



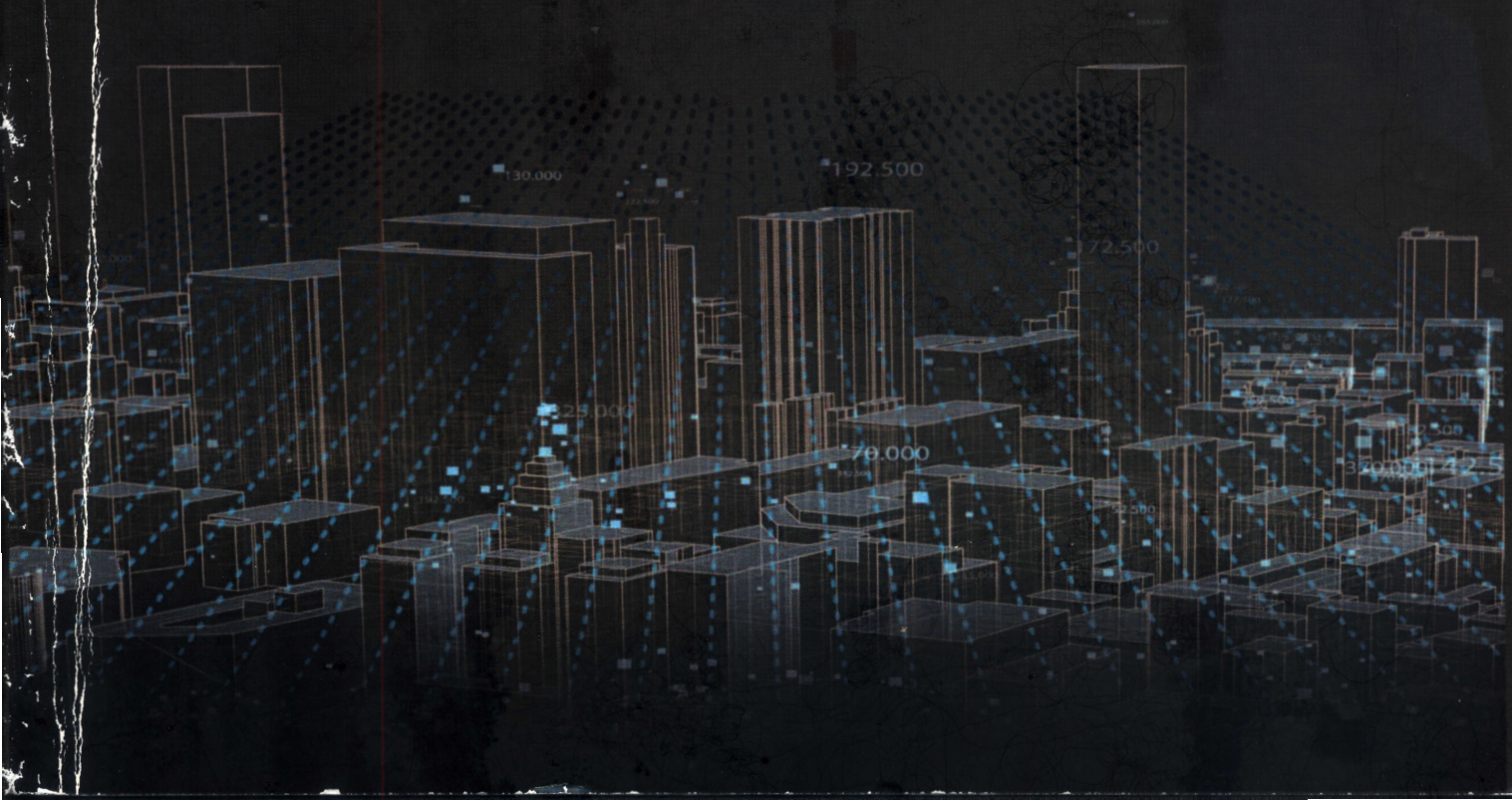
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PROCEEDING
PROPERTY TALK 2021
INDUSTRIAL REVOLUTION 4.0 IN MALAYSIAN PROPERTY



PROPERTY TALK 2021: INDUSTRIAL REVOLUTION 4.0 IN MALAYSIA PROPERTY

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INVESTIGATING THE EMPIRICAL RELATIONSHIP OF CORPORATE REAL ESTATE SUSTAINABLE MANAGEMENT WITH CORPORATE ENVIRONMENTAL SUSTAINABLE OBJECTIVES

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Abstract

Businesses are now obligated to measure environmental impact against their financial impact. Besides focusing on the corporate objectives of maximising value and reducing risks, they now need to ensure that their corporate environmental sustainable objectives are achieved. Previous research reveals a lack of discussions on corporate real estate sustainable management (CRESM) especially those matters linked with corporate environmental sustainable objectives. Therefore, this research was conducted to identify the relationship between them to fill the gap. Previous research was reviewed and analysed using content analysis and metric analysis. Thus, six relationships were identified. These findings could facilitate further investigation into the related fields to encourage more corporations to be involved with sustainability. They could also guide the management to efficiently manage their sustainable corporate real estate.

Keywords: Corporate Real Estate Sustainable Management, Corporate Sustainable Objectives, Relationship

1.0 INTRODUCTION

The concern about the relationship of sustainable issues in corporate real estate management (CREM) strategies with the environment only began in 2012 through a research conducted by Gibler & Lindholm (2012). Consequently, numerous research also discuss about CRESM. Conversely, these discussions are broad-ranging and not relating to CRESM with the corporate environmental sustainability objectives. Hence, this research is required in order to identify as much as possible about the pertinent relationship between CRESM elements and corporate environmental sustainability objectives. This is crucial in guiding the management to manage their sustainable corporate real estate efficiently while at the same time contributing towards achieving the corporate environmental sustainable objectives.

2.0 LITERATURE REVIEW

CRE is defined as corporate assets owned or leased by non-real estate companies including developers' properties in which the properties are used for investment purposes and

not as stock for trade. CRE also involves properties owned by government bodies especially by profit-oriented agencies (Fauzi et al., 2020). CRESM is known as sustainable CREM (Ziemba et al., 2015) and CRE sustainability management (Lützkendorf & Lorenz, 2014). CRESM is the combining theories concerning corporate real estate management and sustainability (Sinke, 2015) that aim to enhance and sustain the concept of real estate and sustainability.

3.0 RESEARCH METHODOLOGY

This research adopts content analysis as the best method to review all the existing previous research on CRESM and corporate environmental sustainable objectives. More than fifty journals and articles were reviewed and analysed using matrix analysis.

4.0 RESULTS AND DISCUSSIONS ON THE RELATIONSHIP OF CRESM WITH CORPORATE ENVIRONMENTAL SUSTAINABLE OBJECTIVES

Sustainability has become a strategic imperative for all businesses (Oyewole & Komolafe, 2018). Corporate environmental sustainability objectives reflect the primary concern of corporations, as well as organisations involved in sustainability. This is mainly due to the intent to preserve the natural environmental resources and to reduce the global warming impact on the world.

4.1 Energy Management ->the Environment

Kamaruzzamana et al. (2020) and Mikulic, et al. (2010). found that energy contributes a significant impact on the environment. Omer (2014) reported that cutting down on energy consumption and efficiently used on energy, reduces the rate of decreasing world energy reserves, reduces pollution and reduce hazardous gas emission in the environment. His findings are supported by Shurrab et al. (2019), and Støre-Valen and Buser (2019), who discovered the same finding. Ajayi et al. (2019), Chang and Devine (2019), and Ilhan and Banu Yobas (2019) concurred that energy efficiency implementation lessens the impact on the environment, while creating local and global environmental benefits (Omer, 2014). Further, Omer (2014) who found that exploration of new renewable energy or green energy in the building development industry will contribute significantly to less dependency on non-renewable energy. Supported by Kranzberg (2012), when he comparing to fossil and nuclear sources of energy. Roper (2009) alludes that the use of natural resources is capable of reducing energy consumption and improving environmental quality.

4.2 Innovation Management ->the Environment

Kamaruzzamana et al. (2020) and Attiya, Shebl, and Nasser (2020) declare that innovation is able to provide environmental benefits and contributes a positive impact on the environment (Pandey, 2016), Kneipp, Gomes, Bichueti, Frizzo, and Perlin (2019) found that technological innovations with emphasis on renewable energy and natural processes lessen environmental impacts. They also preserve limited non-renewable resources and improve current production systems, and the natural environment. This is consistent with Alsharif and Tong (2019), who mentioned that product innovation and new technologies contribute to positive environmental sustainability. Puķīte and Geipele (2017) further report that recent innovations in ICT reduce the use of paper thus directly reducing tree felling.

4.3 Internal Green Management ->the Environment

The internal green management was found to contribute positively towards the environmental sustainability objectives (Byrd, 2017; Gui & Gou, 2020; Kamaruzzaman et al., 2020). The use of green materials in the building is generally found to be a good practice for sustainable buildings as they result in lower use of natural resources, as shared by Amr (2017). Renewable materials have a low or even negative carbon effect. Thus, the use of sustainable renewable materials in all parts of the human presence is seen as the best approach to upgrade the utilisation of assets and diminish the ecological impact related to human activities. Sustainable materials also cause lower emissions and lower environmental impact (Amr, 2017; Isa et al., 2013; Pramanik et al., 2019).

4.4 Waste Management ->the Environment

Amr (2017) found that waste production and recycling are the core environmental aspects of sustainable development. Waste management is identified as an element that preserves resources (Aghili & Mohammed, 2017). Waste management is able to contribute positively to the environment (Aman, 2014; Tonini et al., 2018) as it is also listed as an element of environmental performance measurement (Gui & Gou, 2020). Sinke (2015) concludes that waste management is an indicator to support a sustainable environment. Sustainable buildings are able to reduce waste more significantly (Aghili, Hakim, & Sheau-Ting, 2016; Aghili & Mohammed, 2017; Kanika et al., 2016; Lu et al., 2020; Pramanik et al., 2019; Sinke, 2015; Valencia-Palomo et al., 2019). Sinke, (2015) proposes a reduction of approximately 70% of waste.

4.5 Water Management ->the Environment

Water as one of the elements that garners environmental benefits and can be used to measure environmental performance (Abdul Aziz & Mohd Adnan, 2003; Aghili & Mohammed, 2017; Alsadi et al., 2019; Aman, 2014; Balramdas et al., 2016; Khan et al., 2019; McNeill, 2020; Misra et al., 2016; Shareena et al., 2013; Sinke, 2015; Zian et al., 2019). The use of rainwater harvesting systems solves water scarcity problems while preserving freshwater resources available for the future generations (Yusop & Syafiuddin, 2018). The demand for domestic water consumption from several parts of the building can then be reduced. Rainwater harvesting also effectively tackles rainwater run-off issues such as flash flooding (Wani & Mushtaq, 2018). Moreover, the use of water-saving fittings and potable water systems, are passive ways to economise water usage in sustainable buildings (Attiya et al., 2020; McNeill, 2020). The use of grey or green water also minimises freshwater use (Balramdas et al., 2016; Shafiei et al., 2017) and contributes to improved environmental quality (Attiya et al., 2020; Sinke, 2015).

4.6 Workplace management ->the Environment

Workplace management is a novel idea to provide a positive impact towards environmental performance (Hopkins et al., 2017; Levy & Peterson, 2013). Wani and Mushtaq (2018) share several physical features that contribute to a positive impact on the environment including the locations of certain amenities, such as being close to jobs, schools, shops and services, and reducing the amount of time that commuters have to spend in their cars. Kosonen, Kim, (2017) place emphasis on physical infrastructure and technical facilities as being able to facilitate positive environmental impact.

The above review reveals the relationships between the 6 elements of CRESM with the corporate environmental sustainable objectives consisting of the elements of energy management, innovation management, internal green management, waste management and water management.

5.0 CONCLUSIONS

There are 6 relationships that exist between CRESM and the corporate sustainable environmental objectives. These relationships are critical for companies to seriously focus to ensure that their sustainable objectives are achieved. This finding has dismantled the gap that exists in this case. Additionally, this finding may also be extended in various related research where the CRESM element is used as an independent variable while the corporate economic sustainability objective can be used as a dependent variable. The authors suggest for an exploration to be continued to identify the sub-elements of all the elements found.

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Sekian, terima kasih.

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