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The Bridge of Corporate Real Estate Sustainable Management

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Abstract

The emergence of corporations dabbling in sustainable real estate investment hascaused a shift in corporate real estate management field from the conventional way of managing a property to a more systematic approach involving high technology. This is due to the need for sustainable buildings to comply with certain requirements in order to maintain their green certification while at the same time improving their business performance. Many discussions mentioned that sustainable buildings are capable of improving business performance. However, most of these discussions did not specify which element of sustainable buildings significantly contributed to business performance and business goals. This research attempts to discover the relationship between sustainable corporate real estate and corporate sustainability in order to determine the most significant element of sustainable real estate influencing overall business performance. A sustainable triple bottom line theory was used as a guide. A questionnaire survey was carried out involving 100 combinations of corporate real estate managers, property managers, facility managers, operation managers, building managers, and financial managers that are directly involved in managing green corporate real estate. Data was then analysed using Smart PLS. Results indicate six elements of sustainable corporate real estate that significantly affect business performance. They are energy management, workspace management, internal green management, management, human satisfaction management and workplace management.

Keywords: Corporate Real Estate Sustainable Management, Corporate Sustainable Objective, Relationship, Structural Equation Modeling

Introduction

Recently, most corporations and business entitiesembed sustainable concepts in their overall business operations including to their corporate visions and missions, organizational

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management styles, production processes, delivery systems, and many more. Corporations are also involved in sustainable real estate investments and some added that as one of their investment portfolios. This is due to the speeded spread of knowledge on benefit of sustainable real estate to the business performance. When involving sustainable real estate investment, a corporation directly has been linking to the sustainable corporate real estate management operation in order to well manage and maintain the properties. Questions arise, which element that should be look on in order to ensure business success? And which elements are significantly related to the corporation goals? In conjunction with that, this research aimed to discover the relationship between sustainable corporate real estate and corporate sustainability in order to determine the most significant element of sustainable corporate real estate that will influence overall business performance. This will help management to more focus on those particular important elements and assist them to make any adjustment for improvement in the future.

Corporate Real Estate Sustainable Management (CRESM)

Corporate real estate sustainable management (CRESM) is a term that was developed to bridge sustainable corporate real estate management and corporate sustainability. CRESM is apractice of corporate real estate management that embedssustainable triple bottom line principle of environmental, social and economic (Fauzi, Zainuddin, Noraini, Mohd Ali, & Nawawi, 2016). Some use sustainable CREM term (Ziemba, Ramian, & Kania 2015). This is due to more sustainable practices linked to John Elkington's (1994) principle of sustainable triple bottom line that encompasses economic, environmental and social sustainable objectives(Collins, Junghans, & Haugen, 2018). Fauzi et al. (2016) argued that economic sustainability is the common element, which normally relates to the financial results of the corporation. Meanwhile the environmental element, also known as the ecological dimension thatmaintains or improves the integrity of the life supporting systems on earth, maximizes future options for the current as well as future generations. The third principle ofsocial elements ismore concerned on the impact of the organization towards labor, human rights and the society.

Corporate Sustainability (CS)

Corporate sustainability (CS) represents the organization's willingness to involve in environmental programmed toengage with both internal and external sustainable factors (Janda, Bright, Patrick, Sara, & Dixon, 2016). It includes factor or regulation, economic and social for external factors while for internal factors include management style, organizational style, organizational culture and organizational structure(Janda et al., 2016). This is due to the pressing task of all sectors towards decarbonisation (Cass, 2018). Fauzi et al (2019a)augmented that sustainability is the current trend adopted in management, where more businesses embed sustainable concerns in their management practices. Not only that, the emergence of knowledge by the corporations on the benefits that they will receive by going sustainable has also encouraged them to be involved (Fauzi, et al., 2017). Hopkins, Read, & Goss (2017)supported that in order to encourage businesses to be involved in sustainable practices they need to see evidence of capital improvement especially on the benefits and advantages that they will receive. Chang & Devine(2019) concurred as they found that such business investments must be economically sound to encourage a commitment to environmental sensitivity. Epstein & Roy, (2001) advised that in managing CR,

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the examination of the impact towards social and environmental initiatives are required especially on business profitability.

Much benefit received from CS has been discussed such as improving environmental and social performances including the costs and revenues of the business (Hopkins et al., 2017). As postulated by Osgood (2010), sustainable practice is a strategy that can develop organizational outcome of revenue growth and cost saving. Epstein & Roy(2001) added that, CS would enhance the company's public image and increase their market share. Meanwhile, Cass (2018) found that CS is well in pursuit of a stable ROI whereasOlaleye, Ayodele, & Komolafe (2015) found that CS encourage more energy conservation. This angle was earlier reported by Laposa & Villupuram (2010) that CS not only promotes energy saving but also reduces maintenance cost, encourages high occupant satisfaction, and reduces CO2 emission. Looking at the economic perspective Hopkins et al (2017) found that CS is able to improve their environmental social performance, increase revenue and reduce cost. Mansfield (2009) and Amprinidi & Ringland (2006) also found that competent sustainable practices reduce cost. While Cass (2018) stated that sustainable practices provide financial advantages, improve productivity, improve internal environment, reduce energy costs, provide value for money, and control indoor climate. On a similar note, Christensen, Baldwin, & Ellis (2012) iterate that sustainability can increase productivity thus leading to the revenue results for the corporation. Chang & Devine (2019) added that sustainable practices are associated with the economic impact onthree categories namely real estate, consumers and business. However when looking from a purely economic view, economics is defined as a target concept related to performance targets (procurement, inventory, production, sales), financial targets (liquidity, investment, financing), and success targets (turnover, earnings, profitability) (Glatte, 2012). Recently, Fauzi et. al (2019b) found that several benefits of sustainable practices associated with economics such as maximizing value (value of real estate, image value of the corporation, increased productivity, increased rental rate, increased profitability of the business, increased service provided by the business, marketing strategies benefits, and increased innovation). Additional economic benefit is minimizing costs, which include reduced management, operational, renovation and replacement costs.

Not only that, Chang & Devine (2019) found that CS enables mitigating impact to the environment. This is somewhat similar to what was found by Fauzi, Zainuddin, Chuweni, et al. (2019b) where sustainability contributes to reduced emission of hazardous gas, improves sustainable concern, encourages use of natural resources, and increases innovation to the business. While Hopkins et al. (2017) found that the benefits of CS towards societyis interpreted through employee satisfaction and customer satisfaction that directly impacts corporate profitability. In addition, sustainability also benefits occupants' health, and improve employees' life quality thus boosting their satisfaction level. Besides that, it is on record that sustainable practices are able to increase staff skills and reduce turnover problems (Fauzi et al., 2019b).

Sustainable Corporate Real Estate Management

According to Sinke (2015), sustainable real estate management combines theories concerning corporate real estate performance management and sustainability. Almost similar to that, Ziemba et al.(2015); Fauzi et al. (2016) reiterated that it is a combination of corporate real estate management practices that embed sustainable triple bottom line principles of environmental, social and economic principles. Ziemba et al (2015) recommended that the CRE need to holistically involve several CRE-related concepts such as FM (facility

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management), REAM (real estate asset management), REPM (real estate portfolio management), PM (process management), SD (sustainable development), CSR, RPI (responsible property investment), and ESG (environmental, social, governance). In general, Fauzi, Zainuddin, Chuweni, Johari, & Nawawi (2018) found six imperative elements of green office management including energy efficiency, water efficiency, indoor environmental quality, sustainable site planning, and management and innovation. Apartfrom that, two significant elements were found namely energy saving and water saving elements. Sustainable corporate real estate from the Islamic viewpoint also recorded almost similar results such as sustainable practice, sustainable utilization of water, organizational management and good governance, human satisfaction (employees, occupants, customer), environmental protection, waste generation, energy management innovation, and workspace management (Fauzi et al., 2019c).

Research Method

This research adopts the questionnaire survey as the best method to collect data in order to generalize the results. The purposive sample method involved more than 100 respondents who are directly involved in managing sustainable corporate real estate in Malaysia including corporate real estate managers, property managers, facility managers, operation managers, building managers, and financial managers. The number of samples chosen refers to the G-power software. The sustainable buildings selected were buildings owned or leased by the corporation as per the definition of CRE certified with the Malaysian Green Building Index (GBI). Data collected was then analysed using structural equation modelling (SEM-PLS). The resulting relationship and the significant elementsare as highlighted in Table 1.

Findings and Conclusion

Table 1
The Relationship of CRESM

DE: 47:01:01	STAND-D		P-VALUE	BCILL	BCIUL	F2	VIF	ADJ R2	-	RESULT
RELATIONSHIP	BETA	>1.645	<0.05				<5	=>0.10)>0	
ENM -> ENV	0.380	3.750	0.000	0.210	0.540	0.100	2.890	0.49	0.25	YES
INN -> ENV	0.280	1.652	0.050	0.030	0.530	0.180	2.620			YES
IGM -> ENV	0.090	0.420	0.340	-0.330	0.360	0.000	4.210			NO
WAS -> ENV	-0.030	0.180	0.430	-0.260	0.330	0.000	3.780			NO
WAT -> ENV	0.140	1.350	0.090	-0.030	0.300	0.020	2.330			NO
WPM-> ENV	-0.020	0.130	0.450	-0.260	0.260	0.000	2.060			NO
HSM -> SOC	0.430	2.560	0.010	0.080	0.650	0.120	3.520	0.55	0.32	YES
INN -> SOC	0.320	2.660	0.000	0.100	0.480	0.100	2.400			YES
IGM -> SOC	0.230	1.490	0.070	-0.030	0.440	0.030	4.660			NO
WPM-> SOC	0.270	2.090	0.020	0.080	0.480	0.070	2.390			YES
WSP -> SOC	-0.470	3.640	0.000	-0.740	-0.300	0.120	4.300			YES
HSM ->										
ECOMAX	0.310	2.120	0.020	0.080	0.530	0.060	3.120	0.51	0.23	YES
INN ->										
ECOMAX	0.150	1.650	0.050	0.000	0.320	0.020	2.330			YES
OGM ->	•									
ECOMAX	-0.120	1.430	0.080	-0.310	-0.020	0.020	2.060			NO

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WPM ->									
ECOMAX	0.430	3.240	0.000	0.200	0.630	0.1902.060			YES
ENM ->									
ECOMIN	-0.350	1.790	0.040	-0.580	-0.040	0.0702.490	0.24	0.12	YES
INN-> ECOMIN	0.160	1.090	0.140	-0.080	0.390	0.0202.210			NO
IGM ->									
ECOMIN	0.660	4.130	0.000	0.360	0.880	0.1803.240			YES
WAT ->	•								
ECOMIN	-0.170	1.040	0.150	-0.450	0.090	0.0202.240			NO

Notes: ENM-Energy Management, HSM-Human Satisfaction Management, INN-Innovation, IGM- Internal Green Management, OGM-Organization Management, WAM-Waste Management, WTM-Water Management, WPM-Workplace Management, WSM-Workspace Management, ECOMAX- Economic Value Maximization, ECOMIN- Economic Cost Minimization, ENV-Environment, SOC Social

Results indicate six elements of sustainable corporate real estate that significantly affect a business' goals respectively including environmental (energy management, innovation management) social (human satisfaction management, innovation management, workplace management, workspace management), and lastly economic (human satisfaction management, innovation management, workplace management, energy management, internal green management), which are as per being highlighted in Table 1.

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References

Cass, N. (2018). Energy-related standards and UK speculative office development. *Building Research & Information*, 46(6), 615–635.

http://doi.org/10.1080/09613218.2017.1333351

Chang, Q., & Devine, A. (2019). Environmentally-certified space and retail revenues: A study of US. *Journal of Cleaner Production*, *211*, 1586–1599.

http://doi.org/10.1016/j.jclepro.2018.11.266

Christensen, P., Baldwin, E., & Ellis, C. (2012). Key strategies of sustainable real estate decision-making in the United States: A Delphi study of the stakeholders. ProQuest Dissertations and Theses. Clemson University. Retrieved from

http://search.proguest.com/docview/1287056962?accountid=41453

Collins, D., Junghans, A., & Haugen, T. (2018). Green leasing in commercial real estate: The drivers and barriers for owners and tenants of sustainable office buildings. *Journal of Corporate Real Estate*, 20(4), 244–259. http://doi.org/10.1108/JCRE-01-2017-0003

Epstein, M. J., & Roy, M.-J. (2001). Sustainability in Action: Identifying and Measuring the Key Performance Drivers. *Long Rannge Planning*, *34*, 585–604.

Fauzi, N. S., Zainuddin, A., Chuweni, N. N., Johari, N., & Nawawi, A. H. (2018). The office building and its GreenCRE management's imperative elements. In *5th International*

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- Conference on Science and Social Research 2018 (CSSR2018) (pp. 1-9).
- Fauzi, N. S., Zainuddin, A., Chuweni, N. N., Johari, N., & Nawawi, A. H. (2019a). An Investigation into Islamic Corporate Real Estate Sustainable Management (i-CRESM) Practice. In International Conference on Entrepreneurship, Management, Education, Social Science and Technology (ICEMEST2019).
- Fauzi, N. S., Zainuddin, A., Chuweni, N. N., Johari, N., & Nawawi, A. H. (2019b). Business goals towards sustainable corporate real estate. *Malaysian Journal of Sustainable Environment*.
- Fauzi, N. S., Zainuddin, A., Chuweni, N. N., Johari, N., & Nawawi, A. H. (2019c). Review on Islamic corporate real estate sustainable management (i-CRESM) practice. In *International Conference on Islamic Research in Management, Education, Social Science and Technology (ICIRMEST 2019)* (pp. 1–6).
- Fauzi, N. S., Zainuddin, A., Nawawi, A. H., & Johari, N. (2017). The green building concept: is that a trend. *Journal of Academic Research and Social Sciences*, 7(11), 1440–1448. http://doi.org/10.6007/IJARBSS/v7-i11/3582
- Fauzi, N. S., Zainuddin, A., Johari, N., Ali, M. S. N., & Nawawi, A. H. (2016). A preliminary framework for corporate real estate sustainable management. *International Building Conference Control*, 00062. http://doi.org/10.1051/matecconf/20166600062
- Glatte, T. (2012). The Importance of Corporate Real Estate Management in Overall Corporate Strategies.
- Hopkins, E. A., Read, D. C., & Goss, R. C. (2017). Promoting sustainability in the United States multifamily property management industry. *Journal of Housing and the Built Environment*, 32(2), 361–376. http://doi.org/10.1007/s10901-016-9516-3
- Janda, K. B., Bright, S., Patrick, J., Sara, W., & Dixon, T. J. (2016). The evolution of green leases: towards inter-organizational environmental governance The evolution of green leases: towards inter-organizational environmental governance. *Building Research & Information*, 44(5–6), 660–674. http://doi.org/10.1080/09613218.2016.1142811
- Lamprinidi, S., & Ringland, L. (2006). A Snapshot of Sustainability Reporting in the Construction and Real Estate Sector. GRI Research and Development Series Publication (Vol. Third Gene).
- Laposa, S. P., & Villupuram, S. (2010). Corporate real estate and corporate sustainability reporting: an examination and critique of current standards. *Journal of Sustainable Real Estate*, *2*(1), 23–49.
- Mansfield, J. R. (2009). The valuation of sustainable freehold property: a CRE perspective. *Journal of Corporate Real Estate*, 11(2), 91–105. http://doi.org/10.1108/14630010910963133
- Olaleye, A., Ayodele, T., & Komolafe, M. (2015). The Relevance of Green Building Practice in Emerging Markets: A Perceptual Analysis of Commercial and Industrial Building Users in Ibadan,. *Journal of Sustainable Real Estate*, 7(1), 1–19.
- Robert, T., Osgood, J. (2010). The Strategy Alignment Model: Defining Real Estate Strategies in the Context of Organizational Outcomes. *Site Selection Magazine*, (January 2002).
- Sinke, G. T. D. (2015). Corporate real estate sustainability management a strategic management framework for implementing a sustainable corporate real estate strategy. Eindhoven University of Technology.
- Ziemba, E., Ramian, T., & Kania, K. (2015). The Concept of a Sustainable Approach to Corporate Real Estate Management. *Real Estate Management and Valuation*, *23*(4), 85–94.