

## **The Conception of Balanced Scorecard Method in Measuring the Corporate Real Estate (CRE) Performance for Malaysian Universities**

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### **Abstract**

This paper aims to study the implementation of Corporate Real Estate (CRE) in universities to develop the Balanced Scorecard (BSC) dimension as a performance measurement of CRE practice for the universities in Malaysia. Using six universities as samples, the score rate for each university has been established and analyzed. The findings reveal that even property management practice in Malaysian universities at the moment is not in accordance with CRE practice, but the score shows a range between moderate to good real estate management practice implementation. This situation is expected to further improve if the universities are able to bring in CRE practice and follow the principles in it. The rationale of this paper is to promote the application of CRE into the management of the universities as part of their strategic plan.

### **Keywords**

Corporate Real Estate, Malaysian Universities, Balanced Scorecard, Performance Measurement

### **1. Introduction**

Corporate Real Estate (CRE) has become one of the important concepts in the corporate organizations as the way to create value and synergy in the organization. It has been implemented in the organization's strategic planning and become significant in maintaining its sustainability. The intention of this paper is to introduce the concept of corporate real estate (CRE) in the management of universities in Malaysia as CRE has never being implemented. Besides that, balanced scorecard (BSC) will be adopted as the performance measurement tool. The idea of combining these three areas came from the corporatization of a few public universities and the existence of private universities in this country.

Both CRE and BSC are concerned on strengthening the fundamental factors in organization and to add value in such ways that the organizations are unable to see or discern. The concept of CRE is not to change the current system, but to equip the system. Meanwhile the BSC as the performance measurement system is to complement the adopted measurement system. This concept probably might not answer all the issues faced by the higher institutions, but at least, it could initiate a focus on managing the real estate towards bringing in added value and profitability to the organization in some ways.

In Malaysia, universities are very dependent on the availability of the physical infrastructure in the form of buildings such as classroom, laboratory, hostel, administration block etc. for their academic activities. Because of this, all facilities should support the core activities in the universities, and the property manager should know how to match the university's goals with the required physical settings. The usual issues faced by Malaysian universities are the inadequacies of space due to large number of occupants, thus leading to problems which relate to the occupancy issues, which falls under CRE concern. The

problem can be bigger when the universities do not have a proper planning on the accommodation because occupancy on property and available facilities should be tailored to meet the function, location, time and potential future direction (Langston & Kristensen, 2002).

## 2. Aims of the Study

This study aims to give value-added to the university through the concept of Corporate Real Estate (CRE), and the objective is to develop the Balanced Scorecard (BSC) dimension as performance measurement of Corporate Real Estate (CRE) practice for the universities in Malaysia.

## 3. Literature Review

### 3.1 Corporate Real Estate (CRE)

Silverman (1987) has defined the CRE as the land and buildings owned by companies which are not primarily in the real estate business. The additional element of ‘not-primarily in the real estate business’ has become the main criteria here for the property to be regarded as the CRE. It can be further explained as property assets (property portfolio) owned, leased or used by one organization or company which do not directly involve in the property line activities, but use them as platform for the purpose of business activities which in return can give value added and revenue growth.

Fisher (2009) has emphasized that CRE is a strategic player that is tied by two main objectives which can be briefly described as the value management and service delivery. The idea of this concept is to create awareness on how the real estate is important as a platform for any organization to operate and how the organization can strategically use its real estate, in return giving the organization the value added.

Among the studies that highlighted the influence of CRE towards the organization performance such as presented below in the Table 1.

**Table 1: The CRE value added into organization**

As introduced by Nourse and Roulac (1993)	As stated by De Jonge (1996) in Krumm and Vries (2003)	As from Lindholm and Leväinen (2006)	Added values as ranked in Georg Stadlhofer (2010)
○ Occupancy cost minimization	○ Increasing productivity	○ Reduce cost	○ Reduce cost
○ Flexibility	○ Cost reduction	○ Increase flexibility	○ Change the culture
○ Promote Human Resource Objectives	○ Risk control	○ Increase productivity	○ Increase flexibility
○ Promote Marketing Message	○ Increase of value	○ Increase employee / internal client satisfaction	○ Control risk
○ Promote Sales and Selling Process	○ Increase of flexibility	○ Increase innovations	○ Increase of value
○ Facilitate and Control Production, Operation, Service Delivery	○ Changing the culture	○ Promote marketing and sales	○ Increasing productivity
○ Facilitate Managerial Process and Knowledge Work	○ PR and marketing	○ Increase value of assets	○ Support public relations and marketing
○ Capture the Real Estate Value Creation		○ Effectiveness in corporate strategic process	

Through the application of CRE, the organization can be driven toward its mission because CRE will facilitate their core business. It can also promote the optimization of CRE resources, support the direct

input to the overall corporate strategic planning process, as well as improving communication of CRE objectives between the lower and top management. CRE also functions as one of the strategic devices to control the organization's strategic planning while also increasing the flexibility in the property occupancy through the effectiveness and efficiency of the management.

### **3.2 Higher Education in Malaysia**

The route of universities in Malaysia is not very long and has only a few number of remarkable histories which are not as prolific as the other prominent universities in the world, however it has marked a few major revolutions which has changed the tertiary education of the country as a whole. Starting from the traditional teaching institution in its early days, the university has evolved or involved into the skill based-university, corporatized university, and now into the research-intensive universities. This brings new dimension for Malaysian universities (Karim, 2008). The recent full autonomy in university's administration is among the measures taken by the government to promote a dynamic education system.

The amendments in Universities and Universities College Act 1971 in 1996 allowed public universities to be corporatized. This accompanied the initiative to privatize the higher education (Kaur, 2007). Consequently, university business models in the country have changed while complexity has increased in accordance with the evolution of university corporatization and privatization. According to Abdullah and Othman (2008), university business models evolved, where as the period before the 1990's was exclusively focused on the education and research. Meanwhile the post 1990's period saw the public universities expand into consultancy and franchising their educational programs to local private colleges. Starting in the year 2000, many public universities have set up university owned corporations to contend and get a better grip in the consultancy market while also producing and marketing the inventions of their research products.

The evolution of the university's business model then become an opportunity for corporate real estate to expand into the organization where university somehow need to adopt corporate culture because the bottom line is to produce high quality academic outcomes. Corporate real estate would enhance the strategic process, planning, control and also increase the efficiency of the property or facilities usage in contributing to the core university activities as well as the business activities. From these, the quality of education is expected can be improved together with a better image development for the university itself. These are the value added that the university would received from the application of the CRE thus make the university appreciate their properties.

### **3.3 Balanced Scorecard as measurement tool**

Since it was introduced by Norton and Kaplan in 1992, Balanced Scorecard has become popular in business organization because it can function as a performance measurement and also transform strategy into effective management (Chen *et. al.*, 2006). The evolution of BSC started as the original performance measurement tool, then become a possible instrument to implement strategies. Currently it is a framework for determining the alignment of an organization's, information, and organization capital with its strategies (Kaplan & Norton, 1992, 1996; Halachmi, 2005).

BSC has been regarded as a multidimensional performance measurement which does not focus only on financial aspects but also non-financial measures and more effective in management aspects (Atkinson, 2006). Previously, financial measurements were suitable to measure the tangible assets which used to produce revenue and profit, but for today's organizations, the intangible assets are more influential for the organization. They needed a tool to describe knowledge-based assets and the value-creating strategies (Kaplan & Norton, 2001). The idea of Balanced Scorecard is to improve the traditional performance measurement system using the financial statement performance which is found to have some weaknesses in ability to measure the non-financial factors in the organization. Basically the main improvement here is to provide measurement tools for these non-financial factors and convert them into a strategic

management system for the organization. This will give benefits to the organizations because they have a better option in evaluating their performance rather than to use solely the financial view. In general, balanced scorecard can provide a framework for the organization to overcome three key issues: effective organizational performance measurement, the rise of intangible assets, and the challenge of implementing strategy (Niven, 2006).

The original balanced scorecard has four main perspectives to measure organization performance. Even these perspectives were tailored to the business organization environment, but there is no restriction for other organizations to implement it. Balanced scorecard is flexible to be used and can be aligned to meet the specific organizations' mission and vision. The original perspectives can be changed, added or simplified according on the suitability of the organization.

#### 4. Methodology

In this study, three public universities and three private universities have been selected, seeking information for the current property management situation. The universities were coded as University Alpha (UA), University Bravo (UB), University Charlie (UC), University Delta (UD), University Echo (UE) and University Foxtrot (UF). All these universities have different backgrounds and characteristics so that the results would be more dynamic.

This research is implementing the convenience sampling due to the reason that the population in university is very big and almost impossible to use any of the probabilistic sampling techniques as it requires for a comprehensive list of the population. Besides that, this research has limitation in approaching all the population and admittance to all areas or departments in university. The selection of this technique has been supported by Awang (2010) who noted that convenience sampling is suitable for exploratory research as it generates ideas on certain phenomena, insights into certain problem, to develop hypothesis, to pre-test questionnaires, and to conduct pilot studies.

For the scoring process, each of the BSC perspective can have a minimum score of 0 and maximum score of 10. The rate is given by the occupants through the respondents. For the score of 0, it is only referring to situation where the attribute asked in the question is not available in that particular university, so the minimal score that the respondents can give is 1 if the attribute is available in the university. Basically, a higher score is referring to a better condition and lower score is for lower condition. The relationship between the score given and the condition or physical state of the university is in a positive relationship. For this study, the score is set to be as in the table 2 below:-

**Table 2: The BSC scale to score the CRE performance in university for this study**

Indicator	Score	Criteria
Very Poor	0 - 1	Not available or very minimum
Poor	2 - 3	Available, but not good or just exist
Moderate	4 - 6	Moderate score
Good	7 - 8	Good, close to the objectives
Excellent	9 - 10	Excellent, situation close to perfect or perfect

Using the scores above, the occupants which including the students, lecturers, staffs or any other occupants in the university can rate their university according to the attribute asked in the questionnaire.

The adopted BSC framework for CREM measurement in university is presented in the Table 3 below.

**Table 3: The framework to measure the CREM in university**

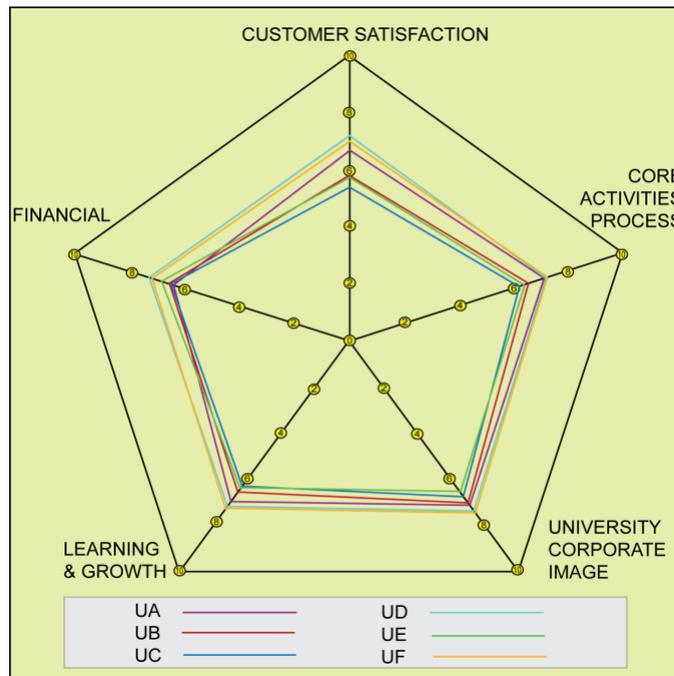
Perspectives	Measures
<b>Customer Satisfaction</b> – including student, lecturers, staff, visitors, alumni, parents and corporation	<ul style="list-style-type: none"> <li>• The layout of the university</li> <li>• The comprehensiveness of the building and facilities</li> <li>• Flexibility of the building and facilities</li> <li>• Ability to cater the number of occupants</li> <li>• Comfort level</li> <li>• Practicality of the building and facilities</li> <li>• Safety and health aspect in buildings and facilities</li> <li>• Facilities for disable</li> </ul>
<b>Core Activities Process</b> – learning, lecturing, research program, student activities, co-curricular etc.	<ul style="list-style-type: none"> <li>• Education activities</li> <li>• Research activities</li> <li>• Student activities</li> <li>• Co-curriculum activities</li> </ul>
<b>University Corporate Image</b> – focus on relation of university corporate activities and available buildings or facilities	<ul style="list-style-type: none"> <li>• in the form of the portrayed corporate image</li> <li>• the visibility of the corporate landmark</li> <li>• corporate environment or atmosphere in university</li> <li>• supporting level to the corporate practice</li> <li>• existence of the university in catalysing the growth of surround developments</li> </ul>
<b>The Learning and Growth</b> – to see how far the building and facilities enhance the process of learning and growth	<ul style="list-style-type: none"> <li>• The ability of the building or facilities to function as a catalyst for learning and growth perspective (comprehensive, conducive, suitable, motivating environment etc.)</li> <li>• The ability of the buildings and facilities to support the research and development activities</li> </ul>
<b>The financial</b>	<ul style="list-style-type: none"> <li>• The budget received in relative to the needs of buildings and facilities</li> <li>• Improvement on cost control</li> <li>• Increment of income generation from the building and facilities</li> </ul>

The questionnaire was set to cover all the perspectives and touching almost all the important aspects in the physical set up of the university. The occupants were required to rate each of the attributes in the questionnaire based on their experience or opinion. Through this, the occupants are able to be involved in the improvement process by giving input to university. Meanwhile the university can regard this as a self evaluation process, in the name of improvement.

### 5. Analysis on the CRE Performance in Universities

Performance measurement is usually conducted specifically for one organization. Meanwhile benchmarking is a process of comparing one organization with other organizations which are considered as the best in its class. From the result, the university itself can figure out where the university is lacking and search for solutions to improve its current state of performance. The idea is to collect information on both the current state of property and feedbacks from occupants. Occupants should be encouraged to participate and communicate their experience occupying the properties in university. So, this approach can at the same time promoting the communication within the organization.

Referring to the BSC dimension in figure 2 below, the performances for all six studied universities were balanced. However they only managed to get a score within moderate and good range. There was no university able to reach the excellent level. According to the study, the best performer was University Foxtrot (UF) which managed to be at the best position for most of the perspectives. Second best university was University Delta (UD) which closely tailed the UF trail. University Charlie (UC) was at the last spot among studied universities as it unable to get good scores compared to other universities.



**Figure 2: The BSC Dimension for CRE performance in universities**

**Table 4: CRE performance scores for universities**

University	Customer Satisfaction	Core Activities Process	Universities' Corporate Image	Learning and Growth	Financial
<b>Alpha</b>	6.5873	7.1519	7.0810	7.2722	6.2964
<b>Bravo</b>	5.8836	6.4395	6.5895	6.7000	6.5289
<b>Charlie</b>	5.6470	6.0774	6.4673	6.2216	6.5152
<b>Delta</b>	7.2194	7.3674	7.4909	7.4167	7.6627
<b>Echo</b>	5.8119	6.1667	6.3429	6.3644	6.9628
<b>Foxtrot</b>	6.9979	7.3803	7.6426	7.6489	7.6268

The scores above indicate the current performance of the property according to the occupants' experience. The above balanced scorecard was arranged according to the perspectives set for the above mentioned framework. Even though the studied universities did not have a proper CRE practice, the results above would give some indications for the current performance while highlighting the area that they should focus on more.

At the moment, there is no proper indicator showing the best CRE practice for universities because in the normal practice, CRE is formulated according to one organization and would not suitable to be compared with other organizations. This is due to the heterogeneity characteristic own by the organization and its properties. But, if there is a possibility that these universities can be ranked out by using the above results, the ranking process can be done by taking the average of each perspective from each university. The figure from there can determine the position for all studied universities. So, according to the average of the results from each university, the performances of the studied universities are ranked as in the table 5 below.

**Table 5: The position of the studied universities according to CRE performance**

Position No.	Universities	Average Score
1	Foxtrot (UF)	7.4593
2	Delta (UD)	7.4314
3	Alpha (UA)	6.8778
4	Bravo (UB)	6.4283
5	Echo (UE)	6.3297
6	Charlie (UC)	6.1857

Table 5 shows that University Foxtrot is shown to be the best among the studied universities in performing CRE at the average score of 7.4593. It is followed closely by University Delta at the average score of 7.4314. Performance of both universities can be regarded as almost similar and the score of each perspective in these two universities generally were classified as good which is close to the objectives. Meaning, these two universities have provided good physical set up and meet the needs and requirements of the occupants and the university itself. University Foxtrot and University Delta just need to give some improvements as a way to push the score a little more. The scores for each perspective were generally balanced and did not require major changes except to improve them all. Other universities were performed differently as indicated by the score. The scores were weighted by the universities real estate performance and other influential characteristics which considered as unique to the university itself.

## 6. Conclusion

In conclusion, the objective to develop the CRE performance measurement system using the balanced scorecard approach in university has been achieved through the development of this measurement method. Even though the universities in Malaysia at the moment do not practice CRE in their organization, these universities were assumed as having already practiced CRE in the university for the purpose of this study

CRE is really concern on putting the real estate decisions in the organization strategic planning. So through this approach, the university would able to integrate the important factors in managing its properties for the benefits of the occupants and organization.

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