

Attitude of Customers and Employees towards the Environmental Management Systems in the Egyptian Hotel Industry

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Abstract

Research into environmental management systems (EMSs) began in the late 1990s with studies that focused on the driving forces, costs and benefits and nature of such systems. However, very little research has been done to investigate the attitude of hotels stakeholders towards such systems. In recognition of this gap, this research studies the attitude of both: customers and employees –as two main stakeholders-towards EMSs in the Egyptian industry. A single case study design, in which a mixed methodology of both quantitative and qualitative approaches, was employed to fulfill the research objectives. Semi-structured interviews with three levels of employees – executive, supervisory and general and a structured questionnaire distributed to the hotel customers were employed as data collection tools. The findings revealed that customers have a positive attitude towards environment. However, despite this positive attitude, findings revealed that there is no significant relationship between customer attitude towards environment and their willingness to pay. Findings, also, provided some significant contributors that boost the positive attitude of customers towards green practices in hotels. From the employees' perspective, results indicated that commitment to the EMS is negatively affected if the adoption of the system by the company was perceived to be merely a means to save costs, improve company image and attract green customers. The study provides valuable insights to help hotels managers design their own strategies and policies which entails most of the environment related attributes which the customers and employees alike are concerned with. Knowing these attributes would enable hotels attract more segments of customers and increases their market share.

Keywords: Environmental Management Systems, Hotel Industry, Employees, Customers, Egypt

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Introduction

The hospitality sector will always constitute an essential and dynamic component of the world's largest industry travel and tourism ¹. It is not one which causes gross environmental pollution nor does it consume vast amounts of non-renewable resources and therefore it may not be in the front line for environmental concern. The hospitality industry has been traditionally considered the one that does not have a great impact on the natural environment compared to such industries as gas and oil or chemical industry and other consumer product manufacturing industries. ²

However, the hotel sector in particular is one of the main business sectors in the hospitality industry that generates much more negative environmental impacts than those caused by other types of buildings of similar size. If the impact of all of these small individual operations is added together the industry does have a significant effect on global resources.^{3;4;5} It has been estimated that 75% of all environmental impacts created by the hotel industry can be attributed to the excessive consumption of local and imported non-durable goods, energy and water followed by emissions released to air, water, and soil.^{6;7} Scanlon ⁸ assures that hotel and resort business affect the sustainability of the natural environment in which they are developed and operated by the consumption of significant amounts of both wastewater and solid waste. In addition, recreation facilities affect the environment by the application of landscaping practices that can pollute local water systems and cause erosion and soil degradation. Environmental awareness is turning into a hot issue for managers as well as having become a high priority on the agenda of governments. This awareness spills over into many industries including tourism and hospitality.⁹ There are obvious and encouraging signs that the travel and tourism industry, one of the largest industries in the world have begun to be aware of its substantial negative impacts on the environment and is stepping up its efforts to embark on a more sustainable path.⁶

The concept of environmental sustainability

The concept of sustainability is the philosophy that humankind should live in harmony with nature and with society.¹⁰ Sustainability is an operating framework that is applicable to reducing the environmental impact of manufacturing companies which produce visibly unclean emissions of waste products as a result of their processes.¹¹ Through the adoption of sustainable development principles, a business aims to protect the environment, ensure economic security and also create a fair society.¹² The aim of environmental sustainability is to maintain crucial resources through effective conservation activities in an era in which these resources are becoming increasingly scarce.¹³ Sustainability can be just as useful in the service sector as in manufacturing. Sustainable hotels lead to sustainable destinations which in turn lead to successful hotel business.¹¹ Although environmental responsibility and sustainability are concepts that have only recently

come to bear explicitly on the development of tourism, the issue of sustainability has been widely addressed in the business literature. The new millennium and the coming decades are a crucial time for the relationship between travel and tourism industry and sustainable development.¹⁴

Environmental Management System (EMS)

Environmental risk can be managed and minimized by the introduction of systems in business activities. One system referred to as environmental management system (EMS). Environmental management system is the organizational structure, responsibilities, practices, procedures and resources for determining and implementing environmental policy.¹⁵ It is a process and practices introduced by an organization for reducing and eliminating and ideally preventing negative environmental impact arriving from its undertaking.¹⁶ It is a set of planning, prevention, control, training and communication actions that the firm carries out to reduce the negative impact of its operations on the environment.¹⁷ The steps involved in establishing the EMS consist of policy making, planning, setting objectives and targets, implementation and review of existing environmental policies.¹⁸

There are two fundamental types of activities in environmental management system: technical which refers to the use of techniques or technologies that limit the physical impact of operational activities and organizational which refers to the incorporation of environmental issues in the firms' values, objectives, organizational structure and systems.¹⁷ Environmental management system is very advisable for the hospitality industry because these are tools for improving internal company management and are suitable for planning and assessing environmental performance.¹⁹

The hotels whose principal type of customer travels for leisure are more concerned about environmental management, not only because it can affect their economic performance but also because it could influence the conservation of the surroundings where they are established, which contributes to it being a more attractive destination for tourism.²⁰ The goal of environmental management system is protecting and preserving the environment and this has become increasingly important in the face of resources shortages, increasing costs and undesirable changes in climate and the environment.²¹ One of the critical elements of becoming an environmentally friendly hotel is adopting an environmental management system that meets ISO14001 standards which extends throughout the hotel organization and between the hotel and its guests, local community and its suppliers.²²

Motivations for EMS adoption and implementation

The growth of travel has led to the concern shown for the environment and quality amongst other factors acquiring great importance. There are two main reasons have been found in the literature for which tourism enterprises are concerned about the environment. These reasons are the main driving forces behind implementing an environmental management system (EMS): (1) Tourism has been blamed for the fact that its activity is composed of a series of operations which used an important amount of water resources and materials which show little respect for the environment such as disposable plastic containers, non-recyclable packaging or cleaning agents and (2) Customers have become increasingly aware of the need for more effective measures to protect the environment. Recent studies have shown that environmental concerns are increasingly influencing customer behavior and that this may substantially affect the choice of accommodation.⁶

Consumers' increasing concerns about the environment and the idea that the customer "pays to be green" have been proven to be one of the main drivers that determine environmental initiatives in hotel companies.^{5;7} This makes hoteliers are becoming more motivated and willing to take towards greater environmental responsibility.⁶ In addition, the need to control hotel activity costs¹⁹ and the increasing environmental regulation²³ are also considered as driving forces behind implementing an environmental management system (EMS).

Perceived Benefits of EMS Adoption and Implementation

The adoption of an (EMS) by a lodging company would have several benefits: a competitive advantage for green marketing as a response to consumer expectations, the minimization of risks and costs, increased profitability, enhanced customer and employee satisfaction, improved relationships with the local community and improved public relations.^{3;24}

Reducing operating costs has been considered one of the most visible benefits for hotels to implement EMS followed by demands from customers and improved hotel image.^{25;26} From a financial perspective, the lodging industry can benefit for the adoption of environmental standards in three key areas of operating costs may be made by reducing the use of detergents, energy and water.^{8;7} Providing a safe and healthy environment and social responsibility are another important benefits coming from implementing EMS.^{14;5}

Top management and environmental management

To be totally effective, the adoption of environmental policies must come from the top. Without a commitment at the highest level of the company, it is unlikely that ideas developed throughout the organization will flourish.³ Top management's commitment to environmental initiatives is one of the most important prerequisites for a successful environmental strategy.²⁷

Managers' awareness of environmental problems and the level of concerns about the environment are proven to be a deciding factor that determines hotel companies' environmental management.²⁸ It is not only the activities that are carried out by the hotel that will lead to success of EMS but also the involvement of managers and proper training of employees.²⁹ Environmental management is largely determined by the way top managers perceive internal and external forces relevant to their organizations.³⁰ The degree of top management commitment varies depending on managerial perceptions of environmental issues: top managers tend to be more involved in environmental issues when perceiving regulatory forces to be threats, their customers to be environmentally conscious or seeing environmental initiatives as opportunities to save costs or improve product quality.³¹ The key success factors for adopting environmental management suggested that top management leadership and support is one of essential elements in raising organization-wide awareness and understanding of environmental issues.³²

Current environmental management system in the hotel industry

Currently, hotel companies with a proactive environmental commitment are implementing green practices in various operational areas such as housekeeping, laundry, food and beverage service guest rooms, conference and meeting facilities.² Green practices conducted can be categorized into three main areas of environmentally friendly practices: energy management, waste management and water conservation.

Energy management

Energy is electricity, fossil, fuels, water and sewage, certain vehicle fuel and in some instances purchased steam, hot water and chilled water.³³ Energy costs usually count for four to six percent of hotel's revenue. Energy costs are one of the largest non-staff cost items on a hotel's profit and loss account. Energy is one of the most crucial resources utilized by the hotel industry.⁴ Hotels are immense energy users. There are substantial differences in energy use between different types of hotels depending on hotel size, class, number of rooms, customer profile, location, the types of services and amenities offered to guests.³⁴ A hotel operation requires and uses energy on a daily basis for 24 hours, irrespective of seasonality, number of guests and its location.^{35; 36} Hotel facilities rank among the top five in terms of energy consumption in the commercial/ service building sector.⁴ Energy is required to maintain the tools which are used to carry out the functions efficiently to maintain the flow of guests.³⁷ The energy consumed by hotels is used for space heating, cooling, ventilation, hot water, lighting, laundry and kitchen and miscellaneous uses.³⁸ It is clear that the hotel sector could make a major positive contribution to the environment by taking some measures consumption to reduce energy consumption which will in turn reduce pollution and resource depletion. Thus while the hotel sector consumes a big proportion of electricity as compared to other tourism sectors, hotel operators still have a chance to implement energy saving campaigns and environmental management systems.¹³

To enhance energy efficiency, there are some initiatives such as adopting automated (computerized energy control system), replacing incandescent light bulbs with fluorescent lighting using energy efficient lighting²³, installing energy-efficient laundry equipment⁵, using digital thermostats to control guestroom energy consumption, installing occupancy sensors (they automatically turn the lights out when guests leave the room), installing triple-glazed windows or reflective glass to save energy or heating and cooling³⁹, insulating hot/chilled water tanks, pipes and air ducts and insulate the entire building correctly³⁴, reducing air-circulation equipment through implementing a smoke free policy²⁹, the installation of an energy efficient kitchen²⁴, and the installation of a computer-controlled air conditioning system.⁴⁰

Water Conservation

Hotels may have high water consumption depending on each hotel's accommodation capacity, standard and the type of facilities and services provided.²⁶ Water is in fact a crucial resource for the hospitality industry due to its scarcity and its role in a number of activities on property such as laundry, food production, outdoor facilities, cold water for kitchen, circulation for air conditioning, hot water for guest bathrooms and circulation for space heating. The consumption of water by guests in a hotel per night will depend on several factors like the hotel standard and facilities that are provided for the guest. In a high standard hotel organization, the hotel room would require 396 gallons (1,499 liters) of water per day.⁴¹ The standard consumption pattern of hotel guests would range between 170 and 360 liters of water use per night. Water consumption at these rates and without monitoring or control will likely lead to water shortages. Regulations regarding water use will tighten in the future and hoteliers will have no other options than to introduce water saving policies and technologies to further reduce consumption.²⁴ Another factor that affects water is not only consumption but also contamination. The amount of water consumed by hotels is more than the normal household consumption, thus larger consumption means a larger quantity of contaminated water will be released in the environment, thus polluting the water will and harming the environment.^{42;35} Waste water management is an important activity for hotels to address in order to minimize environmental impacts. Technology, knowledge and sustainability programs are needed for organization to consume water more efficiently and to minimize contamination of water supplies.¹³

Many hotels have adopted the certain practices for water conservation such as instituting a linen reuse program which encourages guests to reuse linen and towels during their stay contributes to saving 11 to 17% on hot water⁵, using water-efficient devices such as low flow faucets, low flow showerheads, low flush volume toilet that uses less than 4 liters of water per flush cutting water use in half, sink aerators which reduce water flow to 6 liters per minute, water sub-meters

and electronic sensors to control water usage in toilets (Webster, 2000; Ogle and Alonso, 2010), and using water-efficient laundry equipment and dishwashers, placing water saving campaigns in kitchen (washing dishes when there are full loads). In addition, tasks as washing vegetables should always be done in bowls instead of running water and defrosting should be done overnight rather than directly with water, and treated wastewater should be used in garden irrigation.⁴³ Any water use reduction programme must have the full support of the staff. The approach towards decreasing water consumption is to regularly train staff on how they can contribute with simple measures towards decreased water consumption. However, policies should not have a negative effect on a hotel's hygiene and cleanliness.³⁴

Waste management

The generation of waste by hotels is one of the visible effects that a hotel has on the environment. The generation of solid waste depends upon the size of the hotel.¹³ A typical hotel guest produces 1 kg of waste per day which leads to tons of waste disposed by hotels monthly.⁶ Production and service of food operations generate more waste than other areas of hotel operations. There is a variety of waste produced by a hotel and it consists of paper, various metals, plastics, aluminum and glass.⁴⁴ The housekeeping operation also generates cleaning materials and plastic packaging. In addition to solid waste from front-of-house areas, back of house areas also generate a huge amount of solid waste such as toner cartridges, paper and cardboard waste and many other wastes from the hotel facility maintenance department.⁴³

Waste management has been designed and implemented to reduce the volume and toxicity of garbage.⁵ Proper waste management is a cost cutting measure as well as an environmental impact-reducing measure. Costs can be greatly reduced by waste reduction and replacing conventional waste disposal activities with practices aiming for reuse, disassembly, recycling and composting.⁴³ Minimizing waste starts in the procurement department, ensuring that only products with a minimal packaging are acquired.²⁴ Many hotels have adopted the following practices for waste management: placing recycling bins in all front and back of house areas, purchasing used or recycled-content products⁵, dosing system for cleaning agents used in the hotel as well as a series of refillable dispensers for in-room toiletries²⁴, reusing damaged textiles as uniforms and linens and convert them into useful items³⁴, grinding guest soaps to use as laundry detergent for hotel uniforms, Recovering used cooking oil and food waste⁵, and all paper utilized on properties, including toilet paper, paper, paper towels, napkins and office stationery are made from quality-recycled paper, and composting organic kitchen waste.¹⁶ In addition to the above mentioned three main areas of environmentally friendly practices, purchasing activities, organization and system and external relationship can also be included in decisions areas and functions for environmental management in the hotel industry.²

Research Methodology

The aim of this study is to explore the application of EMS in hotels from two main stakeholders' perspectives; hotels employees and customers. The study attempted to investigate how hotels employees and customers think about EMS. To attain this aim, the study objectives were to: (1) investigate the attitude of employees towards EMS whose working attitude directly affects the services provided to guests; and to (2) identify the relationship between the customer attitude towards environment and their willingness to pay more for green practices. Based on the study objectives there were three main research questions raised as follows:

- Q1. How hotels employees perceive the application of EMS in their hotels.
- Q2. Is there a relationship between the customer attitude towards environment and (1) their behavior towards choosing to stay in a hotel and (2) their willingness to pay more for green practices?
- Q3. What are the contributors to the customers' positive attitude towards green practices in hotels?

Research Design and Data Collection Methods

A single case study was adopted in this study. The investigated hotel, referred hereafter as STAR, was selected. The selected hotel is known as one of the pioneer hotels in applying EMS and executing ISO 14001 and ISO 9000 programs. To answer the first research question, the data were collected from 16 employees representing three levels of hotel employees – executive, supervisory and general – to provide a richer database for analysis. Semi-structured interviews were chosen as the main data collection method. The interview schedule was piloted with three hotel managers recommended by a hotel quality system manager who was responsible for the hotel's ISO 14001 and ISO 9000 programs. The informants were briefed about the researchers' background, research aims, the structure and length of the interview, confidentiality of the collected data and informant anonymity. Then, general questions about their background, role and experience were asked. Questions about the informant's views on environmental protection; environmental management in the hotel industry, including how the EMS was designed and implemented across the company and its impact on the perceptions of staff members about their jobs; reasons for the EMS, preparation activities, key actors, communication methods, likes and dislikes regarding the program and problems and difficulties faced during EMS implementation. The informants were also asked about the reasons for these problems and how these problems were overcome. Finally, the informants were asked if they would like to add anything related to the impact of the EMS on employee perceptions about their jobs. On the other hand, to answer the second and the third research questions, the current study developed a

structured questionnaire to study the attitude and behavior of consumers towards green practices as well as identifying the contributors to the customers' positive attitude towards such practices in hotels.

A convenience sample size of 350 customers was employed to collect data from respondents at the investigated hotel from May 20 to October 30, 2013. The questionnaire form was pre-tested with a sample of 15 respondents and minor modifications were made in the questions to reach the final form. The questionnaire form comprised four sections. The first section inquired the demographic aspects of respondents. The second section included two questions to identify the customers' willingness to pay for green initiatives. The first question, using a 5-point Likert scale from totally disagree to totally agree, is, "I would pay more to stay at a hotel that is making efforts to be environmentally sustainable." The second question is, "I would be willing to pay this extra percentage on my hotel bill to support the hotel's efforts to be environmentally sustainable. Response options are: 0%, 1–5%, 6–10%, 11–15%, 16–20%, and more than 20%. The third section of the survey consisted of questions regarding the respondent's attitude towards environmental concerns, which referred to the New Ecological Paradigm (NEP) scale, originally developed by [45], and later revised by [46]. The NEP scale measures people's "endorsement of a fundamental paradigm or worldview, as well as of environmental attitudes, beliefs, and values"⁴⁶; p. 3). The scale represents five facets of an ecological worldview (i.e., the reality of limits to growth, anti-anthropocentrism, the fragility of nature's balance, rejection of exemptionalism and the possibility of an ecocrisis) encompassing 15 question items.^{46;47} Finally, the fourth section included only one question inquired the significant contributors to the consumer positive attitude towards green practices. The respondents were asked to rank these contributors on a 5-point Likert scale where 5 refers to the most important and 1 refers to the least important. Following previous studies such as ⁴⁸, NEP in this study is measured as a continuous variable by adding all scores from the 15 items. Seven NEP items measure a person's attitudes contrary to environmental concern, and the other eight question items measure the person's attitudes supporting environmental concern. For calculation, the study reversed the scores of the seven items to render a total environmental score. The study then divided the total score by 15 to calculate the mean value. For that analysis, the study dichotomized NEP into two groups (High NEP and Low NEP) based on the mean value.

Data Analysis Procedure

Firstly, the analysis of data obtained from the interviews was carried out using the Nvivo software package to code the transcribed interviews by means of different concepts to identify patterns and themes and the transcript were repeatedly re-read to locate and compare the concepts. The interviews were transcribed verbatim. An analysis of relevant documents, including written environmental policy statements, minutes from green committee meetings, and the EMS operations manual, was undertaken to validate the accuracy of the interview data.

Secondly, in the first examination of the data obtained from the questionnaire, descriptive statistics which include means, frequencies and standard deviation and correlation as one of the inferential statistics tests were used to summarize the data. The collected data have been classified and tabulated to be thoroughly analyzed using Statistical Package for Social Science (SPSS) Version 17.0. The necessary percentages were calculated and formed the required repetitive tables to satisfy one of the most important descriptive statistical techniques in identifying and defining the research variables and their repetition rates within the drawn sample. The reliability of the scales was tested by calculating their coefficient alpha (Cronbach's alphas α) to determine the degree of internal consistency between the multiple measurements. Cronbach's alpha should meet the recommended significance of 0.70 or higher. A reliability analysis revealed Cronbach's alphas of 0.84 for the dimension of the customer attitude towards environment indicating a high degree of internal consistency.

Findings

Interview Findings

The Demographic Profiles of the interview respondents are shown in table 1.

Based on the interview data analysis, the following five categories and themes were emerged.

1. Organizational motivations for establishing an EMS.
2. EMS planning.
3. EMS implementation.
4. EMS outcomes.
5. Positive and negative impacts of the EMS on employees

Table (1): Demographic and Characteristics of Respondents

Informants from the STAR Hotel	Job title	Gender	Education level	Age range	Number of years of experience in the hospitality industry	Number of years working for the STAR Hotel
Executive level						
1	Head of Engineering	M	University	45-60	20	8
2	Head of Human Resources	M	University	30-45	10	5
3	Head of Purchasing	M	University	45-60	18	10
4	Head of Housekeeping	F	University	45-60	16	12
5	Front Office Manager	M	University	30-45	15	10
Supervisory level						
1	Duty Engineer	M	University	30-45	15	7
2	Main restaurant manager	M	University	45-60	20	10
3	Coffee shop manager	M	University	30-45	18	12
4	Shift leader, HK	F	University	30-45	15	6
5	Sous Chef	M	University	45-60	20	8
General level						
1	Technical Officer (Engineering)	M	Technical institute	30-45	15	7
2	Room Attendant (Housekeeping)	F	Technical institute	45-60	20	10
3	Public Area Attendant (Public Areas)	M	High school	30-45	18	12
4	Room Clerk, FO	F	University	30-45	15	6
5	Steward (Stewarding)	M	High school	45-60	20	8
6	cook	M	Technical institute			

Organizational motivations for establishing an EMS

The STAR Hotel's top management implemented the ISO EMS out of a genuine concern for the environment and in response to market demands. Although financial savings might motivate hoteliers to adopt such a system, it was not the key motivational factor for the STAR Hotel. In addition, EMS makes employees with greater environmental awareness feel that their belief in environmental protection is shared by their employer. Moreover, implementing an EMS can be a good strategy to enhance employee-employer cohesiveness. In this case study, a duty engineer indicated that about 80% of his colleagues had developed a stronger team spirit because of their intensive involvement with their superiors and each other in implementing the EMS.

EMS planning

It was found that the EMS planning of the STAR Hotel was undertaken by an ISO green committee, which was composed of several senior executives and department heads. The benefits that the executives have obtained from their involvement with the EMS include, but not limited to, achievement, recognition, the work itself, responsibility and advancement. These benefits are considered strong determinants of job satisfaction as well as motivators. It was clear that many of the informants did not understand the actual function of the green committee at the STAR Hotel because of a lack of communication. Most of the informants at the supervisory and general levels did not know how the EMS was designed and had to refer to the environmental practices literature, guidelines and posters for more information. They also indicated that they only had a little introductory training.

EMS implementation

Nearly all of the executives agreed that they had a high degree of freedom to carry out environmental practices as long as their actions did not contradict company policies. Two thirds of the informants stated that their workload had increased because of EMS implementation. However, over half of the two thirds commented that the increase was manageable and not significant, and nearly all stated that they did not mind doing more, because environmental protection was a worthy goal.

EMS outcomes

Better, safer and healthier working conditions

Half of the informants noted that since the EMS implementation, the workplace was cleaner and more comfortable and 'systematic', as most items were neatly separated in line with the recycling program. Some of the staff mentioned that better working conditions in terms of the quality of the air and a cleaner environment had helped to improve their health. Working conditions are one of the factors that can generate dissatisfaction (Herzberg, 1982). Improved working conditions can thus reduce the dissatisfaction of hotel employees with their place of work. Therefore, the integration of health and safety issues in an EMS could help employees to become more actively involved in implementing the system.

Contribution to society

Nearly all of the informants at the supervisory and general levels felt that they were doing something good for society. A laundry operator stated, "I feel proud . . . It is really rare to have a company that is willing to engage in environmental activities. It's great!" All of the informants believed that they were contributing to a worthy goal. This case indicates that an EMS is very different from other business strategies and can be a bridge to good teamwork. Taking the company's engineering department as an example, cohesiveness was enhanced when the team strove hard to meet the meaningful goal of environmental protection.

Recognition via ISO

Over half of the informants were proud of their company's achievement and felt superior to their friends because of the ISO certification received by the hotel and better working environment that they enjoyed (e.g., a tidy kitchen). A room attendant commented, "getting the award made me really happy. When I mention this to my friends, I feel happy, as I have contributed something".

Positive and negative impacts of the EMS on employees

The job satisfaction of the company's executives was enhanced through their high level of involvement in the EMS planning process. Employee commitment to the EMS was negatively affected if the adoption of the system by the company was perceived to be a means to save costs, improve company image and attract green customers. Regarding training and education, because of the lack of continual and in-depth training and external communication, employees often lacked knowledge about new environmental initiatives.

Questionnaire findings

A total of 320 valid questionnaire forms were returned with a response rate 91%. Detailed sample demographic and characteristics are shown in table 2. Of the 320 respondents, 70% were male and 30% were female. Approximately 60% of respondents were 48 years or older. 65% of the respondents were married. The majority of the respondents received some college or higher level of education (68%). 62% of the respondents had an annual household income ranging from \$20,000 to \$79,999. 64% of respondents visit their particular chain hotel at least one to three times per year.

Findings as shown in tables 3 and 4 revealed that customers have a positive attitude towards environment with an average mean 3.9. However, despite this positive attitude, findings revealed that there is no significant relationship between customer attitude towards environment and their willingness to pay (P value 0.1) This result can be confirmed by the fact that the majority of respondents (almost 90%) are not willing to pay more than 5% as an extra percentage on their hotel bill to support the hotel's efforts to be environmentally sustainable. This dictate that hotels should not go far in spending too much on environmental practices and think instead about some cost effective ways to conserve environment and attract the market segment who is environment friendly.

Table (2): Demographic and Characteristics of Respondents

Variable	Research Sample (n= 285)	
	Freq.	%
Gender		
Male	224	70
Female	96	30
Age Group		
18-27 years old	13	4
28-37 years old	45	14
38-47 years old	70	22
48 and above	192	60
Marital Status		
Single	112	35
Married	208	65
Education Level		
High School Degree	48	15
Diploma	54	17
College Graduate	128	40
Postgraduate Degree (MSc, PhD... etc.)	90	28
Annual Household Income		
Under \$20,000	22	7
\$20,000 - \$39,999	42	13
\$40,000 - \$59,999	70	22
\$60,000 - \$79,999	64	20
\$80,000 - \$99,999	122	38
\$100,000 or greater		
Frequency of Visit		
1-3 times/year	205	64
3-5 times/year	67	21
5-7 times/year	22	7
7-9 times/year	26	8

Table 3: Summary of the questionnaire findings

Question		Mean
1.	We are approaching the limit of the number of people the earth can support	3.6
2.	Humans have the right to modify the natural environment to suit their needs	4.1
3.	When humans interfere with nature it often produces disastrous consequences	3.8
4.	Human ingenuity will ensure that we do NOT make the earth unlivable	4.2
5.	Humans are severely abusing the environment	3.6
6.	The earth has plenty of natural resources if we just learn how to develop them	4.5
7.	Plants and animals have as much right as humans to exist	3.9
8.	The balance of nature is strong enough to cope with the impacts of modern industrial nations	3.2
9.	Despite our special abilities humans are still subject to the laws of nature	4.1
10.	The so-called "ecological crisis" facing humankind has been greatly exaggerated	3.4

11.	The earth is like a spaceship with very limited room and resources	4.3
12.	Humans were meant to rule over the rest of nature	3.9
13.	The balance of nature is very delicate and easily upset	3.8
14.	Humans will eventually learn enough about how nature works to be able to control it	4.7
15.	If things continue on their present course, we will soon experience a major ecological catastrophe	3.8
16.	I would pay more to stay at a hotel that is making efforts to be environmentally sustainable.	2.1
17.	Rank the following contributors to your positive attitude towards green practices	
	the participation in an environmental partnership or certification program such as ISO 9000	3.95
	the visible communications about green practices to guests, shareholders, vendors and the public	4.2
	encourage business with environment friendly service providers	2.7
	offer a linen re-use option to multiple night guests	3.2
	Provide environmentally friendly products (i.e. low toxicity, organic or locally made)	3.0
	establish recycling program for materials in all sections of the hotel	3.9

The findings, also, revealed that there are some significant contributors to the consumer positive attitude towards green practices. These contributors, respectively, are the following: (1) the visible communications about green practices to guests, shareholders, vendors and the public (2) the participation in an environmental partnership or certification program such as ISO 9000;(3) establish recycling program for materials in all sections of the hotel;(4) offer a linen re-use option to multiple night guests (5) Provide environmentally friendly products (i.e. low toxicity, organic or locally made; and finally, (6) encourage business with environment friendly service providers. These results clearly indicate that customers look for tangible demonstration of a firm’s commitment towards the green practices.

Table 4: Correlations between customer attitude and willing to pay

		Attitude	Willing to pay
Attitude	Pearson Correlation	1	.430
	Sig. (2-tailed)		.110
Willing to pay	Pearson Correlation	.430	1
	Sig. (2-tailed)	.110	

Conclusion and implications for future research

The objectives of this study were to investigate the attitude of employees towards EMS whose working attitude directly affects the services provided to guests; and to (2) identify the relationship between the customer attitude towards environment and their willingness to pay more for green practices. This study provides a better understanding of how employees perceive EMSs, and identifies, through in-depth interviews, the positive and negative impacts of EMSs on them. These impacts are mainly triggered by human resource factors, including strong management support, an active green committee, continual and in-depth environmental training, environmentally knowledgeable leaders, a tight control system and performance incentives. The organizational motivations for implementing an EMS and the outcomes of the adopted system also have an impact on hotel employees. Meaningful organizational goals result in a more harmonious working environment and positively affect worker involvement in EMS implementation. Conversely, reduced employee

commitment can be expected if an EMS is promoted as just another business strategy to save money and improve a company's reputation. Emphasis of the better, safer and healthier working environment that results from EMS implementation and the achievement of ISO 14001 accreditation could make hotel employees more committed to their jobs.

The hotel managers of the STAR Hotel should clearly communicate the motives for EMS adoption, as correct organizational motivations for the adoption of an EMS help increase cohesiveness and teamwork among employees because they feel that their values are shared by the company. The consumers are becoming aware of the benefits of engaging in environmental friendly practices in the lodging industry. However, the positive attitude does not translate into the willingness to pay for the same. A similar research study could be undertaken in small- to medium sized hotels to elucidate the differences and similarities between hotels in different size categories. On the whole, the study provides valuable insights to help hotel managers design their own strategies and policies which entail most of the environment related attributes which the customers are concerned with. Knowing these attributes would enable hotels attract more segments of customers and increases their market share. Additionally, it provides implications on how EMS can be implemented to be a competitive advantage for hotels.

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اتجاهات العملاء والعاملين نحو نظم الإدارة البيئية في صناعة الفنادق المصرية

شهدت فترة التسعينات بدايات الدراسات التي تناولت نظم الإدارة البيئية حيث ركزت هذه الدراسات على الأسباب التي دفعت الفنادق الى تطبيق هذه النظم مثل خفض التكاليف وتحقيق مزايا تسويقية الى غيرها من المميزات الأخرى. إلا أن هناك ندرة في الأبحاث التي تناولت اتجاهات الأطراف المختلفة ذات العلاقة بالنشاط الفندقى تجاه نظم الإدارة الفندقية. لذا تأتي الدراسة الحالية لسد الفجوة في هذه النوعية من الدراسات من خلال التعرف على اتجاهات كل من العملاء والعاملين نحو نظم الإدارة البيئية في الفنادق المصرية. تهدف الدراسة الى هدفين رئيسيين: (١) التعرف على اتجاهات العاملين نحو برامج الإدارة البيئية لما تمثله هذه الاتجاهات من أهمية على مستوي الخدمات المقدمة للعملاء، (٢) التعرف على اتجاهات العملاء نحو هذه النظم أيضا لتحديد العلاقة بين تلك الاتجاهات والرغبة في دفع أموال أكثر مقابل قيام الفندق بتنفيذ بعض الممارسات والأنشطة البيئية. تم تصميم دراسة حالة عن أحد الفنادق المصرية الرائدة في مجال تطبيق نظم الإدارة البيئية وبرامج الأيزو ٩٠٠٠ والأيزو ١٤٠٠٠. ولتحقيق الهدف الأول للدراسة، تم تجميع البيانات من خلال إجراء مقابلات مع ١٦ موظفا يمثلون ثلاث مستويات وظيفية مختلفة (المدرء-المشرفين-المروسين). ولتحقيق الهدف الثاني، تم تصميم استبانة وتوزيعها بعد إجراء اختبارات الصدق والثبات على عينة عشوائية مكونة من ٣٥٠ عميلا. تم استرداد ٣٢٠ استبانة صحيحة بنسبة ٩١% من اجمالي الاستمارات التي تم توزيعها. وقد أظهرت النتائج وجود اتجاهات ايجابية لدى العملاء تجاه البيئة. إلا أنه على الرغم من وجود هذه الاتجاهات أوضحت النتائج عدم وجود علاقة بينها وبين رغبة

العملاء في دفع مزيد من الأموال مقابل قيام الفندق بتطبيق الممارسات البيئية به. كما أشارت الدراسة الي أن اتجاهات العاملين الايجابية نحو البيئة والتزامهم بتطبيق نظم الادارة البيئية ستتأثر سلبا اذا ما ادركوا أن قيام الفندق بتطبيق هذه النظم يأتي فقط في اطار سياسات الفندق نحو خفض تكاليف التشغيل أو تحسين صورة الفندق أو جذب عملاء مهتمين بالأمور البيئية. وتقدم الدراسة الحالية من خلال نتائجها أفكارا وحلولا للمدراء تساعدهم في تصميم استراتيجيات وسياسات بيئية تلقي قبولا من كل من العملاء والعاملين وتساهم في نفس الوقت في نجاح الفندق في تطبيق نظم ادارة بيئية فعالة.