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The Green Building Concept: Is it a Trend?

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Abstract

The building industry is an important contributing element to the economy of the country. Evidence revealed that the building industry has contributed to the environmental impact in so many ways. Realizing this important role played by the building industry, most building projects have now adopted the concept of green building. In Malaysia, the green building concept has been gradually initiated into the building industry. Reference to the Green Building Index (GBI Malaysia) database shows an increasing number of buildings being certified day by day. Not only that, the green building concept indicated a positive escalation especially within the commercial and residential property sectors. In conjunction with the growing number of green buildings in Malaysia, several questions have arisen; one of which is whether this is just a passing trend or is it because of the benefits received from it. Therefore, this study is conducted mainly to investigate the reasoning behind the corporation's involvement in green building industry. This study used the qualitative method whereby, semi-structured interview has been chosen as the best data collection method. Seven participants from different sectors were selected to generalize the results. Results indicated that at the initial stage of involvement in green building concept, most of the corporations were in it for the trend and novelty of trailblazing the evolutions of the world building industry. It was only recently that green building concept is embedded by corporations due to the benefits they received which indirectly boosted their business operations. Nevertheless, the government, non-governmental organizations (NGOs), and corporations still need to increase efforts to mould and embed the green culture for every Malaysian because the awareness level in the implementation of green building concept is still at an early stage.

Keywords: Corporate Real Estate, Corporation, Green Building, Trend

Introduction

Green building is now seen as a trend in building development industry. Green building developments are observed to be increasingly on the rise throughout the world. Malaysia is not exempt from this phenomenon where the database of green building certification list revealed

that from time to time there are increasing numbers of green building developments especially within the urban centres in Kuala Lumpur, Selangor, Pulau Pinang, Putrajaya and Johor. Not only that, for the past eight years starting from 2009, Malaysia has already established 4 green rating tools namely Green Building Index (GBI), Green Pass, “*Penarafan Hijau*”, and GreenRE. These reflect an eagerness by Malaysia in supporting the green development initiatives. Indirectly, they demonstrate the right path for Malaysia in order to achieve its medium and long term goals enshrined in the 10th and 11th Malaysia Plans.

In conjunction with the growing green building and green rating tools in Malaysia, several questions have arisen which are whether it is just a passing trend or is it because of the benefits derived from green building initiatives? Therefore, this study is conducted mainly to investigate the reasons for the corporations’ involvement in green building industry.

Literature Review

In relation to the National Transformation Plan that encourages green building development in Malaysia, several issues were found. Firstly is whether Malaysians are aware of the importance and benefits of green building development and have embedded the green culture in their daily routine; or whether the green building concept was developed due to an intention to embark on the current development trend.

Green building still at a very early Stage of Awareness

Hence, various literature was reviewed in studying the level of awareness and readiness of the Malaysian people involving green building development. Apparently, previous research revealed that the desire and pride in green building is excellent but implementation is very poor¹. This was reinforced by Umar et al. (2012) with findings that at the initial stage, the public is aware of growing problems on sustainability but minor efforts were initiated in overcoming these shortcomings. Similarly, Nazirah Zainul Abidin (2010) discussed these where the findings of her questionnaire research showed that the majority of respondents considered themselves to have moderate to good knowledge of sustainability concepts. In view of these grim findings representing Malaysians’ attitude towards green building concept, a lot needs to be done in inculcating the green culture among them.

On a further gloomy note, Azlan et al. found in 2009 that the majority of building industry people have lack of experience, and a low level of understanding on the green building rating system. This finding coincided with Fauzi et al.’s (2016) where evidence showed that not only were end users still unaware on the green building concept, even the key players in green building development also displayed poor knowledge on green building. Aliagha et al. (2013) commented that Malaysia’s green tax incentives are inherent but not significantly attractive, coupled with lack of public awareness, database and information technology, and professional knowledge. No wonder most of the key players still face difficulty to digest them.

Aliagha added that green building concept is still largely driven by the public sector while the private sector, including property developers and investors especially those in urban out circuit, are not yet ready to commit. According to many real estate research, location is still the ultimate determining factor that real estate players considered as opposed to the green agenda.

Abidin (2010) reported only top property developers are on the forefront of green development. Due to the world market heading towards green building, only big companies and professional developers are aware of sustainability concept and willing to develop green building. If this happened, it will create a big problem in the future especially in the management and maintenance of the buildings. This is due to the fact that green office buildings are very complex to manage as compared to conventional buildings. The need to have an experienced people to manage the building is crucial. As such, the green building concept should be seamlessly blended from the top to bottom management in order to make it well implemented and the building can function as per its design and maintainability.

Green Building Concept is just a Trend

The opinion that green building concept is just a trend is somewhat concurred by several sectors of general public in the world. An article claimed that green building developments show positively explosive acceptance in terms of idea but the actual adoption and practice implementation still remains surprisingly slow. Deuble & de Dear (2012) agreed in their findings that occupants' satisfaction level in green buildings is associated with the environmental belief. Most ordinary people will normally feel uncomfortable and dissatisfied living in green buildings. This is due to the design and features that is limited due to fulfillment of the requirements of green building. However, living in green buildings will not give any problems for those who believe and appreciate green and the environment. Green buildings normally stressed on cost minimization through lower operation and maintenance cost, energy efficiency, and also low carbon emission (Yen et al., 2016). This is the trend that normally green building reflects. The design of green buildings sometimes overlooks the social benefits factor towards humans. Yen et al. (2016) reiterated that design fail on this important factor leads to failed implementation of the green building and caused the building performance to skew. This is supported by a research by Abbaszadeh et al. (2006), that found most of the occupants in green building offices are dissatisfied with light levels and sound privacy. They also suggested management to accommodate sound privacy layout and cubicle design. Not only that, they also proposed for the management to improve on the lighting system.

Methodology

The research was conducted through semi structured interview with seven experts in green building. Two of the participants are the architects who experience in designing green building and also certified as green building facilitator that facilitate interested clients to develop green building. While, another three participants are property manager of the green building office that have certified with platinum green building index (GBI) certification and another two participant from business management background and green building consultant. The interview session were recorded and then transcribed. Then, the transcribed data were analysing based on thematic contents analysis using Atlas. its software version 8.

Data Analysis, Results and Discussions

The data analysis and findings are divided into three main elements of: 1 - awareness on green building concept, 2 - green building concept is just a trend, and 3 - the readiness for application of green building concept in Malaysia.

Green building concept is still at an infancy stage of awareness

Based on a network of relationship as seen in Figure 1, it is revealed that some Malaysians are aware of the green building concept while some are not. Those aware on green building concept believe that green building concept assists in reducing pollution as pointed out by Participant 4 in Quotation 2 (P4:Q2); and reduces cost as said by Participant 7 in Quotation 3 (P7:Q3). This is concurred by (P4:Q1) who reiterated that green buildings are able to save cost especially on water and electricity. For instance, the electricity bills of the building have decreased from RM400,000 per annum to RM250,000 per annum which is equivalent to a deduction from 220 kw/hour/sq. m./annum to 90kw/hour/sq. m./annum. This proved that green building concept undeniably reduces long term management cost (P1:Q10).

Unfortunately, still a lot of Malaysians are low in the green building concept awareness level. This is evidenced from the statement given by Participant 3 in Quotation 6 (P3:Q6) where not 100% of the people aware on green building concept, and agreed by (P5:Q3) and (P2:Q4). Despite not having adequate awareness on the green building concept, they are conversely aware of the benefits of green building concept in general, such as it being environmentally friendly (P3:Q8), and promotes energy efficiency (P3:Q9). This may be due to their efforts in seeking advice from the experts on matters that they are not fully aware of, as stated by (P2:Q4).

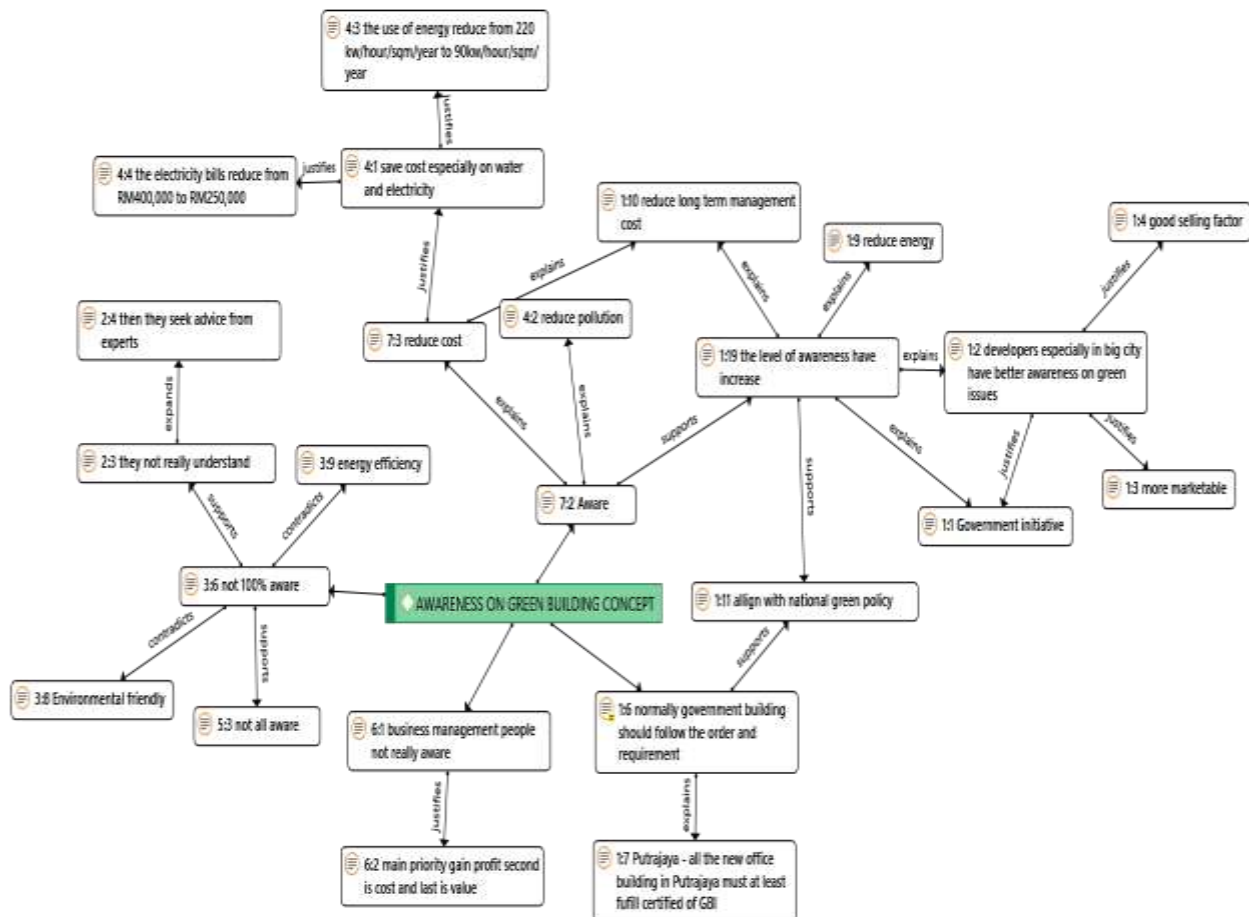


Figure 1: Awareness on Green Building Concept

Available evidence shows that awareness on green building concept by the business fraternity is very low as stated by (P6:Q1). A contributing factor could be their business strategy of always focusing on profit generation as their main priority besides cost minimization and value creation rather than real estate factors as mentioned by (P6:Q2).

These were maintained by (P1:Q6) that identified normally government buildings are required to adhere to and support the government agenda as per the National Green Policy, 10th and 11th Malaysia Plan with aims that Malaysia emerge as a country with a green technology parallel to the worldwide agenda of reducing global warming and carbon footprints. For instance, Putrajaya requires all new office buildings to achieve at least fifty percent green building elements to enable the buildings to be certified with a minimum certification by GBI as per explanation by (P1:Q7).

It is notable that even though data shows a low level of awareness on green building concept, (P1:Q19) conveyed that the level of awareness has steadily increased especially among the urban developers. Results revealed that the developers are aware of the government incentives that they will receive by implementing green building concept as per (P1:Q8). Not only that, developers are also aware of the good selling factors derived from this concept (P1:Q4) and they also believe that green buildings are more marketable nowadays. P1 added that developers and investors are aware of the benefits reaped from green building concept namely it helps in energy saving (P1:Q5) and reduction in long term management cost (P1:Q10). Nevertheless, they are reluctant to participate in green building concept adoption due to the relatively high initial cost of green building construction as compared to conventional building construction cost.

Green building concept is just a trend

According to Figure 2 on the relationship network, there are two schools of thought on the issue; which are whether a green building concept is just a trend, or not. From the analysis, it was noted that (P5:Q1) agreed that green building concept is just a trend. This was augmented by the statement given by (P3:Q2) where most shopping mall owners or investors used green building concept as a trend to market their business and attract more visitors and also international traders. (P2:Q3) corroborated but discovered that most of them do not really understand the green building concept. (P3:Q10) added that not only shopping malls but also other commercial buildings presume the green building concept is just a trend. However (P3:Q10) stressed that this was only evident during the early stage of green building concept implementation. This misconception disappeared after some time whereby most of them including the occupants of the building came to embrace the green building operation. Despite the fact that green building concept is just presumed as a trend, (P5:Q2) iterated that this is good for corporate image.

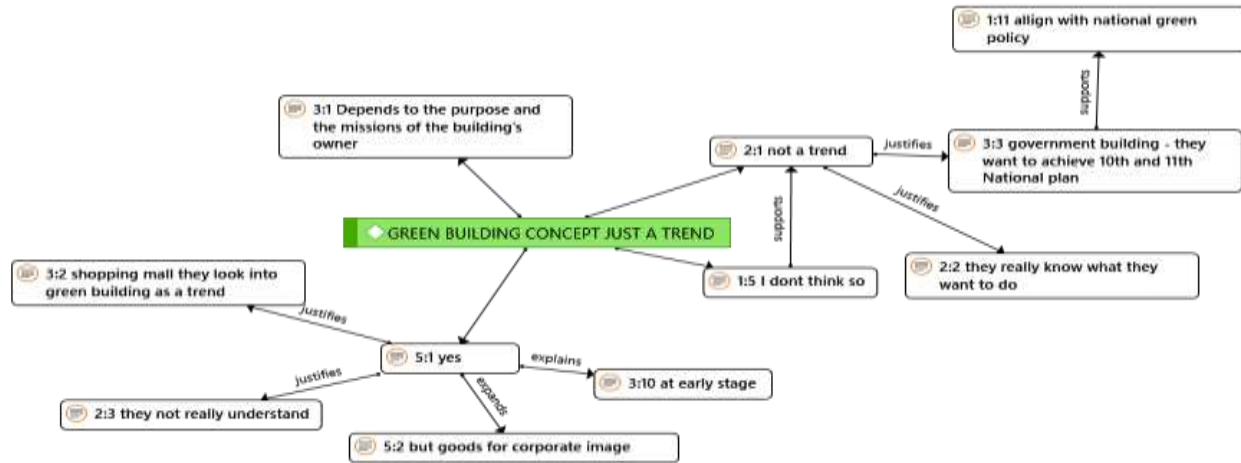


Figure 2: Green Building Concept is Just a Trend

Based on analysis, some respondents beg to differ from (P1:Q5) and (P2:Q1) that green building concept is just a passing trend. On the contrary, (P2:Q2) justified that they really know what they are doing. (P3:Q3) concurred and proposed that government buildings should comply with and enforce the green building concept in order to achieve the objectives of the 10th and 11th Malaysia Plan and the National Transformation Plan TN50 directly aligned with the National Green Policy. Admittedly some building owners, investors or developers presume that green building concept is just a trend and some do not, (P3:Q1) acknowledged that this opinion is dependent on the purpose and mission of the building owners themselves.

Readiness on the application of green building concept

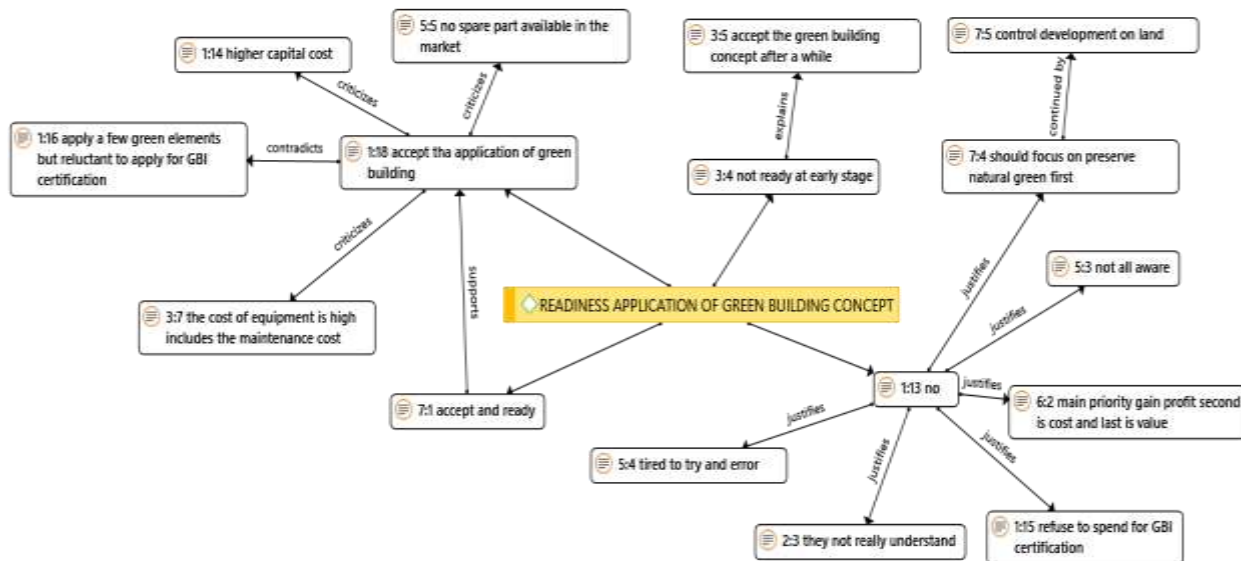


Figure 3: Readiness on the application of green building concept

Reference to the readiness on the application and implementation of green building concept highlights two groups of adherents as displayed by the participants. Some demonstrated their readiness as recorded by (P7:Q1) and (P1:Q18); while some argued as per recorded by (P3:Q1) and (P1:Q13). While emphasizing the readiness of Malaysians in implementing green building concept, the relationship network also highlighted that even though the participants agreed, they also criticized the current green building practice as mentioned by (P1:Q14) where higher capital cost is required for green building concept. (P3:Q7) pointed out that the equipment cost as well as the maintenance cost of green buildings are high as most of the equipment and maintenance materials are imported. (P5:Q5) commented along the same vein where no spare parts are available locally as of now. Results also discovered that some of the buildings adopt a few green building elements but the owners are reluctant to apply for GBI certification. This may be due to the cost involved in the application which is a deterrent.

As regards the disagreement on the readiness of green building concept implementation in Malaysia, these are some justification on this statement. As identified by (P6:Q2), green elements are not the main points for the business entity, they are more inclined towards profit maximization, cost minimization and value enhancement. On the other hand, most Malaysians still do not have heightened awareness on the green building concept (P5:Q3) and they do not really understand the intricacies of green concept itself (P2:Q3). These factors pose as hindrance to property managers in managing and maintaining existing green buildings. Some managers are prone to solve problems in handling the green building through trial and error due to failure in understanding the concept (P5:Q4). Contrary to the opinion by other participants, participant 7 stressed that Malaysia should focus on preserving natural green resources before attempting to be involved in green development on a large scale. (P7:Q5) agreed that controlling land development is a must in order to support the environment.

Conclusion

This paper has investigated 3 main elements to identify whether the green building concept in Malaysia is just a trend. It includes the element of awareness on green building concept, whether the green building concept is just a trend, and the readiness for the application of green building concept in Malaysia. In conclusion, the awareness among Malaysians of green building concept can be summarized as still being at the surface level. A lot of incentives internally should be established and enforced in order to educate the stakeholders on the benefits of green building concept, and also to stress out on the implications of abandoning the green building concept. The finding of this study in terms of whether green building concept is just a trend concluded that during the early stages of involvement in green building concept, most of the corporations went into it for the trend with the intention of fulfilling the government plan but the perception slowly changed to the positive objective of the involvement when they can see a lot of benefits received from the commitment given. Lastly, on the readiness for implementing green building concept in Malaysia, it can be highlighted that the concept is still at the early stage of readiness. If Malaysia is really committed to enforce and encourage the involvement in green building concept, a lot of research and development on green technology especially on green building materials and green equipment should be emphasized to overcome a lack of available local resources. With local product, costs can be reduced and the projects can be easily managed.

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