A Framework for Identifying and Measuring Value Added by Corporate Real Estate

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SUMMARY

The purpose of this paper is to present how real estate strategies can add value to the core business, providing real estate managers a tool to illustrate how real estate functions add value to the corporations. The paper is based on interviews of 26 corporate real estate executives in several countries and examines approaches to develope real estate strategies and to measure performance. Then the authors model how real estate adds value to the company and how to measure the value. The contribution of corporate real estate to the core business and wealth maximisation can be modelled to illustrate the effects of real estate to financial performance.

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1. INTRODUCTION

Globalization of business operations and other competitive pressures are forcing corporations to re-evaluate their real estate needs. The demand for more efficient utilisation of space and higher workplace productivity has led to businesses adopting a range of strategies for managing their facilities. The emergence of corporate real estate management (CREM) as a distinct discipline has supported this drive and the search for strategies aimed at enhancing the value of real estate assets and facility-related services to the core business. Yet, the relationship between core and non-core business, in the context of real estate management and facilities management is not well understood. The field lacks research that develops theoretical models of the relationship between corporate strategic management systems and real estate decisions and operations. The field also lacks empirical testing using well-defined models to quantify the value that real estate adds to the firm.

The lack of unifying corporate real estate models means that the contribution of real estate to the firm and the possibilities that exist for adding value are often not recognized nor properly considered. In many corporations, real estate and facilities management have evolved over the years from individual transaction based decisions about physical spaces. As such they tend to follow traditional approaches of cost minimization and focus on short-term results rather than long-term strategy, still not moving from taskmaster to business strategist (Joroff, et al., 1993). Many real estate and facilities units within corporations have been established from the perspective of managing existing buildings. CREM decisions are, therefore, based primarily on functions and requirements in relation to structures and not the businesses that are performed within them. Little attention has been paid to the added value that CREM can generate from strategically supporting core business processes.

This traditional approach places buildings and services installations in the foreground and "softer" issues in the background. Realization that both tangible and intangible assets are important to the successful support of the core business calls for a broader view of real estate's contribution to the firm. Not only direct facility costs, but indirect costs and contribution to the long-term success of the core business must be identified and measured. This requires not only a broad theoretical framework, but also new techniques and tools for measuring, amongst other things, performance, productivity, usability and functionality that result from real estate decisions rather than just relying on the traditional financial measures corporate real estate officers report using most often (Nourse, 1994; Bdeir, 2003).

Indeed, many business people and researchers discuss such value-adding concepts yet struggle with their proof. The absence of some form of objective measurement using leading indicators as well as financial outcomes inhibits comparison of alternative CREM strategies, and generally, leaves corporations in the dark as to what they are achieving. Furthermore, a broader, more coherent assessment of the ability of best practice CREM to add value to the core business is missing.

This paper contributes to the field by developing a model of how corporate real estate management can produce added value for the core business of the non real estate firm through a broader strategic management framework. The objective of the paper is to use theory from strategic management along with research on business performance, corporate real estate management, facilities management, workplace performance and results of a survey to develop a framework that will illustrate how corporate real estate directly and indirectly adds value to the core business and the wealth of the firm. We will define ways corporate real estate strategies can be linked to the overall business strategy and explain how real estate tactical decisions and actions relate to these real estate strategies. This work is based on previous theoretical models, in-depth interviews with corporate real estate executives and service providers, and the limited empirical studies that have been conducted to date. The result is a model that can be used in future research to empirically test the contribution of real estate to the primary long-term goal of maximizing the wealth of the firm's shareholders.

2. PREVIOUS RESEARCH

2.1 Strategic Planning and Financial Performance of the Firm

According to shareholder value theory, the goal of the firm is the maximization of the wealth of the shareholders. A firm should strive to maximise the return to shareholders, as measured by the sum of capital gains and dividends, for a given level of risk or reduce the risk with the same level of income. According to Kaplan and Norton (1996, 2000, 2004) organizations have two basic approaches for increasing the shareholders' value: revenue growth and productivity. The former generally has two components: build the franchise with revenue from new markets, new products, and new customers; and increase value to existing customers by deepening relationships with them through expanded sales. The productivity strategy also usually has two parts: improve the company's cost structure by reducing direct and indirect expenses, and use assets more efficiently by reducing the working and fixed capital needed to support a given level of business.

Corporate real estate literature research has found that in line with Kaplan and Norton (1996, 2000, 2004), cost reduction and revenue growth are the key elements for global performance (Krumm and Vries, 2003). Also Burns (2002) comes to conclusion that the contribution of CREM to the organisation's value could be measured by adapting the BSC view, where organisations have two financial strategies for driving shareholder value: profitability and growth.

The choice of strategy for creating shareholder value is likely to be closely tied to the nature of the organization. As differently structured and focussed organizations require different results from their real estate assets (for example: low cost, distribution efficiency, employee retention or proximity to markets or resources) there is no one easily identified "output" indicator of "good" performance (McDonagh, 2002). This creates a challenge for identifying the generic added value of CREM as performance is very difficult to measure across a range of differently structured and focused organizations. Because every organisation is individual in respect to the strategies for implementing its ultimate goals, a set of real estate strategies is necessary. A range of possible strategies means that managers can choose the most suitable strategy for their business environment and then make CREM decisions more in line with the organizational overall goals, thereby adding value to the firm.

Based on shareholder value theory we have developed a model to visually capture how corporate real estate can add value to the firm in the modern business environment (Figure 1). The primary aim is maximizing the wealth of shareholders. A business strategy for achieving this goal is developed based on the firm's vision. The firm must develop strategies for the functional areas such as human resources, information technology, finance, and real estate that follow from and support the general business strategy. Within the corporate real estate area, strategies are implemented through asset management (AM), property management (PM), and facilities management (FM). Staff makes operating decisions in each of these areas that can directly and indirectly affect the core business and the value of the firm, and thereby shareholder wealth. Key to this model are linking real estate strategies to overall business strategy, identifying how real estate decisions directly and indirectly affect the firm's financial success, and measuring those impacts on the firm.

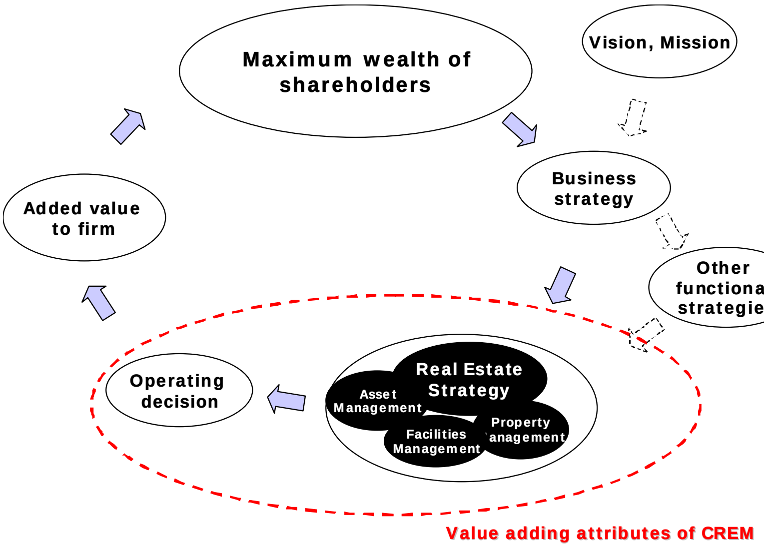

Figure 1. CREM as a Part of the Firm's Strategic Framework (Lindholm et al., 2006)

2.2 Ways to Measure Added Value

The metrics used to determine the contribution of real estate are primarily focused on cost reduction or capital minimisation. What is often not recognized is that property can also help to improve revenues. Both avoiding costs and enabling others in the organization to improve their services and consequently increasing revenues contributes to profitability and add value to the firm.

One way of looking at how real estate can add value to the firm is using the framework shown in Kaplan and Norton's (1996; 2000; 2004) Balanced Scorecard (BSC). In their model, organizations can increase economic value through revenue growth and/or productivity. Revenue growth comes from new markets, new products, new customers, and expanded sales to existing customers. Productivity results from reducing expenses and using assets more efficiently. Burns (2002) translates the BSC view to show how corporate real estate can add value through growth and profitability. Most firms only consider how property decisions can improve profitability through space efficiency, cost reduction, and capital minimisation. Performance measures focus on cost per square metre and space per employee. However, real estate decisions can contribute to increased revenues as well.

Measuring the value of corporate real estate decisions is much more difficult than calculating the financial return on traditional "investment" real estate. Corporate real estate outputs are usually internal outputs to another part of an overall process. In addition, differently structured and focused firms want different results from their real estate assets, so there is no one indicator of "good" performance by real estate. Rather, the firm should develop a performance measurement system of valid and reliable measures that match their objectives and are reasonable considering available data and resources.

3. INTERVIEWS

To achieve our objective of developing a framework to assist corporate real estate managers in mapping and evaluating how property adds value to the core business performance, we built upon previous research by selecting 26 organizations in the US, the UK, the Netherlands, and Finland across a variety of industries (including transportation, broadcasting, banking, and data management) on which we gathered data from their websites, annual reports, and case studies reports. We then conducted personal interviews with corporate real estate executives within each firm.

Based on the previous research discussed above and consultations with corporate real estate researchers we developed a structured questionnaire for the interview survey. The questionnaire comprised of a mixed of closed ended and open ended questions to get respondents to fully explain their ideas and opinions on subjects not previously specifically studied. We pretested the questionnaire with two Finnish corporate real estate executives. One is a corporate real estate director for a Finnish transportation firm and the other holds a similar position with a public organisation. The questionnaire was revised after their comments. The questionnaire covers several topics. First it is used to gather classification data on the respondents and their firms. In an effort to identify the attributes of corporate real estate management that can add value to the core business of an organization, respondents are asked how they would define the term added value and how they thought the CREM units could add value to the core business.

We analyzed the survey data using open, inductive content analysis following Miles and Huberman's (1994) framework. Patterns and themes in the data were noted, links with previous literature drawn, and areas of notable contribution to existing knowledge identified. As is common with open-ended questions, respondents provided a variety of answers that require distillation and interpretation. A comparison of the content analysis between two of the authors was made and inter-researcher differences were resolved through discussion and reference back to the interview transcripts, as suggested by Miles and Huberman (1994).

The interviews revealed that corporate real estate executives across markets and industries believe property and facilities decisions can create value for the core business in several ways. The most common is through providing a pleasant and productive physical workplace. Another is to provide responsive and high quality property services to the internal customers. The impact of site selection was identified. However, the relationship with stakeholders was one of the most important themes that emerged. More and more corporate real estate managers recognize that if they are going to add value to the firm that they must understand the core business and communicate effectively with those at the strategic decision making level of their organizations.

Among the 26 firms interviewed, most do have some sort of real estate strategy, although it may go by a different name and not be as formalized as one might wish. Almost half the firms we talked with do have a well formulated real estate strategy created in close cooperation with the strategic business decision makers. However, one-third of the firms with a real estate strategy had either only a weak link between the real estate and overall business strategy or no link at all. In addition, a few real estate departments reported that they have formulated a real estate strategy without any communication with other business units or top decision makers during the strategy development process. Some of them even reported that their supervisor was not aware of the existence or the content of the real estate strategy. One wonders how the firm's decision makers could ever expect their property to be managed in an optimal way to support the organisation when the real estate strategy is formulated separately from the organisation's strategy.

4. RESULTS

4.1 Creating a framework for how real estate adds value

Based on previous research and the interviews with corporate real estate executives the model shown in Figure 2 was produced that illustrates how seven real estate strategies add value to the core business, with operating decisions that may then follow from the real estate strategies. The framework reflects two basic approaches for increasing shareholder value: revenue growth and productivity. The strategies are:

- increasing the value of assets
- promoting marketing and sales
- increasing innovation
- increasing employee satisfaction

- increasing productivity
- increasing flexibility
- reducing costs.

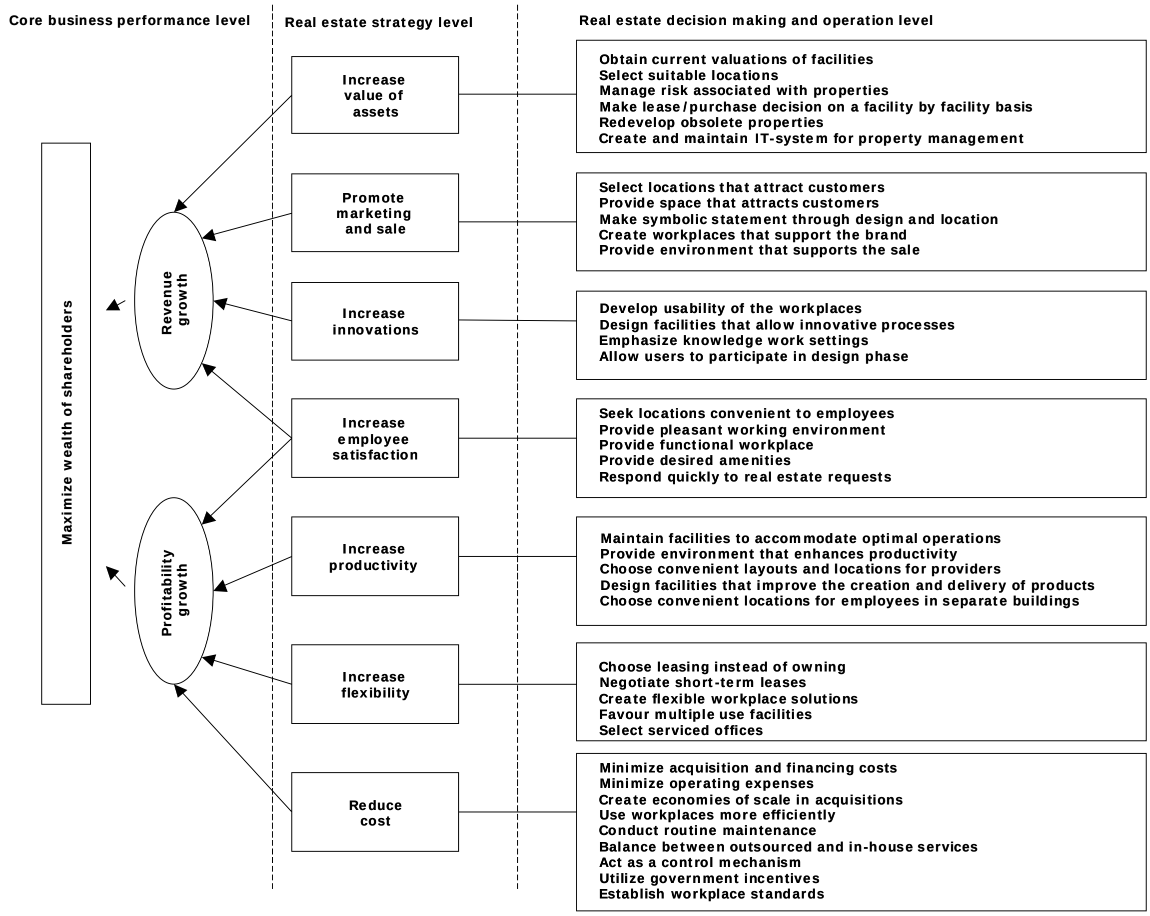

Figure 2. How Real Estate Decisions Support Strategies and Core Objectives (Lindholm et al., 2006)

In formulating these strategies, we have tried to balance the tangible and intangible contributions of property to the firm. The framework spans the traditional real estate strategies such as cost reduction as well as less recognized strategies such as increasing innovation. It incorporates current business issues such as flexible work spaces. The framework illustrates how real estate strategies follow from the overall business strategy and drive property decisions. The property strategies each firm will choose depend on the broader core business strategy and objectives.

The first strategy, increasing the value of assets through managing the real estate portfolio, views real property as a capital asset that can be managed to optimize financial contribution to the firm. Objectives may be to maximize the value of the property portfolio or ensure that the lowest cost alternative is chosen considering all short- and long-term costs of owning versus renting. However, properly managing the company's portfolio must start with an inventory and valuation of current facilities, then management via a property information system.

Real estate can contribute to the marketing and sales strategies through site selection and physical design. Accessibility and visibility are keys to attracting customers and increasing revenues. Physical design can be used to create an image for the company among its suppliers, employees, customers, and investors, an indirect way of adding value to the firm.
Increasing innovations is a less familiar real estate strategy. Many firms are in knowledge businesses operating in very competitive environments. To survive and grow they need to innovate. These firms need to provide workspaces that encourage and support innovative thinking and working. This requires the participation of the space users in planning spaces and providing the type, size, and design of workspace that creates an inspiring working atmosphere. This, in turn, will lead the firms to the increased revenues that manufacturers achieve through innovation.

Increasing employee satisfaction with their working environments depends on real estate and facilities management decisions concerning site selection, workplace design and amenities, and environmental quality. Firms making workplace decisions to improve employee satisfaction can expect to achieve the increased financial returns experienced by other firms in a range of industries who have recognized this indirect path to profits.

Increasing productivity will also lead to increased profitability. Real estate decisions about site selection, infrastructure and interior design directly impact the functionality of the space, allowing employees to work more efficiently and effectively. Real estate and facilities decisions influence a number of personnel and system factors, which influence the level of productivity of the individual and, subsequently, the level of productivity of teams and profitability of an organisation.

A strategy of increasing flexibility may include both physical workspace and financial terms. Many firms form and reform work teams within their offices on a regular basis. They are experimenting with flex time and shared jobs that allow workers to share space. Others want be ready to move into and exit markets quickly as conditions change. In contrast, most space agreements are long-term and workspaces relatively fixed, obligating the firm to pay for space that is not optimal for its operations. If one of the key drivers of flexibility for the firm is its workspace, then a real estate strategy that focuses on providing flexible space that can match the duration of business needs will support the firm's core strategy and add value to the firm. Some operating decisions that would follow from a flexible real estate strategy include choosing spaces that can be adapted to multiple uses and workers, creating flexible workspaces within the structures, negotiating short-term leases that include options for expansion and contraction, and leasing rather than purchasing properties that are not essential to the core business.

The most familiar of the strategies to increase profitability is reducing costs. Reducing cost in any area has a direct and immediate impact on the financial performance of the firm. The most often mentioned real estate operating decisions to achieve cost reduction objectives include outsourcing some real estate services and using corporate real estate staff to oversee operating units' real estate transactions. Other actions firms may consider in pursuit of this strategy include co-locating business units, occupying green buildings and choosing locations based on governmental incentives. They may reduce expenses by negotiating lower rates for real estate related services and utilities, and increasing quality and timing of facilities maintenance to avoid costly repairs and capital expenditures.

For the real estate strategies outlined above to add value to the firm, CREM decision making must be linked to the strategic decision making level of the organisation and corporate real estate staff must possess knowledge of the core business and its needs. Such knowledge creates confidence among business units who are then more willing to cooperate and depend upon the corporate real estate staff to make value-adding decisions. It also ensures that CREM can communicate its contribution to the firm in a language that the top decision makers understand.

4.2 Measuring the Added Value

From this framework, a performance measurement system can be developed to evaluate how well each strategy is adding value to the firm. The system should be comprised of a minimal number of mutually exclusive measures, balance financial and non-financial measures, and measures that focus on stakeholders' needs (Brown, 1996; Sink, 1985; Thor, 1998; Vokurka and Fledner, 1995). The individual measures that comprise the personalized performance measurement system should be valid (measure what is intended to be measured), reliable provide consistently valid results), practical (economical, convenient, and interpretable), and relevant (valuable and useful) (Emory, 1985; Hannula, 1999; Sink, 1985).

Our interviews indicated that while most companies are relying on traditional cost per square metre performance measures, many have also started measuring employee satisfaction with the workplace. Space per employee, physical condition of properties, and client satisfaction with services are also commonly evaluated. Few firms are using measures tying real estate costs to sales or revenue. Very few are trying to measure intangible elements of performance, yet recognize how helpful it could be to have such measures. The use of a performance measurement system seems to be more common when the real estate system is part of the company wide measurement system such as the Balanced Scorecard or Six Sigma.

These firms can improve how they demonstrate real estate's added value to the firm through the creation of an organized performance measurement system tied to the firm's objectives and strategies that have been translated into real estate objectives and strategies. Table 1 provides a list of potential performance measures for corporate real estate managers to select from in creating a personalized performance measurement system that fits the firm's real estate strategies and information availability. The system can be modified over time to adjust to changes in the corporation's core strategies and resulting modifications in real estate strategies.

Table 1. Real Estate Performance Measures

Real estate strategy	Potential measures
Reduce cost	Occupancy cost per square foot/ metre Occupancy cost per seat Occupancy cost per employee Occupancy cost per dollar/unit of revenue Occupancy cost as a % of total operating expense Occupancy cost as a % of operating revenue by business unit Occupancy cost as a % of operating revenue by building Occupancy cost per unit of production Occupancy cost as a % of total labour and overhead by business unit Occupancy cost by building Space (square feet or metres) per employee Whether workplace standards are used Percent of space occupied Percent operational space versus non-operational space Total owned and leased space (square feet/metres) Persons per seat Number of moves per year Cost of under utilized space Real estate cost per CRE employee Total CREM operating expenditures versus budget
Increase flexibility	Percent leased space relative to total space Length of lease terms Use of virtual and flexible workspaces
Increase productivity	Employees' opinions on how well the workplace supports their productivity Distance employees commute Distance among company sites and businesses Time wasted with interruptions (due to open space layout) Percent shared services No loss of business due to real estate service failure Real estate spending as % of gross margin Real estate spending as % of total operating expenses Time used on real estate projects versus time budgeted for projects Money spent on real estate projects versus money budgeted for projects Amount of real estate advice given to other business units

	Number of service providers/service level agreements Number of transactions/projects/leases per FTE employee CRE employee qualifications Employee turnover Number of steps/time for real estate approval process Use of audits for service providers
Increase employee/internal client satisfaction	Distance to required transportation modes for employees Employee satisfaction with work environment Quality of indoor environment (lightning, temperature, noise) Workspace (size, shape) Amount of nearby amenities for employees Range of services offered by CREM Employee/internal customer satisfaction with responsiveness of CREM staff Employee satisfaction with CREM staff professional skills Employee satisfaction with CREM information sharing CREM response time to requests Competence of CREM staff Investment in training per CREM employee
Increase innovations	Number of teamwork settings Number of workstations per employee
Promote marketing and sales	Distance to required transportation modes for customers Distance to customers Use of company logos and colours in workplace design Image rating based on building attributes Energy consumption (conservation) Number of energy audits Environmental sustainability of buildings
Increase value of assets	Real estate cost of acquisitions versus returns/IRR Lease vs. construction or ownership cost comparisons Aging reports for leases Real estate holding costs per year Number of building quality audits Real estate return on investment Real estate return on equity Business return on real estate assets Sales or revenue per square foot (metre)

	Space (square feet or metres) per unit (dollar) of revenue Market capital value versus book value by building Percentage of surplus assets sold Time to dispose of properties versus plan Cost of disposal of property versus savings Time to clear buildings versus plan Number of development projects for obsolete properties Status of risk management activity (contaminated sites)
Effectiveness in corporate strategic process	Percent CREM employees indicating strong understanding of how their jobs fit into attaining corporate objectives CREM involved corporate strategic planning CREM integrated with other functional strategies (HR, IT, etc.) CREM actively involved in firm-wide initiatives such as special asset use, consolidations, or shared services opportunities Number of formal and informal CREM meetings with top executives Fulfillment of CREM strategic aims CREM communication time with top executives Self evaluation of how well CREM decisions support strategy

5. CONCLUSIONS

As businesses strive to improve their competitive position in an ever more crowded marketplace, strategic use of all their resources, including real estate is necessary to succeed. Maximizing the contribution of property to the wealth maximisation of the firm's shareholders requires development of an organizational strategic plan that drives a supporting real estate strategy. Each firm must assess its position in the market and select the proper strategies to support its objectives. Firms may choose from among seven general real estate strategies to support the two main corporate strategies of revenue growth and profitability growth.

Successful implementation of the selected real estate strategies will require the development of a comprehensive performance management system to provide a feedback loop to assess progress and make adjustments as needed. Each firm must choose from the list of potential measures those that are practical and appropriate to the business, its core objectives, and its information availability. Development of a strategic plan with the associated operating decisions and a performance measurement system as outlined in this paper provides the corporate real estate manager with a framework that is easily explainable and defensible to the top level decision makers in the firm. In this way, corporate real estate management can move more squarely into the strategic planning process and live up to its potential to add value to the firm.

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