## PERCEPTION ON ENVIRONMENTAL STRATEGIES AND THE IMPACT TOWARD GREEN PURCHASE INTENTION

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#### **Abstract**

Environmental strategies also known as environmental management practices that adopted by hotel management which help them to monitor their activities in order to preserve the environment. However, these strategies which include energy management, water conservation and waste management have their own impact toward customer green purchase intention. Understanding customer perception toward green product is crucial to attract customer in purchasing environmental-friendly hotel. This paper using self-administered questionnaire adapted from previous researchers with total of 400 respondents. From the findings, it showed that most of the respondents agreed that 'designing parking areas under the hotel's building to reduce site footprint', 'fixing toilet leaks immediately' and 'encouraging recycling campaign by using refillable amenities' as the three main agreeable items in the environmental strategies. Most of the respondents also agreed that they were willing to stay in a hotel that practices environmental strategies. Importance implications for hoteliers and academicians been discussed through the investigation of this study.

Key words: Perception, Environmental Strategies, Green Purchase Intention

# PERSEPSI TERHADAP STRATEGI-STRATEGI ALAM SEKITAR DAN KESANNYA TERHADAP NIAT UNTUK PEMBELIAN HIJAU

#### **Abstrak**

Strategi alam sekitar juga dikenali sebagai amalan pengurusan alam sekitar yang diterima pakai oleh pengurusan hotel yang membantu mereka memantau aktiviti mereka untuk memelihara alam sekitar. Walau bagaimanapun, strategi-strategi ini termasuk pengurusan tenaga, pemuliharaan air dan pengurusan sisa mempunyai kesan sendiri terhadap niat pembelian hijau pelanggan. Memahami persepsi pelanggan terhadap produk hijau adalah penting untuk menarik pelanggan untuk menginap di hotel mesra alam. Makalah ini menggunakan soal selidik yang disesuaikan dengan penyelidik terdahulu dengan jumlah 400 responden. Dari penemuan ini, menunjukkan bahawa kebanyakan responden bersetuju bahawa 'merancang kawasan tempat letak kereta di bawah bangunan hotel untuk mengurangkan jejak tapak', 'memperbaiki kebocoran tandas segera' dan 'menggalakkan kempen kitar semula dengan menggunakan kemudahan tambahan' sebagai tiga perkara yang sesuai di dalam strategi alam sekitar. Kebanyakan responden juga bersetuju bahawa mereka sanggup tinggal di sebuah hotel yang mengamalkan strategi alam sekitar. Implikasi penting bagi pengusaha hotel dan ahli akademik turut dibincangkan menerusi penyiasatan kajian ini.

Kata Kunci: Persepsi, Strategi-strategi alam sekitar, Tujuan Pembelian Hijau

## INTRODUCTION

Green hotel is defined as an eco-friendly hotel operation that performs/follows various environmentally friendly practices or environmental strategies such as saving water/energy, using eco-friendly purchasing policies, and reducing emission/waste disposals to protect the natural environment and reduce operational costs (Hu, et al., 2011). The number of consumers seeking green hotel also has grown (Manaktola & Jauhari, 2007)

Additionally, studies in the later year showed that going green has been a trend within the hotel industry especially in the western countries (Butler, 2008; Wiegler, 2008; Williams, 2008). With the growing number of consumers seeking green operations, being a 'green hotel' can provide a basis for good marketing strategies. These environmental friendly practices or environmental strategies available in the green hotel could also help position the hotels differently in a very challenging and competitive industry (Hu, Fu & Wang, 2011).

The environmental-friendly practice trend has also impacted customers in Malaysia. One positive effect from this effort can be seen by the increasing number of Malaysian hotels receiving green award (Tan, 2010). A study done by Laroche et. al., (2001) showed that some customers were willing to spend money on environmental friendly hotel even though they need to pay more for the facilities. Based on the World Environmental Performance Index, Malaysia was ranked at number 27 out of 163 countries in 2008 but the rank was dropped to number 54 in year 2010 (Yale University, 2011). Thus, the Malaysian government has placed a priority on this issue and has been seriously involved in many green projects namely in Green Technology, promoting the priority to establish the green program (Aman, Harun & Hussein, 2012).

#### PROBLEM STATEMENT

According to some researchers, understanding customer perception, attitude and behavior toward green product is crucial to attract customer in purchasing environmental-friendly hotel or green hotel (Schelegelmilcch et al.,1996; Follows & Jobber (1999); Chan & Lau (2000); Laroche, Bergeron & Barbara-Forleo (2001); Pickett-Backer & Ozaki (2008); Stone et al., (2008); Conraud-Koellner& Rivas-Tovar (2009). Studies regarding environmental-friendly hotels has been widely researched in the western setting, particularly pertaining green purchase intention (Schelegelmilcch et al.,1996; Follows & Jobber (1999); Chan & Lau (2000); Laroche, Bergeron & Barbara-Forleo (2001); Pickett-Backer & Ozaki (2008); Stone et al., (2008); Conraud-Koellner& Rivas-Tovar (2009). A study in Malaysia, carried out by Chen and Chai (2010), pointed out that the problems of green marketing in Malaysia is due to the absence of information on green purchase intention and green behavior of Malaysian consumers. This resulted to difficulty for local and international marketers as well as other relevant agencies to develop their business and marketing strategies.

Being aware of the customer perception on the environmental-friendly practices hotels is important. This is because customer who is dissatisfied with the strategies could lead to disloyalty and this will affect their purchase intention in the future (Kasim, 2004; Millar &Baloglu, 2008). Knowing customers perception and how the environmental strategies affect their purchase behavior also helps hoteliers to better strategize their marketing strategies on green product (Kasim, 2004; Millar &Baloglu, 2008).

## RESPONSIBLE ENVIRONMENTAL BEHAVIOR MODEL AND FRAMEWORK\

One of the models in environmental behavior studies is the Hines' Model of Environmental Research (1984). There are four influencing variables to be involved in predicting individuals' environmental behavior. Figure 2.1 shows the model with all its variables. From the model, individual's intention to respond towards responsible environmental behavior can be influenced by the influencing variables (personality factors, knowledge of issues, knowledge of action strategies, and action skills).

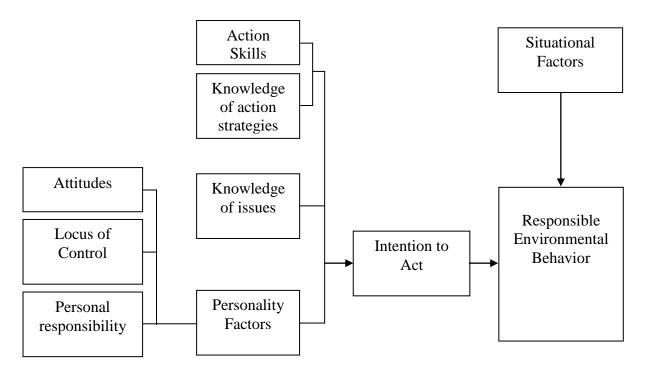


Figure 1.0: Hines' model of responsible environmental behavior

There were new adaptations models have been designed subsequently after the creation of Hines' model. The models were using the combination of elements from Hines' model. Gustin and Weaver (1996) produced a simplified model of responsible environmental behavior (refer figure 2.0) after adapted Hines' model in their studies. This model has been developed in order to evaluate a customer's intention to stay in a hotel based on the environmental strategies used by that hotel.

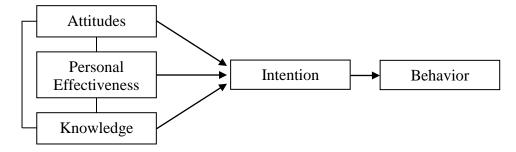


Figure 2.0: Adapted Hines model of responsible environmental behavior by Gustin and Weaver (1996)

#### A REVIEW OF ENVIRONMENTAL BEHAVIOR MODELS

The Hines' model of responsible environmental behavior is designed with the purpose of finding all influencing variables involved in predicting an individual's environmental behavior. However, this research ends as a conceptual framework because it was not tested empirically. Later, Gustin and Weaver continue to research on responsible environmental behavior. They designed a simplified model of environmental behavior and later tested it in hotels to measure its reliability and validity. Therefore, the

primary orientation of their study was to test the correlation between all the variables identified in Hines' model.

#### ENVIRONMENTAL MANAGEMENT IN HOTELS

Environmental management is the processes and practices adopted by an organization for cutting down, rejecting and ideally, overcome negative environmental impacts growing from its undertaking (Cooper, 1998). This is critical since the operations of a hotel require water, heating, cooling, lighting, laundry system and electronic appliances, all of which have significant impacts on the environment (Hsieh, 2012).

## THE BENEFITS OF ENVIRONMENTAL MANAGEMENT

According to Graci and Dodds (2008), the economic benefits can be gained through implementing environmental initiatives. For example, New Zealand's Hyatt Regency International Hotel installed an energy saving program and saves the hotel \$14,000 each year (Alexander, 2002). Nowadays customers are demanding for more environmentally conscious hotels. A study by Manaktola and Jauhari (2007) about customers' attitudes towards environmental practices and behavioral intention in Indian hotels found that there was a relationship between customer attitudes and behavioral intention towards environmental practices. Gustin and Weaver (1996) also developed and tested an adopted version of Hines' model of environmental behavior. The results suggested hotel customers' attitudes, knowledge, and perceived self-efficacy positively affect their behavioral intention to stay in environmentally friendly hotels.

## ENVIRONMENTAL MANAGEMENT PRACTICES IN HOTELS

Environmental management practices refer to the collective initiative of hotels in increasing efficiency under the guise of environmental protection (Cespedes-Lorente et al., 2003). Some of the previous researchers have examined environmental management practices conducted in each area of operation and categorized them into three main areas of environmentally friendly practices: energy management, waste management and water conservation (Bohdanowicz, 2006; Iwanowski& Rushmore, 1994). The three main areas of environmentally friendly practices have been identified as the most popular environmental management practices that promote the quality of the environment, image building, and cost-savings among hotels (Hawkes and Williams, 1993; Forte, 1994; Mensah, 2006).

## **ENERGY MANAGEMENT**

One of the areas of environmental management in hotel industry is energy management. Although generally in a hotel the level of energy usage varies based on type, size, age of the facility and the number of rooms, the cost of energy per every room in both hotel and motel in the United States is approximately \$2,196 annually which represents roughly 6 percent of all hotel operation costs (U.S Environmental Protection Agency (U.S. EPA), 2007). Positively, green practices that promote energy efficiency for hotels generally results in a 10 to 25 percent reduction in expenditures on energy when

using energy efficient equipment (Blank, 1999; Heung et al., 2006). This would be a savings nearly \$20,000 per year for a typical hotel size of 100,000-ft<sup>2</sup> (U.S. EPA, 2007).

## WATER CONSERVATION

Alexander (2002) relates the concerns of water availability to social responsibility that the hotel industry can take. For example, for one single standard hotel room in the Philippines water Consumption is about 396 gallons per day, surprisingly; this amount of water can support fourteen people who are living in moderate lifestyle. It is even more alarming that it is predicted that water consumption is expected to increase by over 20 % to approximately 475 gallons per day by 2010 in luxury facilities in some developing countries (Alexander, 2002).

#### WASTE MANAGEMENT

Another area of environmental management in the hotel industry is waste management. According to (California Integrated Waste Management Board [CIWMB], 2009), one advantage of waste reduction practices is that hotels can recycle as much as 80 percent of the wastes produced. The waste generation is as high as 30 pounds per room per day within the hotel industry (CIWMB, 2009). The main purpose of waste management is to reduce the quantity and toxicity of waste produced (Iwanowski& Rushmore, 1994). The biggest amount of waste produced by hotels derived from papers and food waste (Erdogan and Baris, 2007).

## OTHER ENVIRONMENTAL PROGRAMS IN HOTEL

Besides the three major areas of environmental management in hotel industry; the energy management, water conservation, as well as waste management, there are several other initiatives designed to promote a better environmental friendly hotel.

The following suggestions were derived from Park (2009) which includes purchasing ecofriendly cleaners and detergent; purchasing locally produced ingredients; using environmentally responsible suppliers; establishing a formal channel to cooperate with environmental NGOs; establishing customer education programs; supporting local communities to enhance the local environment; and incorporating environmental reporting in corporate control systems

## **GREEN PURCHASE INTENTION**

Green purchase intention is the probability and willingness of an individual to give preference to green product over conventional product in their purchase considerations (Rashid, 2009). However, some researchers referred green purchase intention as willpower to act in a positive way.

Other than that, green purchase intention also defined as the likelihood of the hotel consumers in visiting a green hotel; engage in a positive word-of-mouth behavior, and willingness to pay more for the green hotel (Han, Hsu and Lee, 2009).

## **CONCLUSION**

Environmental management and sustainability have recently been an important issue in the hospitality industry (Hsieh, 2012). The benefits of environmental management are economic benefits (energy saving), marketing advantages as well as improve hotel image (Alexander, 2002; Bohdanowicz, 2005; Butler, 2008). The environmental management practices can be categorized into three main areas of environmentally friendly practices: energy management, waste management and water conservation (Iwanowski& Rushmore, Bohdanowicz, 2006).

Last but not least, literature on green purchase intention has been explored. Green purchase intention is conceptualized as a uni-dimension based on Chan and Lau (2000) and Qader and Zainuddin (2011) definitions. In addition, the definition of this dependent variable will be consistent with Rashid (2009) which he defined green purchase intention as the probability and willingness of an individual to give preference to green product over conventional products in their purchase considerations.

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