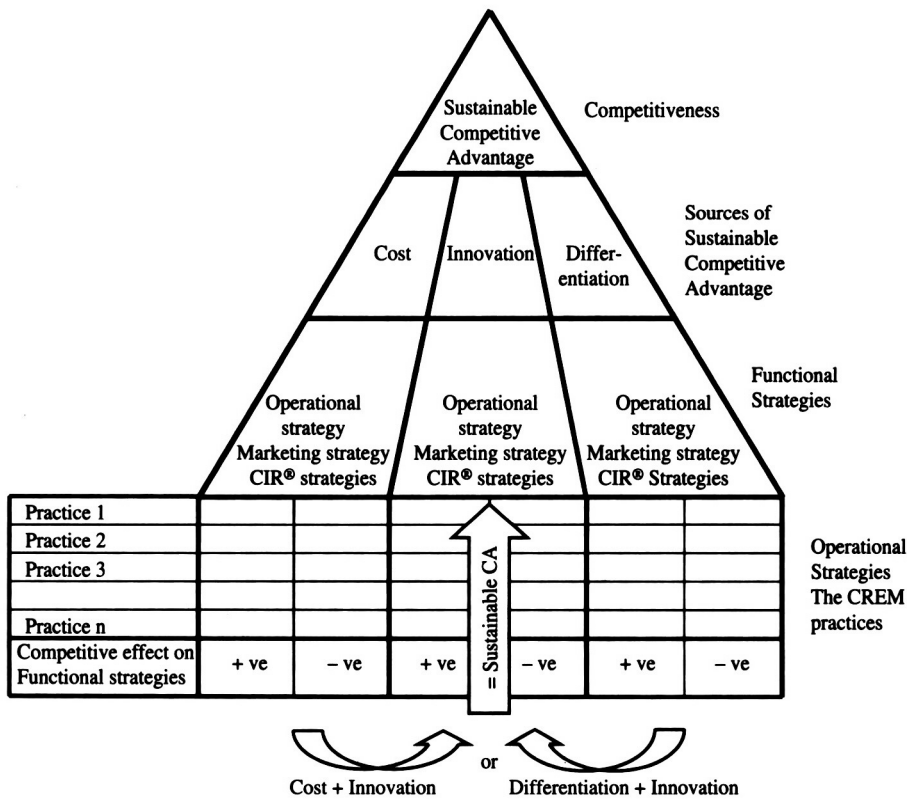


Figure 5. The sustainable competitive advantage model for CRE

The model's connections operate through two levels. The first level derives from the three sources of sustainable competitive advantage – cost, innovation and differentiation that constitute the organisation's overall competitive approach, or strategy. Sustainable competitiveness is achieved when innovation, as a source of competitive advantage, operates in concert with either of the other two sources of competitive advantage. This is particularly important for fast-cycle businesses.

The model's second level of connection is through the functional strategies that contribute to the sources of sustainable competitive advantage derived from the organisational capabilities created from the resources. Functional strategies are those required for the organisation's bundle of business functions – operations, marketing, financial, human resources, information and technology (and CRE) – that are required to achieve the organisation's objectives (Lewis, 1999; Thompson and Strickland, 2003). This model treats operations (production) and marketing (selling) as core functions, and uses the Corporate Infrastructure Resource® (CIR) model (Materna and Parker, 1998) to account for the organisation's support functions, with CRE being one of these. Subsequent to the model's development, this concept has been rebranded, by CoreNet Global, as Integrated Resource Infrastructure Solutions (IRIS) (Dunn *et al.*, 2004).

The bottom layer, which equates to the operational strategies in strategic management models, represents the CREM practices – the organisational routines – that connect to



competitive advantage through the positive or negative effect they have on various functional strategies. Most obviously, these practices operate through CRE within the CIR strategy, but may also operate through one or more of the other functional strategies. This occurs because CRE is the physical place to do business, a financial asset, a cost to business, and more. For example, whether CRE is owned or leased (as holding practices) may impact on finance strategies, both for the organisation and CRE through the assets' use as security for debt, or in competition for cashflow from operations or retained earnings. Likewise, a location/site selection decision to facilitate marketing objectives (from Nourse and Roulac (1993)) works through the marketing strategy, most likely through brand for the differentiation advantage, but also possibly through innovation.

It is possible that contradictory effects can be found for practices operating in different functional strategies, for example: flexibility as a location/site selection practice may negatively impact on the cost advantage in the CRE function but positively contribute to the operations, marketing, information and technology functional areas as differentiation and innovation advantages. Such contradictions require resolution through studies optimising individual practices.

Fundamental to the connection between CREM practices and sustainable competitive advantage is the concept of "strategic fit" from one of three possible types (Porter, 1996):

- (1) simple consistency between activities and overall strategy;
- (2) function's activities reinforcing each other. this has also been framed as "inter-functional coordination" (Gatignon and Xuereb, 1997; Kaplan and Norton, 2006); and
- (3) optimisation of activities, or routines.

Of these, optimisation has for some, primarily, financial practices been the focus of previous CRE academic research, for example: Redman and Tanner (1991), Christensen (1991), Allen *et al.* (1993), Nourse (1994), Manning and Roulac (1996), Seiler *et al.* (2001), Cheong (1997) and Benjamin *et al.* (1998). Inter-functional coordination is found in the CIR-IRIS concept and is theorised in this model though practices' connections with other functional strategies.

The model offers a holistic, integrative framework for CRE, consistent with strategic management and organisational competitiveness theory, with opportunities for all three types of strategic fit. First, by knowing the competitive effect from any CREM practice and an organisation's strategic competitive advantage then CREM practices may be adopted for consistency of fit between them and organisational competitive advantages. Second, as the model frames CREM practices in terms of CRE and other functional strategies then inter-functional coordination is facilitated. Finally, knowing the competitive effect of a CREM practice provides opportunities for its optimisation, both within practice and academic research, where this has not been done to date.

Defining the clusters of CREM practices in the model

Constructing the model identified a total of 162 practices. Each of these was defined from the strategic and business management literature and the CRE literature available at the time. The practices were grouped into 11 clusters of thematically linked practices (several with sub-clusters) within two broad classifications – CRE unit

practices and technical CREM practices (Table I). See Appendix – list of CREM practices for a listing of the practices in the clusters. Kenley *et al.* (2000) was a preliminary publication of this work and the categories have been further refined in subsequent work.

CRE unit practices are those related to the organisation of CREM and its activities, or business-orientated practices belonging to CRE's relationship to the organisation as a whole. The research did not evaluate the direct contribution of these practices to organisational competitiveness, but considers them in three ways:

- (1) as a platform to carry out technical CREM practices, for example: through the CRE unit structure;
- (2) by setting the objectives for the technical CREM practices to achieve, for example: as a generic CRE strategy such as cost reduction or flexibility; and
- (3) by facilitating the implementation of the technical CREM practices in their pursuit of the set objectives by providing high-level strategic alignment, for example: through decision making and strategic practices.

Technical CREM practices are those related to the specific management of a CRE portfolio and are CRE or property specific practices that constitute the traditional core of CREM. It is conceivable that with the evolution towards business strategist CREM that CREM's required competencies will continue to evolve (Berney, 2007) with aspects of strategic management becoming core skills. In addition, technical practices have also been surveyed since 1993 (Bon (1996) was the first report, and Gibson and Luck (2006) the most recent), though not as exhaustively as here. Several of the eight technical CREM clusters had sub-clusters which, together, provide the 12 categories of technical practices described below, and reported in Table II.

CRE unit practices	Technical CREM practices (operational strategies)
Strategic practices	Holding practices (seven practices)
Generic CRE strategies (nine practices) ^a	CRE financing practices (27 practices in total)
People involved in CRE strategy formation (four practices)	Corporate (four practices)
Information used in CRE strategy (two practices)	CRE instruments (14 practices)
Extent of application (four practices)	CRE to support for the organisation financially (nine practices)
Organisational practices (of the CRE function) (14 practices in total)	Accounting practices (nine practices in total)
CRE unit structure (eight practices)	Measuring CRE expenses (four practices)
CRE Unit responsibilities (six practices)	CRE accounting (five practices)
CRE decision-making practices (23 practices in total)	Location/site selection (nine practices)
Decision-making criteria (5 practices)	Workplace styles (21 practices)
Decision-making information (18 practices)	Information systems (24 practices in total)
	IT purposes (four practices)
	IT tools (20 practices)
	Metrics (12 practices) ^b
	Benchmarking (six practices)
47 CRE unit practices	115 technical CREM practices

Notes: ^aSame as location/site selection cluster, therefore not counted here; ^bbenchmarking not counted in this cluster as this is treated separately

Table I.
CREM practice clusters

Competitive effects from	Source of sustainable competitive advantage (percent)					
	Cost		Innovation		Differentiation	
	+	-	+	-	+	-
Holding practices (seven practices)	14.3	14.3	0	0	0	14.3
CRE financing practices						
Corporate (four practices)	-	-	-	-	-	-
CRE instruments (14 practices)	7.1	-	-	-	-	-
CRE to support the organisation financially (nine practices)	11.1	-	-	-	-	-
Accounting practices						
Measuring (pricing) CRE expenses (four practices)	-	-	-	-	-	-
CRE accounting (five practices)	-	-	-	-	-	-
Location/site selection (nine practices)	33.3	66.7	66.7	0	55.6	11.1
Workplace styles (21 practices)	81	95.2	85.7	0	90.5	0
Information systems						
IT uses (four practices)	100	50	75	0	75	0
IT tools (20 practices)	10	10	5	0	10	0
Metrics (13 practices)	66.7	58.3	50	0	66.7	0
Benchmarking (six practices)	100	100	0	0	100	0
Aggregated competitive effects (average percentage of practices in clusters) (rounded to whole numbers)	48.6 (49)	56.4 (46)	42.4 (42)	2.0 (2)	56.8 (57)	1.6 (2)

Table II.
Summary of technical
CREM practices'
theoretical competitive
effects

Note: No data available in the sample

The practice clusters

CRE unit practices. CRE unit practices are those related to the organisation of CREM and its activities, or business-orientated practices belonging to CRE's relationship to the organisation as a whole.

Strategic practices

This is a cluster of practices that are related to CRE strategy formation at an organisational level. It includes four sub-clusters:

- (1) generic CRE strategies are those CRE strategies in use at high levels of CRE strategy formation;
- (2) people involved in CRE strategy;
- (3) information used in CRE strategy; and
- (4) extent of application of those strategies in the property portfolio.

The generic CRE strategies cluster was based on Nourse and Roulac (1993) as generic approaches to how property serves an organisation. An additional, but logically consistent practice, capture financial creation value of business from real estate was also added. This cluster is different from the application of these strategies to specific, individual property decisions where they are technical location/site selection practices. Because of this reuse, they were only counted once in the model's practice count, in the technical CREM practices.

Organisational practices (of the CRE function)

Assuming that CRE is an essential organisational function, the CRE function may be structured in a variety of ways and have a range of responsibilities. The first sub-cluster here is for CRE unit structures with the degree of in-house and outsourcing a subsidiary decision about the mode of providing CRE and CREM services. How the CRE resource is treated, for example: as a free resource or profit centre, does have implications for the CRE unit's structure as the structures in this sub-cluster are not necessarily mutually exclusive.

The second sub-cluster is the CRE unit's responsibilities, at the broadest level of classification. There are many possible separate activities within each of these broad levels, examples of which can be found in Bon (1996) and later versions of that research.

CRE decision-making practices

The CRE decision-making practices are those employed in making CRE decisions. There are two sub-clusters for:

- (1) the criteria used; and
- (2) the information used.

These practices pertain to levels of information used as CREM evolves (Joroff *et al.*, 1993).

Technical CREM practices. Technical CREM practices are the specific CRE or property management practices of a CRE portfolio and that constitute the traditional core of CREM.

Holding practices

Holding practices are those practices relating to CRE tenure, and include freehold and leasehold options. The latter may have a range of forms depending on acquisition mode, and accounting treatment.

CRE financing practices

The CRE financing cluster of practices includes the various ways of considering CRE relative to the organisation's financial requirements. It has three sub-clusters:

- (1) financing the corporation;
- (2) CRE instruments; and
- (3) CRE to support for the organisation.

Two of the three sub-clusters relate to financial instruments. The first is the financing CRE from a corporate perspective, and the second is for property specific financial instruments. The third sub-cluster focuses on how CRE financially supports the organisation based on CRE as both an asset and a tradable commodity, for example: the potential for cash or profit creation from existing, owned CRE assets.

Accounting practices

Accounting practices include two sub-clusters that each use the identification of different treatment of CRE expenses depending on the level of evolved CREM practice (Joroff *et al.*, 1993). The sub-clusters are:

- (1) practices for measuring CRE expenses; and
- (2) how CRE is accounted for, or priced against, operational purposes.

Location/site selection

The cluster location/site selection applies Nourse and Roulac's (1993) real estate strategies, as modified in this research. They are included (and counted here) as a technical CREM cluster because they are the practices applicable to selecting business locations at the level of a specific property.

Workplace styles

The workplace styles cluster practices includes a range of new, alternative and flexible workplace practices characterised as alternative workplace practices that differ from traditional workplace models (Gilleard and Rees, 1998). Sources for these practices include Laing *et al.* (1998), Apgar (1998), Gilleard and Rees (1998), Sims *et al.* (1998) and Weatherhead (1997).

Information systems

The information systems practices cluster includes two sub-clusters. One is the purposes for which the CRE information is used, and the second includes a variety of IT Tools that may be used in CRE.

Metrics

Metrics are a category of practices used to create and apply various performance indicators (metrics) to CRE. Metrics are considered an emerging strategic management discipline (Frost, 1999), and CRE metrics and performance measures have recently been more comprehensively dealt with in Property Council of Australia and KPMG (2005).

Benchmarking

The benchmarking cluster significantly expands categories of benchmarking from previous CRE research, for example: Bon (1996) includes benchmarking as a single practice. This cluster identifies several methods of comparative performance that may be internal, external, or process orientated.

Modelling the competitive effect of technical CREM practices

To model the competitive effect of technical CREM practices a theoretical connection between a practice and a source of sustainable competitive advantage was sought from the literature, including whether the effect on that competitive advantage was positive or negative. In addition, CREM practices' competitive connections to functional strategies were also identified. Identifying the magnitude of an effect for a single practice was difficult because only some of the 162 practices in this study have been examined and optimised this way. For that reason, the competitive effect was only considered at the level of one being present.

A summary of positive and negative effects was determined by calculating the percentage of practices in each category of technical CREM practices that have an effect on a particular source of sustainable competitive advantage. Neutral effects were omitted as this indicates that a practice, while used, had no competitive effect.

This yielded aggregate positive and negative competitive effects in each source of sustainable competitive advantage for each category of practices (Table II). The aggregation of effects from all the categories also shows which source of sustainable competitive advantage is most influenced by technical CREM practices.

This table shows the positive competitive effects from technical CREM practices reported in the literature were reasonably evenly spread across the three sources of sustainable competitive advantage, with ratios of approximately 16:14:19 for cost/innovation/differentiation, respectively. On this basis, there is an emphasis on Differentiation, but there is benefit across all the different modes of competition from technical CREM practices. Practices having a negative effect have quite a different distribution with ratios of 23:1:1 for the respective sources of sustainable competitive advantage. This shows technical CREM practices having a far greater negative impact on cost competitiveness than the other two sources of sustainable competitive advantage and also more than the positive cost effects. Therefore, technical CREM practices retard cost competitiveness more than for the other two sources of sustainable competitive advantage. As a whole, it is apparent that the cost source of sustainable competitive advantage is the dominant competitive effect with approximate ratios of 6:4:5.

As three of the 12 categories and most of two others have no identifiable connection between the practices and sources of sustainable competitive advantage, despite an extensive search of the literature, this indicates a significant lack of CREM theory in these areas in the field's nascent literature. Given CREM is an emergent discipline this is to be expected.

While Table II provides a summary of the technical CREM practices' competitive effects, the situation is more complicated as practices work in functional areas other than CRE and, consequently operate through different functional strategies. Contradictory effects are possible in different functions, for example, alternative workplace styles may negatively impact on the cost source of sustainable competitive advantage in the CRE and information technology functions because they require increased CRE and IT capital and recurrent expenditure, but positive effects on the differentiation and innovation sources of sustainable competitive advantage through the human resources and operations functional areas.

This paper does not document all the analysis making Table II. However, to illustrate the method, the first cluster is analysed in Table III for the holding practices cluster. A similar process was followed for all the other technical practices' clusters in the model.

The freehold practice impacts negatively on the finance functional area as a result of the impact on the corporate balance sheet in terms of comparative returns on assets. Clearly, this is a cost impact but also on the capacity to differentiate the organisation from its competitors, perhaps through branding. operating leases impact positively on finance because they are deductible tax expenses (where the taxation system allows this).

As a finance effect has been noted for operating leases, conceivably similar effects could be found for the other lease-holding forms. There could well be differential effects between the leasehold lengths, with short-term lease lengths providing innovation in the CRE and finance functions where the dominant mode is long leases. Similarly, any lease form may provide an Innovation or differentiation advantage in the CRE and finance functions where freehold is the dominant method of property holding; though again, prevailing national taxation regimes may vary this effect.

Practice cluster: holding practices	Sources of sustainable competitive advantage					
	Cost		Innovation		Differentiation	
Competitive effect	+ ve	- ve	+ ve	- ve	+ ve	- ve
Freehold		C _F -				C _F -
Leasehold long term						
Leasehold short term						
Capital lease						
Operating lease	C _F +					
Synthetic lease						
Bond net lease						
Total no of practices recording effects	1	1	0	0	0	1

Table III.
Competitive effect -
holding practices

Notes: O, operations; M, marketing; C_C, CIR - CRE; C_I, CIR - information; C_H, CIR - human resources, C_F, CIR - finance; +, positive contribution; -, negative contribution; 0, no contribution; *, model inconclusive; ±, positive and negative contribution

The many gaps in Table III does not indicate that these practices are absent from the literature as indeed they have all been identified through the literature analysis, but rather, when discussed that they are not discussed in terms of their competitive effects.

Implications from the model

CREM is an emerging management discipline that, in the past, has focussed on managing the financial aspects of CRE and its technical or spatial (real estate) dimensions. Movements towards, and calls for, more strategic approaches to, and modes of, CREM have been part of efforts to place the discipline, professionally and academically, on a footing more cognisant of the business dimensions of CRE.

CRE research has recently been addressing more business-oriented concepts in seeking to establish CRE's value, or contribution, to the organisation. Such research is likely to be of more interest to business unit and senior management and useful for CRE practitioners described, variously, as becoming a business strategist, or, colloquially, as "achieving a seat at the boardroom table." However, to operate as a business strategist a different mindset is required - one that includes both business and property domains of knowledge with commensurate sets of strategies, practices, routines and skills.

This paper, considering CRE and competitiveness, takes CRE and CREM directly to the heart of the business domain because, probably, the most important outcome of business strategy is sustainable organisational competitiveness - a business-focussed measure of success. Competitiveness is also useful in appraising an organisation's operating mode in its environment, and is the default operating paradigm for capitalist economies. The CRE literature has rarely considered the specific concept of competitiveness and where it has it has concentrated on the tangible, or physical, environment (the real estate) at a tactical level, and on the organisation's external environmental forces.

Within organisational competitiveness theory, there are several perspectives on how competitive advantage is achieved. This paper approaches the issue from an internal organisational perspective where an organisation's capabilities, or core competencies, provide competitive advantage. Those capabilities may originate in the resources

controlled through functional strategies (a resource-based view of organisations), or an organisation's activities and practices (an organisational routines-based view).

CRE may be seen as a physical resource, a financial one, or one that houses and therefore impacts on business operations. Regardless of which one is emphasised, the overall perspective provides ways of building CRE-based organisational capabilities. Its nature, as a resource, means there will be competitive effects across multiple functional areas, the strategies they require, and the capabilities they produce. An important contribution of this paper is its identification that CREM practices, as organisational routines, are important to organisations by providing competitiveness in ways that have been overlooked to date.

That CRE's contribution to competitiveness may be derived from both the tangible and intangible sources raises the importance of having an integrative framework that recognises the totality of CRE's contribution to competitiveness.

The sustainable competitive advantage model for CRE presented here provides a holistic framework that directly links core CRE techniques – technical CREM practices – to organisational competitiveness. In doing so, it directly connects internal, real estate aspects with external, business aspects. The model shows competitiveness originating in two sources of competitive advantage – cost and differentiation – with Innovation added in order to make competition sustainable in conjunction with either of the other two sources. This means that CREM must consider the innovative potential of its practices and to continually seek innovation to deliver sustainable competitiveness.

This paper concentrates on the intangible organisational routines, or CREM practices, that are linked to competitiveness through their effects on multiple organisational resources and their functional strategies. This integrates both the resource-based and organisational routine-based views of organisational capabilities providing competitiveness.

For those, like CRE managers, engaged in delivering organisational success, understanding competitiveness and the organisational modes of competing is fundamental to recognising how their organisation orientates itself relative to the world. To connect CREM practices to competitive advantage through showing practices' competitive effects opens up possibilities for CRE practitioners to make a greater strategic difference to their organisations. That competitiveness, a more business-centric approach, can be used to directly demonstrate connections between CRE and business strategy for competitiveness offers CRE practitioners arguments that may, potentially, be more persuasive to their organisations' business unit and senior management.

Practically, this model allows CRE practitioners to achieve consistent strategic fit for their activities through aligning the competitive effect of their CREM practices with their organisation's competitive advantages, provided the latter has been identified. These possibilities include:

- creating strategic fit for the organisation through consistently aligning their CREM practices with their organisation's competitive advantage;
- inter-functional coordination strategic fit from the multiple impacts of CRE on other functions' capabilities in producing organisational competitiveness; and
- optimising the individual practices through further practical and theoretical examination of them and their effects in functional areas and specific sources of competitive advantage.

Many of the individual practices included in this model require additional theory generation to make the connection to competitiveness clearer. This is because the practices were evident in the literature but it was apparent that they have not been clearly conceptualised for their competitive effect. Therefore, this paper sets a challenge for both practitioners and theoreticians to reconsider and reconceptualise CREM practices.

Conclusions

There are well-developed models for organisational competitiveness in the management literature and the body of theory associated with CRE is advancing rapidly, though CRE's contribution to organisational performance is relatively new.

This paper proposes a theoretical model mapping the contribution of CREM practices to organisational competitiveness as a more business-centric way of conceptualising CREM. The model was developed from the strategic management, organisational competitiveness, and CRE literatures and links CREM practices with organisational sources of sustainable competitive advantage. Technical CREM practices were analysed in this paper as they are, historically, core to CREM and could be considered a core contribution to the organisation's resources and capabilities.

The sustainable competitive advantage model for CRE shows there are direct, explicit connections between CREM practices and organisational competitiveness. The model has utility as a device in understanding CRE and its management as a source of organisational competitive advantage and establishes a basis for CRE to reconceptualise its effects competitively. This will allow CRE practitioners to better align their actions toward supporting organisational competitiveness.

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Appendix. List of CREM practices

This Appendix lists the individual practices within the clusters of CREM practices in this paper's model (see Tables AI-AXIV).

CRE unit practices

CRE unit practices are those related to the organisation of CREM and its activities, or business-orientated practices belonging to CRE's relationship to the organisation as a whole.

Strategic practices are illustrated in Tables AI-AII, organisational practices (of the CRE function) are illustrated in Table AIII, and CRE decision-making practices are illustrated in Table AIV.

Technical CREM practices

These are the specific CRE or property management practices of a CRE portfolio and that constitute the traditional core of CREM.

Holding practices are illustrated in Table AV, CRE financing practices are illustrated in Tables AVI-AVII, accounting practices are illustrated in Table AVIII, location/site selection

Generic CRE strategies

Cost minimisation	Facilitate production, operations and service delivery	Capture real estate value of the business
Flexibility	Facilitate managerial processes	Capture financial creation value of business
Facilitate human resources objectives	Facilitate marketing objectives	
	Promote sales and selling	

Table AI.
Generic CRE strategies

Note: Cluster's practices are the same as the location/site selection cluster, therefore not included in the count of practices in the model being counted in that cluster

Table AII.
People involved, information used in CRE strategy, and extent of application in the property portfolio

People involved in CRE Strategy	Information used in CRE strategy	Extent of application
CRE staff	Corporate strategy	Whole organisation
Corporate management	Business unit strategy	Business units
Business unit management		State or region
External service provider		Australia only

Table AIII.
Organisational practices of the CRE function

CRE's unit structure	Unit responsibility
Centralised	Real estate management
De-centralised	Property management
Functional dept.	Construction
In house property company	Facilities planning and management
Spin-off	Asset management
	Financial management

Table AIV.
Decision making in CREM

<i>Decision-making criteria</i>	
Business unit wants	Traditional cost control standards
Business strategy	Competitiveness of the CRE products and services in the real estate market
Market economics (facilities must meet the quality and cost levels of the speculative space market but do not need to be competitive with the market options)	
<i>Decision-making information</i>	
Technical specifications	Benchmarks
Construction specifications	Space inventories
Maintenance schedules	Market data series
Performance specifications	Building cost series
Accounting systems	Utilisation studies
Inventories	Property market forecasts
Unit and standard costs	Business unit statements

practices are illustrated in Table AIX, workplace styles practices are illustrated in Table AX, information systems are illustrated in Table AXI-AXII, metrics practices are illustrated in Table AXIII, and benchmarking practices are illustrated in Table AXIV.

Holding practices

Freehold	Capital lease	Bond net lease
Leasehold long term	Operating lease	
Leasehold short term	Synthetic lease	

Table AV.
CRE holding practices

Financing – corporate

Financing – CRE instruments

Corporate retained earnings	Mortgage REITS	Joint venture with financial institutions
Cashflow from corporate operations	Use of short-term leases	Joint venture with developers
Corporate debt	Use of long-term leases	CRE securitisation
Corporate equities	Use of sale and leaseback	Hybrid REITs
	Issue of equity security (CRE unitisation)	Property trusts
	Equity REITs	Real estate operating company
	CRE syndication	
	Spin-off into MLP	

Table AVI.
CRE financing practices

CRE to support the organisation

Managing CRE to obtain desirable financial ratios	Use CRE as security to obtain corporate debt	Sale and leaseback
Take advantage of cyclical movements to increase returns on real estate	Active management of CRE to leverage corporate returns	Equity participation lease
Create tax shelter	Securitisation of CRE	Standby lease

Table AVII.
CRE's support for the organisation

Measuring CRE expenses

CRE accounting

Accounting cost	Absorbed as corporate overhead	Business units pay opportunity cost of capital
Value adding	Business units pay depreciation	Business units pay market rents
Real estate market pricing	Business units justify their use by preparing business case	
Capital market pricing		

Table AVIII.
CRE accounting practices

JCRE
10,2

Location/
site selection

Cost minimisation
Flexibility

Facilitate human resources
objectives

Facilitate production,
operations and service delivery

Facilitate managerial processes
Facilitate marketing objectives
Promote sales and selling

Capture real estate value of the
business

Capture financial creation value
of business from Real estate

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Table AIX.

Note: Location/site selection practices

Workplace styles

Caves/cubes
Common
Team space
Group address
Project team environment
Collaborative team environment
Activities settings

Hotelling
Hot-desking
Just-in-time space
Universal plan office
Teleworking
Home working
Work at home

Telework centres
Executive office suites
Remote telecentres
Neighbourhood offices
Touchdown offices
Guesting
Virtual offices

Table AX.
Workplace style practices

IT purposes

Table AXI.
IT purposes for CRE

Strategic
Transactional

Decision-making and controlling
Infrastructure investment (cross-functional enabling technology)

IT tools

Graphic
GIS
CAD

Databases
Simple form databases

Relational databases

Organisational relational
databases
Distributed databases

IT infrastructure
Intranet
Internet

Asset or resource management
Property management
software
Property management
information software
Asset management software

Facilities management
software
Property inventory database
Cross-functional resource
management software

Web-enabled technologies
Property web interface
Web-based property
management
Web-based property help
desk
Procurement
Supply chain management
software

Purchasing system

Table AXII.
IT tools for CRE

Metrics

Lease vs own model	Balanced scorecard	Return on RE investment
Acquisition vs disposal model	Service balanced scorecard	Rate of RE as a cost on corporate revenue
Staff model	Benchmarking ^a	Customer satisfaction indicators
Space model	Best practice	
Scenario model	Economic value added	

109**Notes:** Metrics practices. ^aBenchmarking not counted in this cluster as this is treated separately**Table AXIII.**

Benchmarking

Internal benchmarking	Process benchmarking	Key performance outcomes
External benchmarking	Strategy benchmarking	Key performance drivers

Table AXIV.
Benchmarking practices

About the authors

Christopher Heywood is a Lecturer in CRE, FM and Asset Management, at the Faculty of Architecture, Building and Planning, The University of Melbourne. His recently completed PhD investigated the role of affect in local government corporate real estate management. This research provided new knowledge on the psychology of managing CRE projects and portfolios. Between 1999 and 2001, he was a lead researcher in the Corporate Real Estate and Asset Management (CREAM) Research Group investigating the strategic management of CRE in Australia, particularly the international competitiveness of Corporate Property in Australia. Christopher Heywood is the corresponding author and can be contacted at: c.heywood@unimelb.edu.au

Russell Kenley is a Professor of Management in the Faculty of Business and Enterprise at Swinburne University of Technology, Victoria, Australia. He is also Director of their Australian Graduate School of Entrepreneurship. He has recently returned to Australia after five years as a Professor of Construction and Director of the Centre for Property and Construction Innovation at UNITEC New Zealand. Between 1997 and 2001, he led the CREAM Research Group's investigation of international competitiveness of Corporate Property in Australia.

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CRE critique and expert interpretation

A review of *Journal of Corporate Real Estate*, Vol. 10 No. 2, 2008

By Alan M. Scott, Managing Director, Regional Head, Americas – Corporate Real Estate and Services, Deutsche Bank, USA.

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Christopher Heywood and Russell Kenley (2008), “The sustainable competitive advantage model for corporate real estate”, *Journal of Corporate Real Estate*, Vol. 10 No. 2

This is a well-researched paper that looks at an interesting subject that is material to the world of CREM. How relevant is the CRE Department to the organizational competitiveness of the corporation it provides services to? To answer the question I took a contrarian viewpoint – does an underperforming CREM organization negatively impact the performance of an organization and how visible and measurable is a high-performance team in comparison? I read the paper several times and did not come away with any strong conclusions although I was convinced that the research was relevant and the subject was a necessary one to debate.

The aspirational goals of all CREM professionals are to be both relevant and to make a difference and I wanted the author to convince me that this was the case.

To be frank, I may not be the best reviewer of academic papers – it is not my world and I constantly look for practical answers and solutions. However, I do recognize a well written paper, well researched and with sound and logical conclusions and I do not have any major suggestions because it is first and foremost an academic paper and as I looked at various changes I found that it simply diluted the purpose of the paper and the Author’s well defined discussion.

Howard Cooke and Simon Woodhead (2008), “Break strategy – the key to breaking out”, *Journal of Corporate Real Estate*, Vol. 10 No. 2

This paper would primarily be of use to a UK-based readership. Although the paper might be topical in the UK because of the declining commercial real estate market, it will have a very narrow interest beyond the UK because the UK landlord and tenant law has very little overlap in the global marketplace. The article is one that could be published by the RICS or the EG under best practices/recent case law.

The paper is well researched and clearly benefits from an actual case study. The break option has been a part of UK commercial leases since the 1970s/1980s and has been used to effect in other down cycles. The reviewer has personal experience of negotiating break options and the implication of the underlying message – read the lease contract carefully – is clearly the lesson learned although it is difficult to believe that this is really new news.

To make it relevant on a global scale, the authors might consider broadening the discussion to include the impact of new accounting standards – IFRS, and the accounting rules associated with reserving losses.

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