

**THE EFFECT OF GREEN MANAGEMENT ON CUSTOMER
SATISFACTION IN HOTEL INDUSTRY IN CHINA**

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To my beloved brother, mother and father.

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ABSTRACT

At the turn of the century, green hotels have become an inevitable trend in the hotel industry development and are touted as one of the ways to achieve sustainable development. However, the existence of different guidelines and standards is creating a lot of confusion to the hotel management due to the myriad interpretations especially in China. Therefore, this study aims to develop the constructs for green management and identify the effect of green management on customer's satisfaction. A quantitative approach using survey was used to derive the constructs for green management in the hotel industry as well as to investigate customers' satisfaction levels about green management practices in hotels. Cluster sampling technique was used and questionnaires were distributed to hotels with a minimum rating of three stars in Guang Zhou, China. 375 questionnaires were successfully completed and returned for analysis. Factor analysis was used to determine the construct for green management in the hotel industry and four factors i.e, the environmental rules, hotel facilities, hotel practices and hotel management were identified. Regression analysis between those factors and customer satisfaction revealed that only facilities offered by hotels had significant impact. Demographic analysis of the respondents indicated significant difference between customer satisfaction and social economic status as well as education level; whereby the wealthier and better educated customer are more likely to choose green hotels.

ABSTRAK

Pada awal abad ini, pengurusan hotel hijau telah menjadi satu trend yang tidak dapat dielakkan dalam pembangunan industri perhotelan dan ia merupakan salah satu cara untuk mencapai pembangunan lestari. Walau bagaimanapun, kewujudan garis panduan dan piawaian yang berbeza telah menimbulkan banyak kekeliruan kepada pihak pengurusan disebabkan pelbagai pentafsiran terutamanya di China. Justeru itu, kajian ini bertujuan untuk membina konstruk pengurusan hijau dan mengenal pasti kesan pengurusan hijau terhadap kepuasan pelanggan. Pendekatan kuantitatif menggunakan tinjauan telah digunakan untuk menerbitkan konstruk pengurusan hijau dalam industri hotel, di samping untuk mengkaji tahap kepuasan pelanggan terhadap amalan pengurusan hijau di hotel. Kaedah pensampelan kluster telah digunakan dan soal selidik telah diedarkan kepada hotel yang bertaraf sekurang-kurangnya tiga bintang di Guang Zhou, China. Sebanyak 375 soal selidik telah berjaya dikumpulkan dan diterima untuk dianalisis. Analisis faktor digunakan untuk menentukan konstruk bagi pengurusan hijau dalam industri hotel dan empat faktor, iaitu peraturan alam sekitar, kemudahan hotel, amalan hotel dan pengurusan hotel telah dikenalpasti. Analisis regresi antara faktor-faktor tersebut dan kepuasan pelanggan menunjukkan bahawa hanya faktor kemudahan yang ditawarkan oleh hotel mempunyai kesan yang signifikan. Analisis demografi responden menunjukkan perbezaan yang signifikan antara kepuasan pelanggan dan status ekonomi sosial serta tahap pendidikan; di mana pelanggan yang berada dan berpendidikan lebih cenderung untuk memilih hotel hijau.

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LIST OF ABBREVIATION

SPSS	-	Statistical Package for Social Science
UTM	-	Universiti Teknologi Malaysia
ER	-	Environment Rules
HP	-	Hotel Practices
HF	-	Hotel Facilities
GM	-	Green Management
VIF	-	Variance Inflation Factor

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CHAPTER 1

INTRODUCTION

1.0 Research background

This chapter explains the introduction, background of the study, problem statement, research questions, objectives, significance of the study and operational definition. This study is about the effect of green management on customer satisfaction in the hotel industry in China.

1.1 Introduction

Due to globalization and massive development in the industrial sector, environmental pollution has increased globally. Yang (2012) in his famous observation identified “Eight public nuisance events” in the twentieth century, which has contributed not only for environmental destruction, but brought a massive number of fatalities to human lives. These are the Belgium’s Meuse Valley’s Killer Fog, Yokkaichi Asthma Disaster, Minamata Disease, Yusho Disease, Great Smog Disaster (London), 1948 Donora Smog Disaster (U.S.A), Itai-Itai Disease (Toyama), Los Angeles Photochemical Smog. These events have caused combined death toll over millions of people and has inevitably polluted the environment.

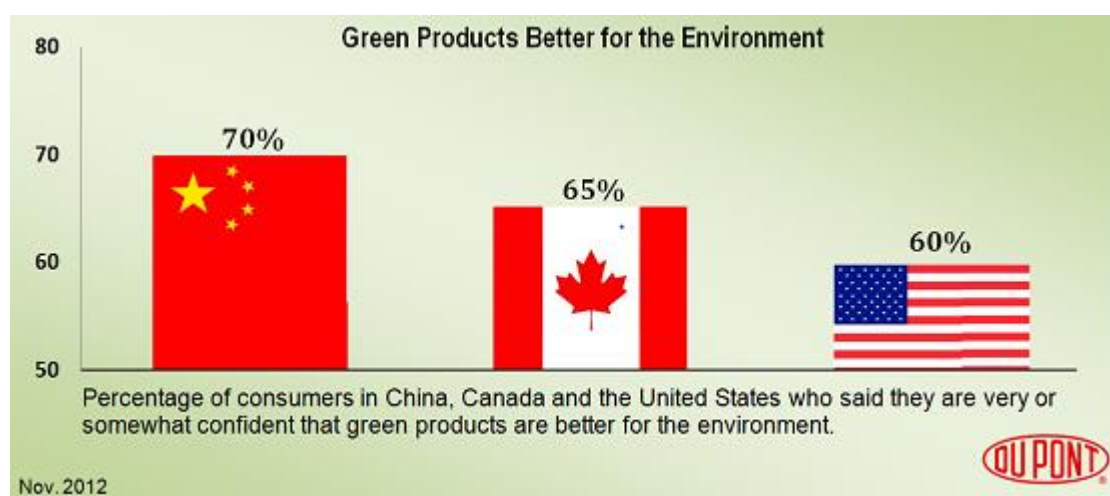
In view of the serious environmental degradation, countries have begun to incorporate environmental protection and adopt the go-green approach into their economic and political agenda. According to WNFCC (2005), the Kyoto Protocol was adopted and executed on 16th February 2005 after a series of long negotiations since December 1997. This agreement has an international binding effect with governs industrialized countries to reduce pollution in order to promote the green revolution.

With the world environmental issues gaining more traction over time, interest and concern regarding the environmental issues have become the central issues of business organization (Cai, 2013). According to the Euro barometer (2008), 75% of the Europeans are “ready to buy environmentally friendly products, even if they cost a little bit more”, even though only 17% of them declared having recently bought such products marked with an environmental label. The growth of environmental awareness and demand from consumers has resulted in the incorporation of green management into business organization i.e. giving birth to the concept of green management. Green management is defined as “the processes and practices introduced by an organization to reduce, eliminate and ideally preventing negative environmental effects arising from its undertakings” (Cooper, 1998, p. 112).

In the case of China, a report from the China Green National Economic Accounting 2004, which was released by the Chinese Government in 2006, stated that China has lost approximately 511.8 Billion Yuan in 2004 due to environmental pollution (PRC website, 2006). This is equivalent to roughly 3.05% of the country's 2004 GDP. Based on a conservative estimate, it will cause the Chinese Government 1.08 Trillion Yuan to remove and clean up the environmental pollution, i.e. 6.8% of the country's 2004 GDP as well as an additional 287.4 Billion Yuan a year, or 1.8% of China's 2004 GDP to fund the running cost of governing environment issues. This serves as lessons that government should not neglected environment in return for economic development, as the loss of focus could backfire on and cause more in order to remedy the situation.

Nevertheless, all is not lost. In Genencor Household Product Sustainability Index Survey conducted by Du Pont in 2012 in figure 1.1, the Chinese urban consumers are becoming more aware and more inclined to accept green products with 70% of the Chinese consumers believed that green products are eco-friendly, surpassing the Canadian and American which has a score of 65% and 60% respectively. With such an encouraging statistic, China has become a potential target market for green products, and this serves as a positive development since it is currently one of the world's largest consumer markets.

Figure 1.1 Genencor Household Product Sustainability Index Survey



(Source:www.dupont.com)

1.2 Background of study

According to the 2030 Global Tourism Outlook report, which was released in the year of 2011, there will be an increase of 30 million passengers annually from the emerging markets and 14 million passengers increased contributed by the developed country market. At the same time the total number of places visited in China has also increased accordingly from 20 places in 2001 to the current number of 111 places, as well as the increased in outbound travel agencies from 67 to 1379 in the same period (Yin, 2013). In the case of inbound tourism, Du Jiang (2012) the Deputy Director of the China National Tourism Administration pointed out that the Chinese per capita travel rate domestically is 4% of the Chinese GDP, making it the world's largest domestic tourist market.

The increase in domestic tourist movement, naturally creates opportunities for tourist accommodation. According to International Hotel and Restaurant Association (2000), there are more than 13 million hotel rooms were available at the turn of the twenty-first century, with an average occupancy rate of 55.6 percent. Naturally, with the increase in the demand for accomendation, hotels in China have begun to differentiate themselves. According to the "2013 China Hotel Investment Outlook report" released by the China Tourism Research Institute in May of 2013, by the end of 2012, China had 11,706 star-rated hotels, consisting of 654 five-star hotel, 220 four-star hotel, 5545 three-star hotel and 3306 two-star hotel, providing a total of more than 1.57 million rooms. To further differentiate themselves, some hotels have embarked on green management in response to the growing awareness of the Chinese population towards the environment (Chen, 2013). Moreover, with the growing number of international travelers indicating their preference towards environmentally responsible organizations, the path towards green management is a logical extension to the hotel industry. For example, in a survey conducted by the National Leisure Travel Monitor worldwide in 2008, 85% of leisure travelers considered themselves to be environmentally conscious (Crocker 2008). This was in agreement with Vora (2007) study where 43 million of U.S travelers have expressed their concern for the protection of the environment.

In choosing their choice of accommodation, of the 1,155 business tourist's respondents asked by Clausing (2008) in his survey, 34% of them will look for hotels that are ecologically friendly, while 38% indicated that they have conducted prior research in green lodging facilities. Similarly Mensah (2004) reported that in a study by the International Hotels Environment Initiative and Accor, 90% of hotel customers would choose to stay in a hotel that cares about the environment. Study by Penny (2007) on hotel managers in Macau found that 65% of respondents believe that good green management can contribute to a hotel's image and competitiveness. According to one survey conducted by Chen (2013) as recognition of the need for the development of green hotel, support the development of green tourism hotel and the hotel does not provide free one-time items, respondents who fully affirmed the attitude of the population accounted for 72.41%, 86.21% and 63.10%, the survey results show that the higher education level, hold a positive attitude towards the people of the proportion of Greens Hotel High, which shows the positive role of education in raising environmental awareness of citizens. These observations could be attributed to the upswing trend towards environmental protection is growing where 66% of hotel guests according to the survey conducted by North America Hotel Guest Satisfaction study indicated that they were aware of their hotel's conservation efforts, compared with only 57% in 2008 (Power, 2009).

On top of that, due to the dual pressure of fierce competition and energy crisis; as well as the inclination for a low-carbon economy as a new economic growth point; hotel industry is inevitably drawn to this environmentally conscious phenomenon (Shen and Jiang, 2008). Eco-hotel and energy conservation are becoming a necessity for the future of the hotel industry.

The world has entered into a "green era" since the 1990s, where the emerging of green era had a tremendous impact on global economic. Due to the fact that the hotel is a consumption and entertainment place that have a lot of consumers, it will take and consume large amounts of natural resources, emitting a large amount of waste material and produce a lot of noise pollution (Ye, Shan and Song, 2009). "China ecological tourism" campaign quickly set off China's tourism hotel industry "green

wave" in 1999 (Liu, 2012). The China Hotel Association has developed the National hotel industry's first "green hotel standards" in 2002 (Yin, 2013). The "Green Hotel Rating Provisions" was formally implemented Since March 1, 2003. According to Yang (2012), Zhejiang Province took the lead in that "create a green hotel" initiative in 2005, after that China's green hotels have sprung up throughout the country, environmental protection and energy saving has become the new fashion of modern hotels and has been listed in the national assessment standards for the star hotels. In 2010, Beijing Tourism Administration issued 100 recommendations for the tourist hotel energy saving and set targets that the water consumption for star hotel reduced by 20% in the following five years, and announced that put the tourism hotel energy-saving emission reduction target into the evaluation of star rated hotels and green hotel evaluation system (Zhang, 2011). In the same year, the Shanghai Municipal Bureau of Tourism announced the second half of 2010 the city's hotel industry in energy conservation work, and declared the star hotel used for energy saving lamps will reach five percent at the end of the year (Zhao, 2012). In short, the creation of green hotel shows ascendant trend in China.

According to one statistic conducted by the portal of Chinese hotel industry—Mai dian Net in 2011, a 15,000-square-meter three-star hotel, need to consume heat generated by 1400 tons of coal in one year and at the same time emitting more than 4200 tons of carbon dioxide, 70 tons fumes and 28 tons of sulfur dioxide into the air. Meanwhile, the hotel's per capita resources usages when compared to that of the urban residents are 10-15 times higher in electricity consumption and 3-5 times in the area of water consumption.

1.3 Practical Problem Statement

Green hotels advocate safety, environmental protection and health concept, in line with the hotel sustainable development requirement. But now there are still a series of problems and obstacles in the process of building green hotel in China (Chen, 2013). This view was echoed by Yang (2007) when he observes that certain hotels are just using the green management as a mean of the corporate green image to publicize rather than using it as the guiding ideology. Additionally, the hotel's manager and staff are still unclear about the implementation of green management due to lack of appropriate green management standards (Chen and Sun, 2009). In response to the differences in the guidelines and standard to evaluate and endorse environmentally friendly hotels, there is a need to propose a construct that could be used and accepted by the industry.

According to Zhou and Lin (2013), Chinese consumers are willing to try the relevant hotel green environmental protection measures which reflect the increase of environmental awareness of Chinese hotel consumers. In other words, the customer support for green hotel is high. Though responses for green hotel have been encouraging, however, the actual implementation and the ideals of eco-friendly hotels may differ significantly. This is because in the pursuit of being "green", a certain level of consumer comfort maybe sacrifices (Liu, 2011). For example, in order to save on energy resources, the use of hot water may be limited thus creating unwarranted discomfort to the hotel guests. This is especially true for the case of China since the hotel industry here has only taken up this issue of late. Additionally, consumer awareness in China regarding the ecological hotel is also low, as they have yet to truly understand or accept the eco-friendly concepts. They are also discouraged by the generally higher price of green products (Liu, 2012). Moreover, in choosing their place of stay, hotel related green operating measures does not feature highly in their choices. Consumers are reluctant to pay a higher price to stay at a green hotel. This is similar to the research conclusion of Li (2009). These results show that there is a disconnection between the Chinese consumer's green consciousness and green behavior in presently. The consumer's backward awareness should not be blamed too

much, but further promotion of green environmental protection, especially to promote environmental protection in hotel industry should be taken by government and even the whole society (Zhao, 2012). The increase of customers green awareness is needed to actively cooperate with whole society and strengthen the propaganda and promotion work in China. The green operating measures provided cannot meet customer expectations of the hotel green environmental protection in China. Hotel customer not satisfied with the hotel green management (Zhou and Lin, 2013). This brings a new task for the hotel industry: how to better let the consumer recognition and support environmental protection measures of the hotel.

In the process of gathering relevant information, the researcher found that most articles are based on an environmental perspective to discuss about hotel energy saving, or enterprise-based perspective, while the article integrates the real effectiveness between the two; customer perspective was not given too much attention in the discussion. Adhering to the guidelines that create eco-hotel will not only save material, reduce consumption, reduce operating costs, but more importantly, companies will be able to understand the customer experience needs and provide customers with high quality products and services to win customer support (Chen, 2013).

The concept of green hotel is not new. However, with the growing attention on being environmentally responsible, it has of late generated positive feedback and has been accepted by hotels, government, organizations and even consumers in the international arena (Zhou and Lin, 2013). In fact, at the turn of the century, green hotel has become the inevitable trend in the hotel industry development; and is touted as the only way to achieve sustainable development (Zhang, 2011). This view was also echoed by Liu (2012), when he said that: "setting up of green eco-friendly hotel has become an inevitable trend of the hotel industry. In the developing process of the hotel industry, with the continuous improvement of economic efficiency, the conflict between environmental and economic has become more tensed. In the long term, rational use of resources in order to effectively protect the environment, and adopt the approach of sustainable development is an inevitable choice for hotel industry".

1.4 Theoretical Problem statement

In response to being green, the Chinese local government has tried to introduce their own standards in endorsing green hotel's management. The "Green Tourism Hotel LB /T 007-2006" tourism industry standard was released by the National Tourism Administration in 2006 for the classification of Green Hotel (DB33/T326-2001) (Zhang, 2011). This standard has become the local standards in the Zhejiang Province. The guidelines would cover the area of setting up the green tourism hotels, implementation of environmental management in nine areas i.e. the water, air quality, emissions, noise, building materials, indoor environment, afforestation, control strengthening of environmental management, and practical recommendation for the setting up of green tourism hotels (National Tourism Administration of China, 2006).

Apart from this, there is another guideline in China for Green Hotels which is the GB/T21084-2007 and it came into execution on 1st March 2008 (Zhang, 2011). This guideline was drafted and regulated by the Ministry of Commerce, the National Development and Reform Commission, the State Council, the State-owned Assets Supervision and Administration Commission of the State Council (SASAC), the Ministry of Environmental Protection, the National Standards Commission, the National Tourism Bureau and the China Hotel Association. According to this guideline, the green hotel is divided into 5 levels based on the degrees of effectiveness achieved by the hotel in saving resources, protecting the environment, provision of a safe healthy products and services (The China Hotel Association, 2007).

The existences of different guidelines and standards are not helping since it creates a lot of confusion and interpretation, thus providing opportunities for unscrupulous entrepreneurs gain from the green movement (Liu, 2012). GB/T 21084-2007 are too focused on the hotel hardware requirements, while ignoring one important software that is the quality of the staff (Liu, Shi and Wang, 2008). This construct is not requirement for corporate environmental policy communication between hotel managers and staff. According to Zhao (2012), GB/T 21084-2007 without making the

requirements for staff environmental training, although there are certain requirements, but gives low scores to the staff environmental training.

The China Green Hotel certified by the National Working Committee, there is strong official colors in the certification bodies and authentication (Wan, 2012). Green Hotel Review Working Committee is responsible for the training of the register review division, eligibility review division may participate in the provincial Green Hotel evaluation work (Liu, 2012). The operating costs of the headquarters and branches in the provinces of the Green Hotel Working Committee are paid by the relevant state departments. The hotel is not required to pay annual fees except for fees paid to hire experts (registered assessment division) and the production of plaque. According to Yin (2013), the Government-led authentication mode simplified the green hotel certification program, but the hotel that applies for certification is difficult to get the sustained counseling provide by the professional agencies.

So far, the majority that applies for China Green Hotel Certification are state-owned hotel, well-known international brand hotel chains and private domestic influential hotel chains did not participate in them, which shows that foreign hotels and private hotels does not recognize China green hotel construct and also the certification program (Zhou and Lin, 2013).

According to Liu (2012), China green hotel development is not satisfactory, become an empty slogan or concept, the fundamental reason is that only the principles and guidelines without specific operation content and standards. For example, in the process of create Green Hotel, the hotel just simply placed in the shop of some green plants, put a number of "self-consumption, do not waste" style propaganda signs, or just developed a simple measure of central air conditioning and other time-phased operation, the hotel prides itself on creating a green, this hotel is extremely superficial understanding of green hotel, consumers believe that these practices only hotels selfish behavior, has nothing to do with the interests of consumers, so the participation and recognition are particularly low (Ye, Shan and Song, 2009).

It must also be noted that the concept of “Green” differs between countries, industries, organizations, and customers (Wan, 2012). For example, in the hotel industry, some hotels are more stringent with the definition of green and they follow a more comprehensive approach towards being green as compared to some hotels which claimed to be green, but are merely restricting their activities to a particular aspect (such as reducing the number of sheets changed for the consumer) (Heung, Fei & Hu, 2006). Abraham Pizam, an international famous tourist scholar wrote in his journal in 2009 that there are different guidelines in evaluating Green Hotel due to the different interpretation of every country. In view that the lack of uniformity would seriously affect the measures of green and environmental protection in the hotel industry, there is a need to standardize these guidelines across the world in order to provide a common general expectation on green hotel standards for consumer (Pizam, 2009).

According to Green Hotels Association (2008), “Green Hotels are environmentally friendly properties whose managers are eager to institute programs that save water and energy resources; and reduce solid waste – while saving money – to help protect the earth.” In order to become a green hotel, green management must be implemented. Green Management as a new management model for sustainable development, through the use of green technology to build effective green management system in order to achieve green marketing, making the hotel to contribute towards the unity of economic, environmental and social benefits (Yang, 2012). Therefore, the model of how to build and implement green management becomes an important goal of sustainable development of the hotel industry. But there is no a clear construct to guide the hotel manager to implement the green management in China (Yin, 2013).

1.5 Scope of the study

Hotels in Guangzhou are under increasing pressure to improve their environmental performances (Cai, 2013). Guangzhou is located on the Pearl River, about 120 km north-northeast of Macau and north-northwest of Hong Kong, and is the capital and largest city of Guangdong province in South China (PRC Central Government Official Website, 2014). Guangzhou is a key national transportation pivot and trading port. One of the five National Central Cities, it holds sub-provincial administrative status (Tourism Administration of Guangzhou Municipality, 2010). The city is currently experiencing a very rapid growth in the number of tourists. Guangzhou is the third largest Chinese city and the largest city in South Central China. As of the 2010 census, the city's administrative area had a population of 12.78 million (PAW, 2011). According to one research conducted by the Guangzhou Tourism Bureau, as of December 31, 2013, a total of 229 star hotels in Guangzhou, including 23 five-star hotels, 39 four-star hotels. According to Hsiao, Chuang, Kuo, and Yu (2014), a focus on environmental issues, particularly in the tourism area has led to the increased number of green hotels. Many hoteliers recognized the need to adopt the green hotel strategy in their operation.

1.6 Research questions

This study attempted to answer the following research questions:

1. What is the construct to evaluate green hotel management in China?
2. What is the relationship between green management and customer satisfaction in hotel industry in China?

3. What are the influences of demographic differences on customer satisfaction in China hotel industry?

1.7 Objectives

1. To identify the construct to evaluate green hotel management in China
2. To identify the relationship between green management and customer satisfaction in hotel industry
3. To identify the influences of demographic differences on customer satisfaction in China hotel industry

1.8 Significance of the study

This study measures the effect of green management of customer satisfaction in the hotel industry in China. The findings of this research make contributions to the policy maker or government, hotel manager and academics.

The first discussion is the findings contribution to policy maker or government. In this research, a new construct to evaluate hotel green management in China was created and the relationship between hotel green management and customer

satisfaction was identified. The researcher also stated some problems in the current hotel green management in China. During the process of conducting this research, the researcher found that many hotel customers unsatisfied with the hotel green management practices. The customer's green awareness is still in a very low level. The policy maker or government can use the findings of this study as reference to make the standard or rules to evaluate hotel green management. Moreover, the government can use this construct to guide or supervise the hotel to implement green management.

The second discussion is the findings contribution to hotel manager. The Eco - hotel will effectively save energy, reduce the operating costs of the hotel, enhance competitiveness, meet new consumer trends, which will help hotels to expand market share, help to establish a corporate image change for hotel public relations as well as to create a good corporate reputation (Liu, 2011). From, environmental issues are directly connected to the hotel operating costs; with the right management operating cost could be reduced. This research, which intends to develop evaluation instruments from the viewpoint and values of customer experience provide a basis for resource conservation that is in line with the customer perspective; is able to improve customer support towards green management practice in the hotel industry. The hotel managers will be able to innovate the energy saving approach based on the customer perspectives. There are as well constantly looking for opportunities to make improvements and energy planning to carry out ways to make green marketing and enhance customer support. Only through adjusting their strategies and developing products that meet customer satisfaction requirements of energy saving measures. It is as well seek to identify the degree of customer support the hotel's energy-saving measures, horizontal and vertical comparison, identifying the internal and external factors that impact of customer support, to adjust business strategy, with practical and operational significance

The last discussion is the findings contribute to the academicians. Hence, this study is able to provide an optimal balance point for eco-hotel; taking into account the customer perspective, the environment conservation and the corporate desire through the building of an evaluation model of the eco-hotel that saves energy and will be

supported by customers. In this research, the hotel green management includes four components which are environmental rules, hotel facilities, hotel practices and hotel management. The researcher used these four components to test the relationship between green management and customer satisfaction in the hotel industry. This will be a new model for future researchers to study the construct to evaluate the hotel green management. This model, which is formed from the value of the customer experience opened up a new direction for the research of customer experience and supports the theory of energy saving.

1.9 Operational definitions

1. **Green management** takes into consideration the concepts of sustainability with the concepts of management. It is related to the three main branches which are the environment, the needs of future and present generations and the economy (Zhong, 2007). In this study, Green management refers to the hotel's green management
2. **Sustainable development** as its name implies not only should ensure the development, but also should keep the sustainability of development. This sustainability involves the common sustainable of three fields which are economic, society, and environment (Lovins, 2007). It requires achieving economic development and needs to adjust the excessive growth of population, improve national quality, control the environmental pollution and protect the ecological balance at the same time in order to realize the degree of social civilization progress and comfortable environment in harmony with the economic development level (Reinhardt, 2007).
3. **Demographic** is the quantifiable statistics of a given population, it studies of a population based on factors such as age, race, sex, economic status, level of education,

income level and employment, among others (Yang, 2012). In this study, the demographic information will include gender, age, education level, income and occupation of the customer.

4. **Rules** are accepted principles or instructions that states the way things are or should be done, and tells you what you are allowed or are not allowed to do (Zhou and Lin, 2013). In this study, it refers to the rules which are hotels followed to implement green management.
5. **Facility** is a place, amenity, or piece of equipment provided for a particular purpose (Guo, 2009). In this study, facility refers to all the facilities provided by the hotel.
6. **Activities** are things that a person or group does or has done (Liu, Shi and Wang, 2008). In this study, it refers to something done by the hotel in the process of implement green management.
7. **Customer satisfaction** is a term frequently used in marketing. It is a measure of how products and services supplied by a company meet or surpass customer expectation (Chen and Sun, 2009). In this study, customer satisfaction refers to the satisfaction level of hotel's customer.
8. **Hotels** In this study, hotels that we research are three and higher star hotels in Guang Zhou, China.

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