

Awareness of FO Employees on Environmental Management System (EMS) at Hotel Le Meridien Bali Jimbaran

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Abstract

This study aims to know the implementation of the environmental management system (EMS) and determine the relationship of awareness of EMS and implementation of EMS of the front office department at Hotel Le Meridien Bali Jimbaran. The data collection methods of this research were observation and questionnaire. The sampling technique in used was the saturated sampling technique with a total sample of 35 respondents. Data was collected using online questionnaires distributed to the respondents using QR barcodes. The questionnaire data were processed with the help of SPSS 25 software for windows. The data analysis technique uses frequency, mean, and standard deviation. In addition, correlation analysis technique was used to determine how far the front office employee awareness relates to EMS implementation. The results show that implementing EMS in the front office department was maximal. The correlation analysis results in employee awareness and the implementation of EMS in the front office department is moderate. The need to improve awareness of the front office department is thus considerably important.

Keywords: environmental management system (EMS), employee awareness, front office department

INTRODUCTION

The increase in the economy of a region can be influenced by performance of the tourism business and industry, which include accommodation facilities, food and beverage providers, and other related businesses (Abdullah & Pebriyanti, 2016). Accommodation facilities play an important role in tourism since tourists usually choose comfortable

accommodations. During the pandemic covid-19, the government participates in controlling the spread of virus in the community by implementing the cleanliness, health, safety, & environmental sustainable (CHSE) protocol. CHSE is a policy of the Ministry of Tourism and Creative Economy as a guidelines for those involve in tourism businesses such as entrepreneurs and managers, local tour guides, and employees of tourist attractions to adapt to new habits. It is also a guide for other tourism products to ensure tourists that hygiene, health, safety, and environmental sustainability are implemented (Tandilino, 2021).

Hotel is one of the facilities needed in traveling. Although hotels are considered as main player in tourism, they are also big consumer of natural resources and producer of large quantity of solid and liquid wastes. Tourists staying in a hotel are becoming aware of things related to the environment protection such as distinction of organic waste from non-organic one, trees around the hotel area for cooling the air. This proves that tourists have awareness on protecting the environment. Hotel guests increasingly realize the importance of environmental awareness and expect every hotel follows environmentally friendly practices (Yoon et al., 2016). Along with the increase of the environmental awareness, hotel industry also takes initiatives to include eco-friendly measures in their daily operations, such as reducing waste and saving energy (Sharma & Prakash, 2021).

According to Kurnianto (2019) and Tiara et al. (2022), SNI ISO 14001:2015 is an international standard for implementation of environmental management systems (EMS). EMS helps organizations to improve their environmental performance through more efficient use of resources and reduction of wastes, thereby they gain competitive advantage and stakeholder trust. One of the strategic ways that can be done to achieve ISO 14001 and to continue to include environmentally friendly measures in the operations of hotel industry is by implementing an environmental management system or EMS. EMS is a strategic

environmental management system for a hotel to compete effectively with others. This implementation is a must because many hotels produce wastes and use large amounts of energy. The application of environmental management practices can promote a better image and increase competitiveness for a hotel.

To achieve a good environmental management system in especially front office department is by reducing wastes in the form of using unused paperbacks for small notes and destroying unused recycled paper stored in the warehouse. Using refillable pens and printer is another way. Ways to save energy are to turn of electrical equipment and lights when they are not in use, to create natural lighting and ventilation if possible, and to set air conditioner temperature properly and turn it off when applicable.

By implementing a better environmental management system in the hotel, guests will give higher appreciation since they can get information about the environment such as global warming. The information can make them to be aware of products or services that can damage the environment. Hotel sector has begun to implement environmental management practices called environmental management system (EMS). EMS is an important voluntary management tool that aims to reduce the environmental impact of company activities (Ozusaglam et al., 2018).

Environmental conservation is no longer considered as an expense and external pressures a company must meet but rather an instrument of competitiveness and a way to control environmental costs (Marouen Amiri et al., 2015). Although the hospitality industries may be less visible in the environmental impact, it is increasingly recognized that they are also responsible for reducing impacts of unefficient energy use and disposal of large wastes (Mujahidin, 2015).

Hotel Le Meridien Bali Jimbaran, located on Jl. Bukit Permai Jimbaran may experience less fully EMS implementation in especially the front office (FO). The observation on the FO department shows that several employees forgot to close the air conditioned back-office door and sometimes throw away papers that can be reused for small notes. They however turn off partially the lobby lights during the night shift for proper brightness and energy save. Printers in the FO department are rarely turned off because their use is shared with other departments. A lack of employee awareness about good environmental management can hinder the implementation of environmental management and thus EMS needs to be improved further for employees of front office department can assess their awareness and implement a healthy environmental management system. With this in mind, the aims of this research is to assess employee awareness of EMS at Hotel Le Meridien Bali Jimbaran.

LITERATURE REVIEW

According to ISO 14001 (item 3.5), environmental management system (EMS) is part of the overall management system. It includes the organizational structure and planning activities. It is also defined as responsibilities, practices, procedures, processes, and resources for developing, implementing, achieving, reviewing, maintaining, and setting environmental policies (Dalem, 2012). According to Ozusaglam et al. (2018), the EMS standard is an important voluntary management tool to reduce environmental impact generating from the company's activities. It can be stated that EMS is an environmental management system created to reduce environmental damage resulting from the company's development, energy and tools use

Improving hotel environmental performance can also help in creating an eco-friendly environment for staff and customers, gaining a competitive advantage, and enhancing the hotel business image. The examples of the EMS achievement process in FO department on waste management are to use recycled paper for internal purposes and to use refillable pens or printer as well as to save energy by always turning off the lights (Shafey, *et al.*, 2018).

Implementing EMS will work only if everyone especially the FO staff knows importance of creating an environmentally friendly condition. Consciousness is resulted from a group's way of thinking since each has different mind from the other's (Simorangkir, 1987:107). Therefore, FO staff with a high awareness of the implementation of EMS will certainly impact the hotel positively.

METHODS

According to Rahsel (2016), population is a generalization area consisting of objects or subjects with certain quantities and characteristics set by researchers to be studied and then concluded. The population of this study is FO employees at Hotel Le Meridien Bali Jimbaran. The sampling method used in this study is saturated sampling. It is a sampling technique if the entire population member is used as the research sample because the population is small numbers (relatively small population). Saturated sampling is generally referred to as a census, and the entire population is used as the research sample. The sample used in this study was 35 respondents.

This research was conducted for six months at Hotel Le Meridien Bali Jimbaran to observe awareness of the FO employees in relation to the implementation of EMS at the hotel. The data collection methods were survey through questionnaire and observation (Creswell, 2003). At first, unstructured observation in which direct observations without involving the

staff directly was conducted. Secondly, the data was collected by distributing questionnaires using a QR Code.

The questions on EMS are divided into waste management and energy saving (table 1), meanwhile those on awareness contain knowledge, understanding, attitudes, and actions (table 2). Validity test was conducted to these questions.

Table 1. The Variable of Environmental Management System

Dimension	Indicator
Waste Management	a. Using recycled paper for internal purposes (X1.1)
	b. Use the back of the paper to write small notes (X1.2)
	c. Use paper when it is confirmed by the guest only (X1.3)
	d. Minimize disposable tools such as paper cups when giving welcome drinks (X1.4)
	e. Collecting old stored paper for recycling (X1.5)
Saving Energy	a. Turn off equipment and lights when not in use (X1.6)
	b. Natural light and ventilation are used whenever possible (X1.7)
	c. The air conditioner must be adjusted to the ideal and normal temperature (X1.8)
	d. Use energy-saving appliances and rechargeable batteries (X1.9)
	e. The door is closed when using the air conditioner in the room(X.10)

Source: (Shafey et al., 2018)

Table 2. The variable of awareness

Dimension	Indicator
Knowledge	Employee knowledge about environmental management system (Y1.1)
Understanding	Employees understand the environmental management system (Y1.2)
Attitude	Remind each other employees to keep the environment (Y1.3)
Action	Apply actions that are already understood about the environment by taking positive actions related to the environmental management system (Y1.4)

Source: (Shafey et al., 2018)

According to Janna (2020), validity test is a test to see whether the instrument is valid or invalid. Similarly, Ghozali (2011) stated that validity test is used to measure whether or not

a questionnaire is valid. The instrument is valid if $r_{\text{statistic}} > r_{\text{table}}$ and is invalid if $r_{\text{statistic}} < r_{\text{table}}$. The r_{table} is determined using $df (N-2)$, the level of significance of 5%, and the two-way test.

Following the validity test, reliability test was carried out. According to Streiner (2003), the instrument is reliable if the Cronbach's Alfa reliability coefficient is more than 0.70 ($r_i > 0.70$) and less than 0.90 ($r_i < 0.9$). If the reliability coefficient of Cronbach's Alpha is less than 0.70 ($r_i < 0.70$), the questionnaire is unreliable.

The data analysis techniques used in this study were frequency, mean, and standard deviation. Frequency was calculated and used to summarize the data in the first check. Next, the data collected was classified and tabulated for thorough analysis using the Statistical Package for Social Science (SPSS 25). Finally, mean and standard deviation were calculated to classify the data and determine how homogeneous the sample is regarding all study variables. Mean value is the total value divided by the total data. The standard deviation is intended to know the diversity of a data group by subtracting each data value from the average of the data group (Nafi'iyah, 2016).

Another data analysis technique used was correlation analysis that is to measure the close relationship between awareness (variable X) and EMS (variable Y). The value of correlation coefficient ranges from -1 to +1. Positive value of correlation coefficient (r) indicates relationship between variable X and variable Y is in the same direction. It means that the increase value of variable X directs to the increase value of variable Y. On the opposite, negative correlation coefficient (r) indicates the relationship between variables X and Y is on the opposite direction. It means that the increasing value of variable X will decrease the value of variable Y. The meaning of correlation coefficient is as follows: (Astuti, 2017)

Table 3. Interpretation of the Correlation Coefficient

Correlation Coefficient (positive or negative)	Correlation
0,00	No correlation
0.01-0.20	Very weak correlation
0.21-0.40	Weak correlation
0.41-0.70	Medium correlation
0.71-0.99	High correlation
1.00	Perfect correlation

Source: (Astuti, 2017)

RESULTS AND DISCUSSION

Results

The results are described in simple form for providing easier overview on the situation of the research at Le Meridien Bali Jimbaran. The questionnaire distributed to 35 FO employees covers several characteristics of nationality, gender, age, position, and length of work.

Table 4. Characteristics of Respondents

Characteristics	Total	Percentage (%)	
Nationality	Indonesia	35	100
Gender	Male	15	42.9
	Female	20	57.1
Age	17-24 years old	25	71.4
	25-34 years old	8	22.9
	35-44 years old	2	5.7
Position	DW	9	25.7
	Staff	11	31.4
	Trainee	15	42.9
Length of Work	1 week	1	2.9
	3 months	1	2.9
	5 months	1	2.9
	6 months	15	42.9
	10 months	2	5.7
	1 year	8	22.9
	2 years	2	5.5
3 years	5	14.3	

Source: Data processed 2022.

Based on table 4, it can be seen that the FO employees are all Indonesian citizens, dominated by female, aged 17-24 years old, trainee, who have a working period of 6 months.

Table 5 and 6 present the results of calculation of frequency, mean, and standard deviation of respectively the variable X (EMS) and the Y variable (awareness).

Table 5. Frequency, Mean, and Standard Deviation of the Responds on EMS

No	Question	Strongly Agree		Agree		Less Agree		Disagree		Strongly Disagree		Mean	Std. Dev
		F	%	F	%	F	%	F	%	F	%		
1	X1.1	16	45.7	14	40	5	14.3	-	-	-	-	4.31	0.718
2	X1.2	21	60	12	34.3	1	2.9	-	-	1	2.9	4.49	0.818
3	X1.3	14	40	17	48.6	4	11.4	-	-	-	-	4.29	0.667
4	X1.4	16	45.7	16	45.7	2	5.7	-	-	1	2.9	4.31	0.832
5	X1.5	20	57.1	14	40	1	2.9	-	-	-	-	4.54	0.561
6	X1.6	27	77.1	8	22.9	-	-	-	-	-	-	4.77	0.426
7	X1.7	16	45.7	18	51.4	1	2.9	-	-	-	-	4.43	0.558
8	X1.8	17	48.6	12	34.3	6	17.1	-	-	-	-	4.31	0.758
9	X1.9	12	34.3	22	62.9	1	2.9	-	-	-	-	4.31	0.530
10	X1.10	25	71.4	10	28.6	-	-	-	-	-	-	4.71	0.458
											Total	44.47	6.33
											Total Mean	4.45	0.63

Source: Data processed 2022.

Table 6. Frequency, Mean, and Standard Deviation of the Responds on Awareness

No	Question	Strongly Agree		Agree		Less Agree		Don't Agree		Strongly Disagree		Mean	Std. Dev
		F	%	F	%	F	%	F	%	F	%		
1	Y1.1	23	65.7	12	34.3	-	-	-	-	-	-	4.66	0.482
2	Y1.2	26	74.3	9	25.7	-	-	-	-	-	-	4.74	0.443
3	Y1.3	22	62.9	13	37.1	-	-	-	-	-	-	4.63	0.490
4	Y1.4	22	62.9	13	37.1	-	-	-	-	-	-	4.63	0.490
											Total	18.66	1.91
											Total Mean	4.67	0.48

Source: Data processed 2022, Output SPSS 25.0 for Windows

Discussion

Implementation of the EMS in the FO department

Hotel Le Meridien Bali Jimbaran is part of Marriott that applies an earth hour program. Every Marriott hotel sends e-mail to run the earth hour program that must be done and disseminated on all social media. Earth hour is a program where hotels must turn off all lights such as in rooms, restaurants, and other hotel areas for one hour. It can help in saving energy in the world.

The questions related to the implementation of EMS is divided into two indicators: waste management and energy saving. In term of waste management, the results are as follows:

- 1) The use of recycled paper for internal purposes has been implemented properly. For example, the Duty Manager uses recycled paper to print room status or files needed for briefing purposes to be more efficient.
- 2) The front office department has used the back of blank papers for small notes when receiving calls or handling guest complaints.
- 3) The front office department has used paper when confirming guests, such as printing guest bill if bill is to be paid.
- 4) The department does not provide straw and not use paper cup for the welcome drink but uses ordinary glasses instead.
- 5) Used papers for destruction are usually collected first in the warehouse.

The results related to the implementation of energy saving are as follows:

- 1) The front office department has turned off all computers and lights at night, except for one computer which must be kept on for the night audit.
- 2) The front office department has not provided natural ventilation light maximally because the back office is closed.

- 3) The use of air conditioning must be adjusted to the ideal and normal temperature. Therefore, it cannot be maximized because the system or computer must be exposed to air conditioning or otherwise it will be damaged.
- 4) The front office department is still minimal in equipment and rechargeable batteries because it still uses single-use equipment.
- 5) The front office department has closed the back-office door when the air conditioner in the back office is on and thus it saves energy.

The indicators that are not maximized exist in those related to energy saving: the front office department has not been maximized in the provision of natural ventilation light used, the use of air conditioning has not been maximized, and it is still minimal in equipment and rechargeable batteries. Consequently, efforts for using possible minimum level and reminding each other on the use can be to avoid excessive use unless necessary.

The results indicate that the EMS has generally been implemented in the front office department at Hotel Le Meridien Bali Jimbaran even though it has been maximized but not yet perfect in its implementation. One indication is that the FO department is the second largest user of paper after the accounting since it can maximize the budget for paper purchases. If the accounting prints only once, the FO department can use the back of the paper for internal reports. Even though it can provide paper to other departments, the FO department can keep a lot of paper for their use.

Awareness of the front office employees on the EMS

Based on the calculation of frequency, mean, and standard deviation, it is known that four indicators are included in the awareness. Each shows a high percentage on employee awareness of EMS. The correlation coefficient examines the relationship between employee

awareness and EMS implementation in the front office department at Hotel Le Meridien Bali Jimbaran. The results presented in table 7 show that the relationship is moderate (significant 0.004) or is considered neutral (not strong and not weak).

Table 7. Correlation Test Results

Variable	r	N	Sign**
1 X	.475	35	.004
2 Y			.004

Source: Data processed 2022.

The correlation coefficient value for EMS (X) and employee awareness (Y) is 0.475. This indicate a moderate positive correlation between EMS (X) and employee awareness (Y), which means employee awareness (Y) will be higher if the implementation of EMS (X) is considered better. It can be concluded that the front office employee awareness of EMS is still moderate or neutral and thus needs to be improved by reminding each other about the implementation of EMS in the department.

Prior the research, the front office employees awareness of EMS had not been proper. After the research and implementation of EMS, the awareness was still neutral even though several employees began to realize the implementation of EMS and started to practice it in their works. In the future, the front office employees will be expected to have better understand on the impact of the EMS implementation. They also consider and realize that this research is important to reduce negative environmental impacts. Continuous improvement on EMS implementation is thus needed to achieve better results.

CONCLUSION AND IMPLICATIONS

The front office employee awareness of EMS was still low. The implication of awareness has been maximized. The first indicator of waste treatment has been well-directed and greatly minimizes the use of excess paper. There are still three things that are not yet optimal in the second indicator of energy saving: the provision of sufficient light and ventilation, air conditioner saving, and the procurement of energy-saving equipment and rechargeable batteries.

The front office employees awareness of EMS at Hotel Le Meridien Bali Jimbaran needs to be increased. Based on the research and discussion, suggestion for the front office department at Hotel Le Meridien Bali Jimbaran is to give education or training for all front office employees, including DW (daily workers) and trainees about EMS, so they always remember the importance of implementing EMS and its impact on the hotel and the environment. The role of hotel management is very important to increase the awareness of human resources towards the green environment.

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