

## A Framework for Evaluating Management's Environmental Commitment toward Green Practices

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### Abstract

Green practices are an integral part of the hotel management's strategic decision making nowadays. With increased concerns among the public, consumers and government on the environmental issues, hoteliers worldwide have gradually adopted green practices in managing their hotels. Managerial attitude drives the direction and organisational's approach towards green practices in hotels. As such, top management's environmental commitment will have a substantial influence on the extent to which the hotel will implement green practices in their premise. This study proposes a research framework to evaluate the mediating role of management's environmental commitment on the relationships between environmental knowledge, subjective norm, perceived benefits and green practices in the hotel industry. The result of this study will be able to assist the authority and the hotel associations to provide appropriate supports and guidelines in promoting green practices in the hotel. Green practices will help hotels to improve their reputation and image, which in turn can help them to create a sustainable competitive advantage in a highly competitive environment.

**Keywords:** Environmental Commitment, Green Practices, Hotel, Green Hotel.

### Introduction

The hotel industry is one of the important sub-segments of the hospitality and tourism industry. According to report published by Department of Statistics Malaysia (2017), tourism industry contributed 14.8% or RM182.4 billion to Malaysian GDP in 2016 and among them, the accommodation sub-sector is the third largest contributor to tourism industry (with a share of 13.1% after retail trade of 43.9% and food and beverage of 16.0%). Tourism and hospitality industry is one of the National Key Economic Areas (NKEA) in the government's vision and this sector is viewed as essential in helping Malaysia to be a high-income nation by 2020 (The Star, 2017). In 2018 national budget, the government has allocated RM2 billion as tourism fund to provide loans for operators (The Star, 2017). The total tourist arrival in

Malaysia has increased 52.5% from 17.55 million in the year 2006 to 26.8 million in the year 2016. And, the total tourist receipts for the year 2016 was reported as RM82.1 billion (Tourism Malaysia, 2018). The aspiration towards green growth required joint efforts among the government, private sector, and individual citizen. Coherent with the 11th Malaysia Plan, the blueprint of sustainable consumption and production (SCP) 2016-2030 was developed, which among others addresses the need for the change in patterns and behavior among the consumers and industry. Tourism is one of the key sectors in government green growth initiative. SCP criteria will be systematically added to the official hotel star rating system, which will include sustainable purchasing, energy management, waste management, and creating guest environmental awareness (Economic Planning Unit, 2016).

The increased number of tourists predicted by the government signifies increased needs for lodging. The hotel sector operates around the clock and consumed a huge amount of resources especially electricity, water, food and non-durable products (Bohdanowicz, 2006; Yue, 2012). With the increased concerns among the public, consumers, and government on the issues related to global warming, climate change, pollution, and wastage of resources, the hoteliers worldwide have gradually adopted green practices in the hotels. Currently, there are only 20 hotels that have been rated as Green Hotel in the country (Ministry of Tourism and Culture Malaysia, 2018). Environmental issues entail strategic decision making and require constant attention from the hotel's management as there will be increasingly demanding legislation and pressures from different stakeholders to be more environmental friendly.

Adoption of green practices by the hotel's management will enable the achievement of the sustainability goals in the 11<sup>th</sup> Malaysian Plan. Thus, it will contribute towards alleviation of global warming and other environmental problems, which is beneficial to the society as a whole.

Several studies have indicated that the hoteliers who engage actively in the green practices will contribute favourably towards environment protection, and will benefit from lower operating costs and improved corporate reputation, customer satisfaction and brand image (Chen & Chen, 2012; Kim, Hlee, & Joun, 2016). Empirically, a number of researchers have examined the determinants of hotel employees' pro-environmental or ecological behavior (Chan, Hon, Chan, & Okumus, 2014). Meanwhile, others (Yusof & Jamaludin, 2013; Yusof & Jamaludin, 2014) have explored the green practices of the selected hotels in Malaysia based on the qualitative research approach. Managerial attitude is commonly known to have great influence on the company's responses and directions towards the environmental sustainability issues (Wei & Ruys, 1999). Nevertheless, little is known about the precursors of the hotel's top management commitment that lead them to embrace green practices in their organisations. As such, this paper aims to evaluate the mediating role of management's environmental commitment on the relationships between environmental knowledge, subjective norm, perceived benefits and green practices in the hotel industry.

## **Literature Review**

### ***Hotel's Green Practices***

Green or environmental practices of an organisation may encompass different activities, such as projects that lead to energy and water efficiency and conservation,

reduction of waste consumptions, effective waste management and emphasize on the 3Rs ('reuse, reduce, and recycle'), improve resource productivity, reduction of hazardous and toxic substance pollution, and green purchasing (Fryxell & Carlos, 2003; Wang, 2012).

According to the Green Hotel Association (2018), green hotels are environmentally-friendly properties whose managers are keen to institute programs that can reduce solid waste, save water and energy. The management of a green hotel aims at providing services and facilities that emphasize environmental protection. Efforts in saving water, energy and reduce waste need the participation from staff and customers (Chen & Chen, 2012). Meanwhile, ASEAN green hotel standard encompass similar aspects of environmental friendly approaches as described above, such as energy efficiency, water efficiency and quality, use of green products, collaboration with local community and organisations (e.g. environmental awareness programs), noise pollution control, wastewater treatment and management, solid waste management, toxic and chemical substance disposal management (ASEAN green hotel standard, 2016).

### ***Environmental Knowledge***

An individual's state of knowledge on a particular issue has great influences on all phases of his decision-making process (Alba & Hutchinson, 1987; Kaplan, 1991). Environmental knowledge is related to the amount of knowledge a person has in relation to the environmental issues (Chan & Lau, 2000). Fryxell and Lo (2003, p. 48) defined environmental knowledge as "a general knowledge of acts, concepts, and relationships concerning the natural environment and its major ecosystem." Several studies demonstrated that a person's knowledge typically affects his pro-environmental attitude, which subsequently determines the extent to which a person will behave in environmentally responsible ways (Corral-Verdugo, 1996; Mostafa, 2006). In consumer behaviour research, environmental knowledge has often been linked to green purchase intention and ecologically responsible behavior (e.g. Haron, Paim, & Yahaya 2005; Lee & Moscardo, 2005).

Apart from that, Chan et al. (2014) showed that the level of environmental knowledge possessed by the hotel employees affects their ecological behaviour and intention to implement green practices in the hotel. On the other hand, managers with environmental knowledge have a better understanding of the interconnection between their decisions and environmental consequences (Fryxell & Lo, 2003). The managers' environmental knowledge was found to be a significant predictor of managerial environmental actions and behaviors, which include environmental advocacy, initiating the new environmental program, and acquiring environmental information and maintenance of equipment to ensure efficiency (Fryxell & Lo, 2003). Regular acquisition of environmental knowledge through different sources is essential in improving environmental commitment of an organisation (Roy & Thérin, 2007). The above reviews lead to the following proposition:

Proposition 1: Environmental knowledge has a positive influence on top management's environmental commitment

### ***Subjective Norms***

Subjective norm is “the perceived social pressure to perform or not to perform the behavior” (Ajzen, 1991, p. 18). It can be determined by a set of normative beliefs which consist in the expectations of individuals’ reference group formed by their immediate social network, such as family, friends, colleagues or neighbours (Ajzen & Fishbein, 2005). Likewise, subjective norms in the environmental studies could be expressed as the perceived social pressure to perform or not to perform the behaviour that directly or indirectly related to the environment. It could be a set of informal rules, unwritten policies, laws and regulations that restrict an individual to perform a certain behaviour that is not acceptable by the society (Haines & McConnell, 2016). Subjective norms have a significant influence towards one’s pro-environmental decision making process and behaviour (e.g. Chen & Tung, 2014). On the other hand, study by Sa’nchez-Medina, Romero-Quintero, and Sosa-Cabrera (2014) confirmed that perceived subjective norms were found to have a significant positive impact on the attitude and behaviour to perform environmental measures among managers of small and medium enterprises. These arguments give rise to the following proposition:

Proposition 2: Subjective norms are positively related to management’s environmental commitment and green practices.

### ***Perceived Benefits of Green practices***

Generally, perceived benefits are defined as the acceptance of personal vulnerability to conditions and also believed to be important when was held to produce a force leading behaviour (Forsythe, Liu, Shannon, & Gardner, 2006). Green initiatives are important for the organisations as these efforts can enhance the organisations' attractiveness by improving their competitive advantage, the motivation of employees, and customer satisfaction (Iraldo, Testa, Lanzini, & Battaglia, 2017). On the other hand, To and Tang (2014) viewed that environmental management contributed to managerial benefits, cost-related benefits and environmental benefits. Bonilla-Priego, Najera, and Font (2011) found that the commitment of hotel’s management engaging in green practices was largely driven by the internal factors instead of external factors, such as legitimation. Based on resource-based view, hotels’ management or owner is likely to be more committed towards green practices if it can be served as a source of competitive advantage and generate greater values to the firm through greater efficiency as well as improved financial performance.

A number of literature has documented the advantages of environmental or green practices by the organisations, such as financial benefits (Chen & Chen, 2012), stakeholder (e.g. customer, employees, and community) satisfaction (Bohdanowicz, Zientara, & Novotna, 2011; Kassinis & Soteriou, 2003), and improved corporate image (Chen & Chen, 2012). In their study among the hotels’ top management in the United States, Park and Kim (2014) empirically demonstrated that in addition to stakeholder pressure and personal environmental concern, managers who perceived the economic advantages of environmental management are more eager in adopting environmental friendly approaches, which include environmental system and technical practices (e.g. providing employees with environmental training program, recycling and waste management, and uses energy saving equipment). As such, positive perceptions of the benefits gained from the environmental practices likely have

a favourable impact on top management environment commitment. Accordingly, this leads to the following proposition:

Proposition 3: Perceived benefits of green practices positively affect top management's environmental commitment

***Top Management's Environmental Commitment: Mediating Effect and Impact on Green Practices***

Environmental commitment is referred as a psychological attachment to and long-term orientation toward the natural world (Davis, Le, Coy, Rickert, Regan & Ridgeway, 2015; Davis, Green & Reed, 2009). In a general view of environmental study, an individual with some degree of felt commitment to the environment would be able to enhance the chances of pro-environmental behavioural intentions (Tam, 2013). Similarly, in the current context of study, the management environmental commitment in the hotel sector can be defined as an individual "involvement and support for hotels' adoption of environmental practices" (Kim, Park & Wen, 2015, p.1502). With an adequate commitment to the environment by the manager, it would further contribute to the environmentally friendly practices. The upper echelons theory (Hambrick, 2007) explains that the organisation strategic choice and actions are driven by top management.

According to Kim et al. (2015), environmental committed manager stressed on the environmental preservation in the organisation, support the environmental program and involve in the formulation of environmental strategies in the hotel. Based on the data collected from 172 hotel's general manager in the United States, Kim et al. (2015) revealed that hotels' top management who are high in environmental commitment showed greater tendency to invest time and efforts in building the hotel environment management capabilities by providing employees with environmental related training and education, communicating environmental initiatives to guests, gaining knowledge and skills to implement environmental practices, as well as acquiring capital to invest in environmental management. Such commitment in building the environmental management capabilities among the managers has a sizable effect on the firm's involvement in environmental practices, such as green purchase, waste management, and application of water and energy conservation activities in the hotel (Kim et al., 2015). Therefore, the manager's environmental commitment is essential as he/she will decide on the provision of resources within the organisation that will directly affect the formulation and execution of environment or green initiatives in the company. As such the following proposition is formed:

Proposition 4: Top management environmental commitment has a positive influence on adoption of green practices

Several factors such as environmental awareness and knowledge are known to influence one's commitment in taking efforts towards environmental protection and resolving the environmental problem (Madsen, 1996). Park and Kim (2014) explained that the hotel's top management who are concerned with the environment showed a positive attitude towards the adoption of environmental practices. Based on the evidences gathered through a qualitative study, Williams and Schaefer (2013) concluded that as compared to external

pressure (e.g. legislation and demands from stakeholders) and economic reason, personal commitment and values of the owner/manager was the most important factor that drives small-medium size enterprises (SMEs) in England to proactively respond to environmental and climate change issues. Hence, managers with higher environmental knowledge are expected to have the greater environmental commitment and subsequently devote more efforts in the implementation of green practices in their hotels. Besides, the subjective norm can have a great impact on a person's attitude towards the environment as well (Sa'nchez-Medina et al., 2014). Several authors, such as Davis and his colleague found that subjective norms are significantly related to the environmental commitment of the community and undergraduate students (Davis et al., 2015; Terrier & Marfaing, 2015).

Public concern, environmental regulations and the ability to achieve competitive advantage were among the main forces that drive top management environmental commitment (Banerjee, Iyer, & Kashyap, 2003). And, such commitment by the top management has significantly contributed to the improvement in organisation's environmental orientation and environmental strategy. Obviously, top management commitment in pursuing environment-friendly or green practices depends on both the internal and external forces. The empirical works by Banerjee et al. (2003) clearly demonstrated that top management's commitment mediates the link between competitive advantage and environmental orientation as well as environmental strategy. When top management perceived that environmental effort is beneficial to the firm by creating or enhancing the firm's competitive advantage, they tend to be more committed to ensure environmental reservation and support the relevant activities. In addition, committed top management would recognise the importance of environmental issues faced by the company and environmental strategy will be part of the firm's strategic plan (Banerjee et al., 2013). The above reviews lead to the following propositions:

Proposition 5: Top management's environmental commitment mediates the relationship between environmental knowledge and the hotel's green practices.

Proposition 6: Top management's commitment mediates the relationship between managers' subjective norm and the hotel's green practices.

Proposition 7: Top management's environmental commitment mediates the relationship between perceived benefits of green practices and the hotel's green practices.



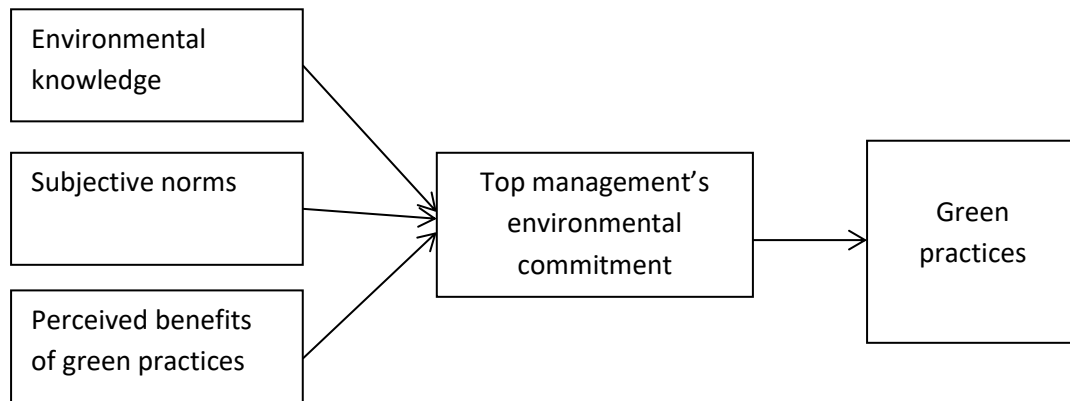


Figure 1: Proposed research framework

### Methodology

A quantitative approach with a cross-sectional study design will be employed for this study. The key decision makers, such as owners, general managers or other positions that have the managerial discretion on the green practices of the hotels will be the target respondents of this study. The self-administered questionnaires will be distributed to the owners or top management of the one-star to five-star hotels that are located in different states in the country through the mail. A self-addressed stamped envelope together with the cover letter and the questionnaire will be mailed to the target respondent. According to Zikmund, Babin, Carr, and Griffin (2013), advanced notification can increase the response rate of mail questionnaire; as such earlier notification will be made by emailing or calling the target respondents or their secretary / personal assistant. There are a total of 1,547 hotels based on the list provided by the MOTAC. The respondents will be selected based on a simple random sampling approach. For the purpose of this study, power analysis was performed by using G\*power 3.1 software in order to determine adequate sample size (Faul, Erdfelder, Lang, & Buchner, 2007). Based on the alpha of 0.05, the power of 0.80, and a medium effect size of 0.15, a minimum sample size of 92 is required.

Descriptive analysis and data checking will be performed by using SPSS version 23. On the other hand, Partial-Least Square-Structural Equation Modeling (PLS-SEM) approach will be employed by using the SmartPLS3 software in which reliability and validity of the constructs as well as the relationships among the variables can be determined. The analysis of data through PLS-SEM involves two major stages: (a) The first stage is related to the evaluation of the measurement model and then followed by (b) assessment of the structural model (Anderson & Gerbing, 1988; Hair, Sarstedt, Hopkins & Kuppelwieser, 2014). As all the constructs in this study are reflective, the measurement model needs to meet the criteria for internal consistency reliability, indicator reliability (outer loadings), convergent validity and discriminant validity. The subsequent analysis in the structural model covers several assessments, such as the significance of the structural model relationship, predictive relevance, and effect size.

### ***Instrument Design and Measures***

All the items will be measured by using a five-point Likert scale. Respondents will indicate their agreeableness on the statement based on a five-point Likert scale range from strongly disagree (1) to strongly agree (5). Pre-test and pilot test will be performed to ensure the internal consistency reliability and content validity of the measurement used prior to the actual study. Management environmental commitment is operationalised through three items that were developed by Kim et al. (2015). Sample items include "As a manager, I fully support green programs at our hotel," and "I am fully involved in formulating environmental strategies of our hotel." The measure for hotel's green practices will be adapted from Kim et al. (2015). Sample items include "Our hotels apply energy conservation activities", and "Our hotel monitors and record environmental performance." Environmental knowledge will be measured by using the scale developed by Kaiser, Ranney, Hartig, and Bowler (1999). The example of the items include "Melting of the polar ice caps may result in a flooding of shores and islands", and "A change in climate caused by increased levels of carbon dioxide (CO<sup>2</sup>) in the atmosphere is called the greenhouse effect". The measure for subjective norm is adapted from Ajzen (2002), consist of three items. Sample items include "Most people who are important to me think that I should emphasize on green practices in the hotel, and "The people in my life whose opinion I value would stress on the importance of green practices in the hotel."

Perceived benefits are modified from Park and Kim (2014), To and Tang (2014), and Iraldo et al. (2017). Perceived benefits consist of nine items, covering the aspect of economic benefits, managerial and competitive benefits of green practices. Sample items include "Reducing operating costs is a very attractive feature of green practices in the hotel", "Adoption of green practices in the hotel improves organisational image", "Adoption of green practices in the hotel create competitive advantage over direct competitors", and "Adoption of green practices in the hotel improve employee motivation").

### ***Implications and Contributions***

Theoretically, this study aims to gain a better understanding of the determinants of the management of environmental commitment, specifically in the hotel sector. Besides, this study examines top management environmental commitment as a mediating mechanism through which subjective norm, environmental knowledge, and perceived benefits may eventually affect the hotel involvement in green practices. This can be a valuable addition to the existing literature that has investigated the direct influence of internal and external factors on green practices (e.g. Deraman, Ismail, Arifin, & Mostafa, 2017).

This research will be able to assist the authority concerned to have a better understanding on the determinants of hoteliers' commitment towards green practices. This will assist MOTAC and the local hotel associations to provide appropriate supports and guidelines for the management of the hotels. Besides, such efforts also in line with the aims of the government aim in promoting green growth and to have more green hotels in the country. The outcome of this study may encourage the ministry, the hotel association as well as the institutions of higher learning to organise regular conferences and seminars that can expose the management of the hotel on the relevant knowledge related to environmental sustainability and effective green programs. The events also facilitate communication and



exchange of ideas among the experts and the practitioners regarding the needs of green practices in the hotel sector.

### Conclusion

Hotels' involvement in green practices is part of their corporate social responsibility as hotel has a closed relationship with the society and environment. It is important to note that increased environmental knowledge, perceived subjective norms and perceived benefits of green practices in relation to the environmental issues would determine the level of hotel's involvement in green practices indirectly through. However, gaining a better understanding of top management's environmental commitment is also critical because it may enhance the chances of a hotel in adopting green practices and programs. Green practices undertaken by the hotels may lead hotels to achieve economic savings in terms of reduced energy costs, reduced operating costs, reduced costs of eliminating waste, increased efficiency as well as advantages in collaborating with local communities, local organisations and governments. Green practices will help hotels to improve their reputation and image, which in turn can help them to create a sustainable competitive advantage in a highly competitive environment.

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