CORPORATE REAL ESTATE ASSET MANAGEMENT: A CONCEPTUAL FRAMEWORK

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ABSTRACT

The purpose of this paper is to identify the factors that influence CRE asset management and develop a conceptual framework of CRE asset management based on a detailed review of the existing literature. The conceptual model consists of six elements or factors, namely: operations, organisation, financing, acquisition and leasing, outsourcing, and disposal. The paper concludes that further research in corporate real estate asset management is desirable and argues that the theoretical model developed in this paper will provide a useful tool for estate management industry practitioners in developing a more comprehensive overall CRE asset management strategy.

Keywords: Corporate real estate, asset management, conceptual model

INTRODUCTION

As we enter the new millennium, corporations are exploring possible avenues of increasing their bottom line profit. The cost of corporate real estate is substantial for any corporation (Webster, 1995) and it is in this area of real estate that substantial savings might be achieved given the right management for the future. Corporate real estate is a term that is generally used in a broad sense to refer to real estate owned by a corporation, also referred to as real property or physical facilities or the buildings and land held by large organisations, both public and private.

Studies have found that CRE comprises from 25% to 40% of the total assets of many corporations (Webster, 1995; Zeckhauser and Silverman, 1983). CRE representing some 25-40% of a company's total assets is a large capital commitment, the financial returns of which is expected to be found fitting or appropriate. As for all corporate assets, real estate represents an initial capital investment to the business which must be justified by providing to the business long-term profits which is of strategic value and hence long term shareholder value. Although not all organisations are profit-oriented in their running (eg. churches and charitable organizations), an effective stewardship of a corporate is still expected, representing committed capital that ought to be justified by the asset producing the appropriate outcomes (Ng, 1999).

In Australia, Smith (1999) found that 70% of retail and office space is owned by institutions. This figure is about 25-40 % in the US (Zeckhauser and Silverman, 1983), yet the resources are either entirely neglected or continuously grossly under managed (Gale and Case, 1989; Veale, 1989; JLW, 1992; Rodriguez and Sirmans, 1996).

While inherently integrated with all other functional areas of a business, CRE is still a necessary and separate focus for management attention (Manning & Roulac, 1999). The neglect of a corporation's real estate assets exposes them to unavoidable takeovers, lost profits, and lower stock price performance (Zeckhauser and Silvermann, 1983). This neglect remain a current and pertinent issue in many countries and among many corporations.

Australian companies are slow to embrace international developments in CRE management, as compared to other organisations with similar sized portfolios based in Europe and North America, which are incurring less CRE expenses without compromising profit (PCA, 2000).

There is however an increasing general awareness that corporations can profit from more effective management of their real estate assets that does not appear to match with research input in the same area (Pittman and Parker, 1989).

The purpose of this paper is to identify and analyse the factors that are considered relevant in effective corporate real estate asset management from a review of the literature on the subject. The paper is divided into four sections. The first reviews the existing literature on the subject of corporate real estate asset management, the second gives a conceptual framework of CRE management as emergent from the literature review, section three presents an analysis and discussion of the conceptual framework, while the final section concludes the findings of the discussions in earlier sections.

LITERATURE REVIEW

Corporate real estate is a term that is generally used in a broad sense to refer to real estate owned by a corporation, whether it is for investment or for use. The term "corporation" is used to refer to any medium to large organisation, most certainly including public companies, government organisations, and public institutions and not for profits (Jorrof *et al*, 1993). It is somehow difficult to pinpoint the size of an organisation that qualifies as a corporation. However, more emphasis is put on the role played by such organisation in the overall productive process, which is also a function of its efficient and effective management.

From the research, one can say that CRE management is *the management of real estate by an organisation, that incidentally holds, owns, or leases real estate to support its corporate mission*. Thus the primary value to the organisation is not the investment value of the property, but rather its contribution to the way the organisation does business. Management techniques designed to derive operational benefit from property include site selection, facility design, and space utilisation (PCA, 2000).

Effective corporate real estate management can be best viewed on the basis of the functions a corporation or organisation is expected to perform. Functions expected of corporate real estate management may include planning and execution of real estate acquisition and disposal; space management, interior planning and installation; architectural and engineering services; maintenance and operational budgeting (Mole and Taylor, 1992). These functions may also be organisational cost control; financial value creation; real estate entrepreneurialism; business strategy formulation and implementation (Jorroff *et al.* 1993).

There is a wealth of literature available on the application of CRE management in the US market due to the presence of groups such as the Industrial Development Research Council (IDRC) and International Association of Corporate Real Estate Executives (NACORE) which have provided ideal forums to facilitate the development of effective CRE principles. The Australian market on the other hand is relatively underexposed to these concepts and research findings in the field is limited.

In 1987, the Laboratory of Architecture and Planning (MAP) of Massachusetts Institute of Technology (MIT) conducted a study of the management of the buildings and lands in large organizations not primarily in the real estate business, with senior real estate executives at large US corporations and institutions being surveyed. The result of the research showed that corporate real estate assets, in spite of their great value were grossly under-managed, as earlier revealed by a similar study conducted by Havard Real Estate Inc. (HRE) in 1981 (Veale, 1989). One of the most significant key factors directly implicated for this deficiency was that many CRE managers do not maintain adequate information about their real estate assets. An analysis of the MIT study (Veale, 1989) showed that the attitudes of managers in regard to the value of real estate function within their organisation appeared to be the strongest key factor in the effectiveness of real estate management in many organisations. This research further revealed that the CRE decision making process is driven most strongly by the mission and operational needs of the corporation and that CRE management as a field has been inhibited by the low prestige and priority accorded it in the companies, in management consultancy groups, and in business schools. The author opined that CRE management must move toward developing a strategic approach involving principles and practices of general management to develop a proactive, comprehensive and portfolio-wide decision-making process.

A major study of CRE among major American corporations, carried out by Gale and Case (1989) showed that much of corporate real estate resource management was centred mainly on lower levels of management, with some real estate specialists being used on a limited basis. The same study exposed an overall ambivalence of executives toward CRE resource management and the consequent under-utilization of corporate real estate resources. One conspicuous factor listed for the ambivalence was corporate executives attitude. Corporate executives were quoted as giving replies such as “We are not in the real estate business”, “Our financial analysts and accountants are already doing this as part of the overall financial planning” or that “Real estate returns cannot meet our hurdle rate requirements” when challenged for not managing their real estate resources. On the brighter side however, Gale and Case also reported an increasing number of executives taking a better advantage of the rich opportunities provided for improved corporate financial performance and available through the keen management of their real estate resources at that time. Schaefers (1999) mentioned a similar forward trend in Europe.

Gale and Case (1989) further noted that the corporations follow no consistent pattern in managing their real estate resources, while most of the corporations have a real estate department, the level of competence of manpower employed to man them varied. A vast majority of the firms surveyed reported the utilisation of outside consultants on contract basis for services such as architecture, design, engineering, construction and brokerage.
The research of Pittmann and Parker (1989) on a survey of real estate executives however showed that communications and working relationships with management and operating divisions are considered vital to corporate real estate department top performance. In addition, a centralised real estate authority and a comprehensive computerised inventory of real estate is equally important.

The trends in CRE management in America (US and Canada) has remarkably been toward outsourcing or, the replacement of internal provision of services with external provision of those services. Many companies, including those conducting much of their own work, have used external service providers extensively in a bid to improve the level of expertise in the management of corporate real estate. This in itself arose out of the need to cut costs and emphasise the core business to match with prevailing economic conditions and downsizing of many businesses (Kimberly and Rutherford, 1993).

Furthermore, reports from Europe also indicate there is still a significant general neglect of CRE management. Studies carried out in Germany by Schaefers (1999) showed that in spite of the significant value and associated costs, real estate assets are presently seriously under managed by a vast majority of German companies. The research result however indicated that there is a progressive evolution of the CRE management function into a recognized management activity that requires a more formal and systematic approach. In Poland, the lack of professional infrastructure to support corporations opening or expanding their businesses in the country has been reported as the main drawback in effective CRE management (Shone and Roth, 1999). This deficiency has in turn been blamed on the artificial restrictions placed on supply by the government.

CRE management reports have mostly shown similar trends in the Asia–Pacific region with slight variations within the sub-regions. In a nation-wide survey of all non-real estate companies listed on the New Zealand stock exchange, and a case study of New Zealand corporations, Teoh (1992) came up with a model centering on the positive corporate perception on CRE assets management, a separate CRE unit and a real estate inventory record as key primary success factors to efficient CRE management. Teoh also acknowledged the presence of a team of motivated property staff, and a fair and competitive reward system as pivotal to getting the most from qualitative CRE asset management.

Studies of JLW (1992) showed there is significant neglect in managing Australian CRE resource assets. Such neglect largely comes in the form of placement of operational rather than strategic imperatives first in property decision-making processes. Neglect also often comes in the form of lack of recognition of alternative uses to which property can be put. Webster's study of CRE management (1995) also supported this claim, reporting that 10% of respondents surveyed were not able to identify alternative uses for their property. The consequence is a failure to put property to its "highest and best use". Like some previous reports mentioned above, Webster's report indicated that some corporations do not even keep a centralised register of all property held or leased.

A survey of literature on CRE in Asia, with Singapore as a showcase, was carried out by Teoh (1993) which identified the following five issues as pertinent to the management of CRE:

- The negative perception by most business executives of non real estate companies of CRE asset management;
- Absence in most organisations of a specific department for separate evaluation of real estate;
- The problem of inexperienced and unqualified property staff;
- Absence of a well defined, comprehensive and fair reward system to attract good property professionals; and
- Lack of a useful and up-to-date real estate inventory recording system to facilitate decision-making.

A more recent research study was sponsored by NACORE International (International Association of Corporate Real Estate Executives) which examined the major categories of issues facing the current and future CRE function and the executives dealing with CRE. Using a Delphi study process (a means of extracting expert observations on a given set of problems, largely developed by the Rand corporation in the late 1960s) Carn *et al.* (1999), listed operational, organisational and human resource as anticipated issues likely to affect CRE. In a different setting however, a report of the research conducted by the Victorian Division of the Property Council of Australia (PCA, 2000), using focus groups with key players from private, commercial and government organisations outlined the following seven issues as emergent and significant to CRE management in Australia:

- Making CRE more strategic,
- Skills needed by successful CRE managers,
- The organisation of the CRE unit,
- Financing CRE,
- CRE decision making process,
- Performance measurement, and
- Outsourcing.

However, this report particularly emphasised finance as the most important issue critical to future CRE management in Australia.

Outsourcing has become an increasingly relevant point in CRE management. Outsourcing could be defined as employing an outside agency to manage a function formerly carried on inside the company (Rothery and Robertson, 1995) or simply the use of external providers to accomplish designated jobs or duties in CRE management for which the providers are better skilled than the internal staff. Outsourcing CRE management is a long-established practice in the United States and, to a lesser extent, in Europe and Australia (Kooymans, 2000).

Elmutti (1998) stated the main long-term reasons for outsourcing as:

- Freeing resources for other (core business) purposes,
- Sharing risks with the outsource provider, who is more likely in tune with the expected risks being his area of specialty, and
- Accelerating re-engineering benefits for the corporation which ordinarily needs ample time to put in place and for befitting benefits to be realised, whereas outsourcing on the other hand enables a 'world class practice' specialist to take over immediately, thus speeding up the rewarding process of the initial action.

Other reasons given for outsourcing which were mainly of a short term duration are:

- Assisting with a function task that is difficult to manage or out of control,
- Accessing resources that are erstwhile unavailable internally, either due to lack of cash, infrastructural facilities or technology,
- Reducing and controlling operating costs using the external service provider's economies of scale.

One recent research study among various organisations in New Zealand by McDonagh and Hayward (2000) also mentioned the benefits (successes) and the disadvantages (failures) of outsourcing. They identified problem areas to include:

- Outsourced workers being less in tune with organisational needs and culture,
- Outsourcing being a time consuming bid/management process,
- Failure by service providers to deliver promised service,
- Slower response times,
- Lack of control, and
- Poor communication

On the other hand, they found outsourcing success factors to include:

- Establishing a well defined rationale and process for outsourcing,
- Having clear objectives and expected outcomes,
- Avoiding outsourcing processes that are vital to competitive advantage, and

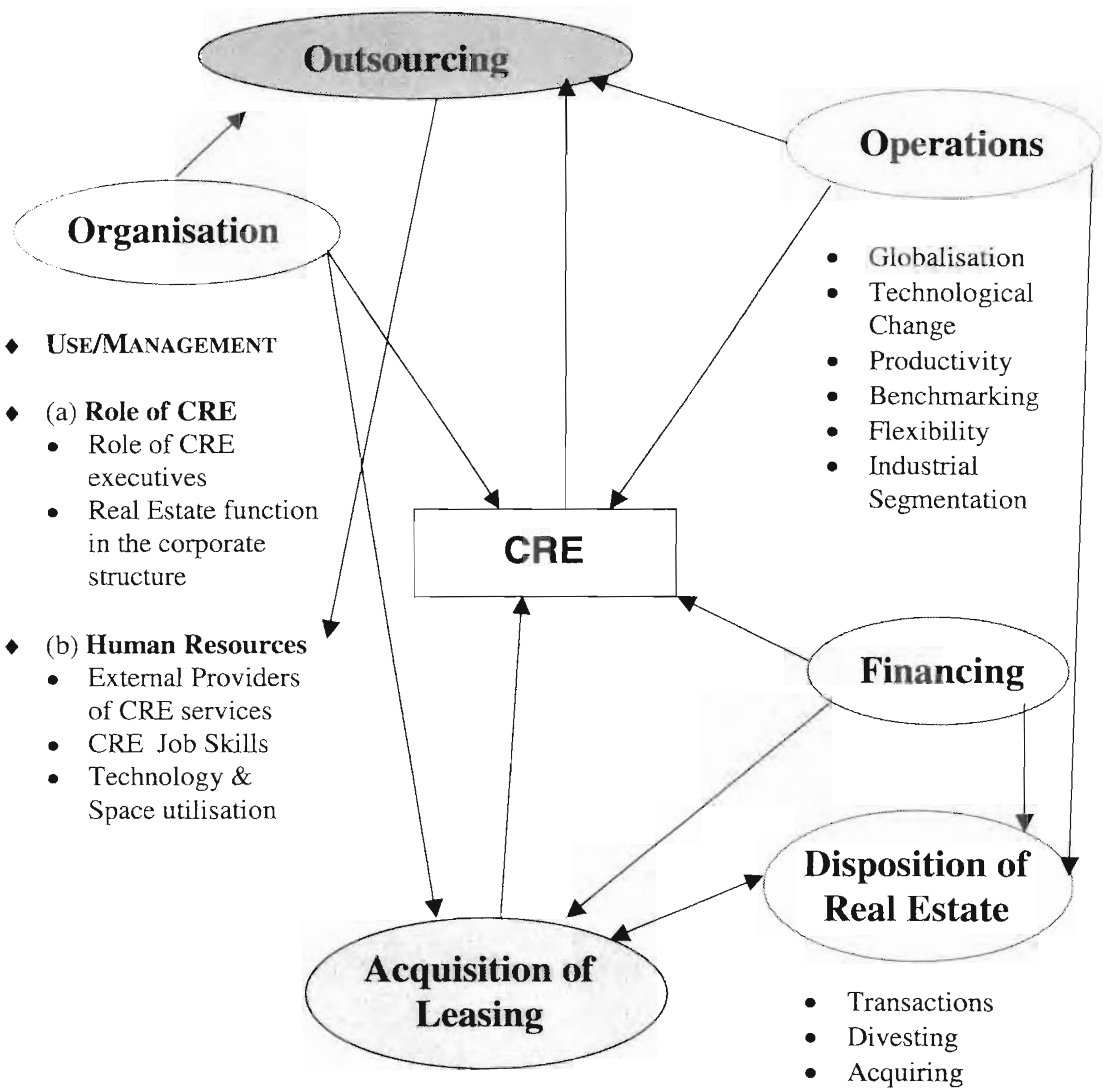
- Avoiding outsourcing processes and practices that are more specific to one's own organisation than to the industry as a whole.

From the literature review in this paper, certain issues have been identified as recurrent and most appropriate to the management of CRE assets. The issues can be identified as:

1. Operational
2. Organisational
3. Acquisition of Leasing
4. Disposal of Real Estate assets
5. Outsourcing and
6. Finance

A conceptual model of CRE management based on the major issues arising from literature survey is presented below.

Figure 1: Conceptual Model of CRE Asset Management



ANALYSIS OF MODEL

The analysis of the conceptual framework in Figure 1 and the issues surrounding it are discussed below.

Operational issues

Operational issues discussed are mainly globalisation, technological change, productivity, interaction between productivity and space utilisation, flexibility, benchmarking and industrial segmentation. The discussion is largely based on the reports of the Delphi study (Carn et al 1999).

Globalisation: Global competition is causing corporations to focus more on production and quality. This means that productivity and quality, not cost-cutting, are major issues in global competition. This emphasis is in support of the contention that providing space is not always a cost issue, but can be seen as an investment in production as well.

Technological Change: The impact of technological change on CRE operations is considered an important issue. Complete accurate up-to-date records of property usage enables departments to share the total company portfolios more efficiently, hence eliminating waste. For example before acquiring or leasing new property, a department could first consult an up-to-date database. A substantial number of corporations were reported to lack such basic CRE principles (Gale and Case, 1989). Although there have since been considerable improvements and computers seem to have permeated every aspect of decision-making in corporations, formalized decision support systems and expert systems are yet to make their inroads into the CRE arena (Johnson *et al.* 1997). However, with advances in Information Technology, information and decision is expected to be more accurate and timely, thus maximising its effectiveness.

The advent of IT aids in the effective use of office space. Programs have been implemented to place more workers in the field. All of the traditional needs of the home or office desk are now electronically accessible anywhere in the world via the Internet (Garcia, 1995; Lynne, 1999; Arend, 1999; McDermott, 1994, Bruzzels, 1995).

Forecasting and therefore planning ability for the corporation may be improved to implement strategic property decisions. Buying property in anticipation of need (proactive) rather than an 'in-time' process is now seen to waste capital.

Productivity: This is a factor that emerges as an important consideration, and of prime concern. It overshadows the concept of real estate as a corporate investment or a mere corporate cost, and suggests that corporate space is viewed by some corporations as a net present value (NPV) decision (Redman and Tanner,1989).

Benchmarking: Benchmarks are important in the strategic planning process of corporations but they are only one of the several approaches and inputs into the corporate strategic plan and the company's real estate activities and operations. Garcia et al (1999) reported that the corporate real estate use of benchmarks will require more awareness of:

- The process of forming the benchmarks.,
- Problems that benchmarking can reveal such as the fact that the company is in an inferior position relative to the benchmark,
- Problems in the measurement of the benchmark values such as uniformity of definitions for concepts being measured.
- Interpretation of the appropriate benchmarks in the light of the company's needs and its specific situation.
- Integration of the information about the benchmarks into the corporation's planning activities.

Flexibility: High adaptability and flexibility are characteristics expected of the CRE function because the corporation itself must possess these same characteristics.

Industrial Segmentation: The diversity of opinion on many issues suggests that CRE is not a single concept as has been resolved by the Delphi survey (Carn, 1999). The survey showed the segmentation and classification of different types of corporations whose CRE functions differ due to the nature of the industry or the internal orientation of the company. For example, some companies such as package delivery services act in an environment where providing the lowest cost space at a given location is the CRE mission. Other companies, such as high tech companies that need to provide a stimulating atmosphere for creative people, may see the CRE function in a net present value context. Bottom line cost may be less important than the return on extra cost spent to promote production. This is but one example of segmentation that can be discovered by analysis of survey methods as employed in the said study.

Organisational issues

CRE management is somewhat of a mystery to many, a probable reason why the adoption of CRE management practices has been low on the average. PCA (2000) reported the reason why corporate management has often not empowered CRE managers with access to strategic management decision-making within their organisation as a probable lack of awareness of CRE management tools. A comprehensive survey of literature of all relevant categories of CRE was presented in the literature as :

- Strategic management of CRE,
- Organisation of the CRE function,
- CRE holding practices,
- CRE financing practices,
- Site selection practices,
- Alternative workplace practices,
- Use of IT in CRE management and
- Measuring CRE performance.

CRE management basically embraces the entire range of activities for the management of a corporation's property needs, including planning and management in the areas of investment finance, construction and facilities.

CRE activities in an organisation can be assumed by an individual or by a separate unit. It may also be completely outsourced to an external provider. Depending on how the CRE function is organized and CRE decisions are made, the CRE function may be centralised, (standardised process, decisions and outcomes by the head office) or decentralised with individual offices and operations having their own processes and objectives (Veale, 1989).

ROLE OF CORPORATE REAL ESTATE

The Delphi Survey results showed that the concept of CRE as a separate profit centre seems not to have been favoured. This lack of clear agreement on real estate as a cost or profit function illustrates that CRE may have a different function depending upon industry -specific and corporate-specific goals.

CRE is being portrayed as principally concerned with occupancy strategies to enhance environmental conditions to accomplish dual human resource and productivity goals. Respondents in this survey gave high level of support for the statement that the three basic objectives for CRE operations are: (1) to enable the core business; (2) to optimise real estate resources; and (3) that CRE should be consistent with corporate objectives.

According to Carn *et al.* (1999), the CRE Executive (CREEx) plays and will continue to play the following roles that relates to the external provider:

- Determining agent of the functions to be performed,
- Manager and quality control agent,
- Coordinator of the activity with internal procedures and systems,
- Integrator of the product into the corporate mission and procedures,
- Evaluator of the activities, services and reports received,
- Utiliser of the information in the internal decision-making process and
- Explainer of the impact of the work on internal decision process to senior management.

The Delphi survey analysis of Carn et al (1999) showed there is no agreement on the best placement of the CRE function within the organisational scheme of a corporation. Responses presented lead to the conclusion that the CRE function should be free-standing, and not linked with information systems or human resources, that CRE should play an important role in strategic planning but report to senior management, which in turn reviews and presents the information to the CEO and the board of directors.

HUMAN RESOURCE ISSUES

The use of external service providers is not exclusively driven by the corporate need for cost savings, but can lead to a reduction in salary, benefits, office space and occupancy costs. (Carn *et al.*, 1995)

It is most certain that externally provided services will continue to be important for CRE management in the future. The move to use external providers requires the CRE executives (CREEx) to understand both the nature and significance of the externally provided activity, to have the ability to communicate expectations regarding the performance standards of the work and to be able to integrate the service provider into the corporate environment.

The need to better integrate the real estate function into the overall corporate business function remains a prime concern. While a good grasp of finance is required for the CREEx, there is additional need for legal issues, communication skills and general management skills. The emergent overall picture is that the CREEx should use a broad range of corporate skills and these skills help to broaden networking within the corporation.

There is a strong indication that CRE having been isolated in the past must emerge in the future as an integral part of the corporate structure, not just a department that manages a "necessary evil" (space) that the corporation needs to perform its main function. Carn *et al* (1999) points out that CREEx has the primary responsibility of creating an appropriate relationship. CREEx and managers must communicate clearly with senior management. This necessites a wider exposure of CRE executives and managers to management skills and techniques that must be continuously maintained and enhanced. There is thus expected to be more focus on management skills and techniques in order to achieve the necessary stature and effectiveness required.

Given the enormity of real estate as an asset and hence capital investment, office space and worker minimisation programs have taken place, including hotelling, flexible office layout details and shared work-spaces. Flexible space and space management programs such as hotelling, are not necessarily viewed as the strongest or most broadly applied solutions for adapting to technological change. Even though these programs are regarded as important by many, other solutions are however needed to meet the wide array of space demands experienced by most companies (Carn *et al.* 1999).

It is an undisputable fact that telecommuting is increasing and is an important factor in future occupancy strategies. It is largely indecisive however whether telecommuting and the virtual office significantly reduce the need for the provision of corporate office space as shown in the Carn (1999) report.

In the case of office or industrial CRE, improving worker productivity through better use of telecommunications, computer or other technology integrated into working spaces will significantly benefit from the greater resources of larger companies. Manufacturer cost savings, productivity enhancements and wise long term investments in facility innovations provide competitive advantages especially to large well known companies such as Intel and HP, which would serve world markets from multiple locations (Manning and Roulac, 1999).

ACQUISITION OF LEASING

A number of papers including Schriner (1997), Hiatt (1994) and McDermott (1994) have presented the opinion that the lease contract can be structured to reduce tenancy risk. The viable cost of leasing also provides for clearer cost management information on property service that corporate departments are receiving. The charging of 'market rents' in management accounts is currently not a universal practice. An argument for economic resources maximisation is that the leasing of more properties ensures that properties are exposed to the highest and best use (as function of achieving the highest rent levels). This is a shift from buying real estate and then assuming or ignoring that the best use of the property is within the company. In leasing a property, the property usually goes to the highest bidder (and generally, highest use). One may hypothesise that the reason companies do not realise how valuable their real estate portfolios are is because properties are not put to their potentially highest and best use. This being ignored as a necessary business input (Hiang, 1998).

DISPOSAL OF REAL ESTATE ASSETS

Corporate real estate management is probably most innovative in its disposal. Holod (1993) describes such a strategy. A business needs not only just cash. In a property slump, selling property forces a firm to take substantial capital loss. Property can be exchanged for trade credits, which like cash have a valuable purchasing power. The benefits are varied. Because of the non-cash realisation, a high value can in effect be realised for the property and the disposal problem is also taken away. Further, tax consequences can be simplified and most importantly, the business capital is no longer tied up in a relatively illiquid asset.

Other ways of disposal includes simply giving the assets away. For instance, BellSouth donates surplus floor space to local educational institutions, realising tax benefits (in some countries), positive public relations, educational and government economic partners (Johnson, 1997), all of which impact on corporate citizenship.

Other corporation values add to their real estate before disposal through such means as participating in developments. By providing the development asset to developers, site acquisition finance is provided and financial risk eliminated. In return, the corporations stand to gain a higher realisation value (Tschirhart,1993).

OUTSOURCING

The outsourcing of non-core business activities is currently a significant and accelerating trend throughout the developed world as organisations pursue strategic advantage in an ever-increasing competitive market. CRE asset management is seen as a non–core activity for many organisations in which outsourcing is seen as a relatively easy way to drive costs out of a business.

In the words of Wong (1995), "a successful outsourcing process is neither simple nor easy". By the same token, simply cutting back on internal resources and outsourcing the same old work in the same old way can end up costing more, not less (Scroggins, 1994).

In the developed world, the reasons for pursuing an outsourcing strategy seem to have evolved from an initial focus on cost savings to one of ensuring the best access to skills and technology,while building a core business-focussed organisation. The reasons for outsourcing have changed; there is now a shift from price to quality of service (Ciandella, 1996).

According to McDonagh and Hayward (2000), research survey among New Zealand organisations showed the main reason for outsourcing real estate functions to be mainly access to skills, technology and best practice not available within the organisation. Cost savings are relatively unimportant, contrary to popular belief.

Elmutti *et al* (1998) made reference to a 1995 study by the Economist Intelligence Unit and Arthur Andersen that showed 85% of all executives in North America and Europe outsourcing all or at least part of one business function with the figure being expected to rise to 93% by 1998. The same report showed that globally, outsourcing was expected to be a US $ 121 billion market by the year 2000.

According to Rotherery and Robinson (1995), Jorrof *et al* (1990) and Kooymans (2000), the reasons for outsourcing CRE management have been variously given as: business process re-engineering (including value re-engineering), time compression, and value chain analysis; organisational restructuring (re-inventing); competition and competitive advantage, changing technology and cost control among others.

FINANCE

The importance of financing in real estate has increased with time as successful property strategy now depends on organisational strategy, in line with a new focus on strategic management. Property units have become more accountable as they are expected to contribute to the corporate bottom line.

There is no one solution to CRE financing that suits all. Financing decisions are very highly influenced by a corporate or organisation's capital or strategic requirements. Considerations of return on investment also affect decisions about financing methods. For instance, many USA corporations are using Real Estate Investment Trusts (REITs) to raise capital to buy their real estate holdings (Manning, 1991; Brown, 1997).This way, investors are provided with a property investment with a secure cash flow whilst the corporation accesses a cheaper source of capital. This acquired capital is similar to a loan in that it does not require a dividend return but periodic servicing. However, unlike a traditional loan, the capital received can be geared toward benefiting the corporate by the way the REIT is structured. This translates into less interest rate exposure, and exposure to rent rise may be limited by lease terms (Brown, 1998).

The emphasis in the near future, as has been in recent past, will be on financial issues. Several dimensions to the financial issue will include ownership methods, relationship to capital (source and balance sheet), competition with other organisational asset types, and the desire to bring all financial property decisions under a single umbrella (PCA, 2000).

CONCLUSIONS

In an ever-increasing competitive global market where corporations are seeking novel ways to gain a competitive advantage over their peers, CRE has come to the limelight as one of the major resources on which to rely. Its management for increased firm performance and profitability has become an issue for major consideration.

Effective CRE support today includes assisting business unit managers to make location and facility design decisions aimed at maximising long term cash flow through increasing the "top line" (*i.e.* revenues) as well as reducing costs. The implication is that CRE support should be able to assist business units evaluate operating profit advantages more specialised building design, leasehold improvements, and facility site improvements and facility site considerations that can more than offset sacrificed real estate investment return (as a result of less marketable space).

Given present globalisation, technological, information and cultural trends, it will become even more important in the future for a company's CRE function to assist corporate managers with how site selection, building design and leasehold improvements impact an organisation's business strategy.

Better-run companies are learning how to take more advantage of the economics of scale opportunities inherent in the management of their CRE, both internally and externally. For example, corporate outsourcing of real estate functions has increased the competition among CRE consultants, brokers and developers seeking new and better ways to provide CRE services to companies.

It is hoped that the model of CRE management advanced in this paper provides a useful fulcrum for organisations to launch a meaningful management of their corporate real estate assets.

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