

Study of decision of the tourists to stay in a green hotel: A case study of Chiang Mai

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Abstract

The strategies to manage tourism and a green hotel in Chiang Mai are more important. Because it help motivate tourism and help to develop mange to hotel. This research has aims to study the factors that effect of tourists to stay in a green hotel in Chiang Mai by using logistic regression and data using simple random sampling during September - December 2018. The study found that the factors affecting the decision to stay green hotel are gender, age, trip expenditure, the image of a hotel that friendly with environment and consideration of green tourism in the next time. So the strategy to manage the hotel in Chiang Mai that to friendly and satisfy of the tourists. Might to solve the decadence of the environment and help the tourists have the decision to travel in Chiang Mai again.

Keywords: Green hotel; Decision of the tourists; Logistic regression

1. Introduction

During in the past, Thailand has a vision of tourism “Thailand has a leading quality of tourism in the world based on a balance of Thainess to promote the development of social economy and income distribution to the public sectors sustainable”. Defined The National Tourism Development Plan in No.2 (2017-2021), according to the principles of sustainable development no.5 are promoting the sustainability of natural resources and environment of protection and restoration to the risk of degenerate. Administrative ability to support the tourists and awareness of environmental friendliness. Promoting a culture of sustainability by honoring and protecting the identity of Thailand, traditional values and local knowledge. In

the first major strategic development of quality tourism. Tourism products and services to achieve balanced and sustainable (Ministry of Tourism and Sport, 2016). So this plan is to direct the development of tourism to attract tourists from around the world and to make money from tourism.

It can be seen that the tourism industry is a large industry and important industry of Thailand country. Due to the tourism industry can make money or create income give to the country and it also gives the many business and services to expansion. Because tourism industries have many beautiful natural and many unique cultures to attract tourists. It was also found that tourism industries have develop and growing up in 2018 cause it has the number of foreign tourists increased, in other words from 2018 it has Asia tourism come to Thailand around 21,630,601 and then increased to 23,623,500 and tourists from Europe come to Thailand increased from 5,689,346 to 5,918,578 (Ministry of Tourism and Sport, 2018).

However, the tourism industry to meet the problem of degradation of natural resources and the environment. Because Thailand focused on only attracting an increase in the number of tourist and revenue. But the lack of countermeasure in term of ability to support the tourists. So to be effective to the tourist attraction to decadence (Kritsada Thiyawiwattananukool and Somskaow Bejranonda, 2016). Particularly of the famous province in Thailand as a tourists interested or tourists attraction.

As a current, tourists do not like to travel in far places because it may cause the feeling tired to travel and it may pay more than near places. Furthermore, it also has many facilities to provide a basis for the decision to travel. For example, the province as tourists interested or a tourist's attraction, it is Chiang Mai province. It has famous province to many diversities about tourism, the nature of tourism and medical tourism and Chiang Mai has many facilities to facilitate tourism whether it be the accommodation, restaurants and transportation (Wanna Wongwanit, 2003). It can be seen from a number of tourists visiting in Chiang Mai around 2,643,290 and then increased to 2,856,204 (Ministry of Tourism and Sport, 2018)

As mention previously, the tourism industry has affected both positively and negatively to the attractions of Chiang Mai whether it be income distribution to the province or more has destroyed the environment to decadent. So it has many choices can reduce the impact that to make the tourism to friendly with the environment such as the many hotel inside Chiang Mai province adapting the hotel or accommodation business that more friendly with the environment or the most people will know as a green hotel.

Therefore, using green hotel guidelines to reduce the impact of destroying environmentally. May it has the choice to solve the problem but there must be cooperation of operators and tourist accommodation in helping to preserve or protect the environment.

This research aim to study the factors that affect the decision of the tourists to stay in a green hotel in Chiang Mai. By the result of the research will be help Chiang Mai province has the way to develop a form of manage green hotel or find the strategy to solve

the problem about manage area and environment to appropriate and satisfying of the tourists about tourism industry and a green hotel to appropriate with lifestyle and culture of local peoples.

2. Research Objectives

To study the factors that affect the decision of the tourists to stay in a green hotel in Chiang Mai.

3. Research Methodology

3.1 Methodology

Descriptive statistics is the statistic to describing the characteristics of data. By describe the characteristics of a variable about frequency, percentage, mean and standard deviation.

Logistic regression to describe chance of the factors that affect the decision of the tourists to stay in a green hotel in Chiang Mai (Equation 1) and the details of the variables shown in table 1. This research have the hypothesis to predict the probability of the decision of the tourists to stay in a green hotel in Chiang Mai depends on the factors that we said (Kanlaya Wanitbamrung, 2008). The equation as follows:

Take equation 1 in equation 2 as follows:

$$odd = \frac{P_i}{1-P_i} \quad (3)$$

Take ln in equation 3 as follows:

$$\ln(odd) = \ln\left(\frac{P_i}{1-P_i}\right) \quad (4)$$

$$\ln P_i - \ln(1 - P_i) \quad (5)$$

$$\ln P_i - \ln(1 - P_i) = \ln(odd) = \beta_0 + \beta_1 X_1 + \dots + \beta_n X_n \quad (6)$$

The equation will be in the form of linear called logit response function to estimate coefficient $\beta_0, \beta_1, \dots, \beta_n$ in the equation 6 by use maximum likelihood method.

$$Prob(Y = 1) = \frac{e^{\beta_0 + \beta_1 X_1 + \dots + \beta_n X_n}}{1 + e^{\beta_0 + \beta_1 X_1 + \dots + \beta_n X_n}} \quad (1)$$

$$Prob(Y = 0) = 1 - \frac{e^{\beta_0 + \beta_1 X_1 + \dots + \beta_n X_n}}{1 + e^{\beta_0 + \beta_1 X_1 + \dots + \beta_n X_n}} \quad (2)$$

Prob(Y=1) is the probability of the tourists decision to stay in a green hotel

Prob(Y=1) is the probability of the tourists no decision to stay in a green hotel

X_i is the factor that relate with the decision of the tourists to stay in a green hotel

3.2 Data

As mention previously, the objective of researcher interested to study the factors that affect the decision of the tourists to stay in a green hotel in Chiang Mai. This research is quantitative research and uses the primary data (survey research) by collect the data from questionnaires and then bring the data to analyze for found the result to satisfy the aim of research. By the data that the researcher collects from tourists to visiting in Chiang Mai about demographic characteristics and behavior characteristics.

The data in the questionnaires that are the Close-ended Question by choosing the options to match the reality. The structure of the questionnaire can divide 2 part as follows:

Part1: The questionnaires about demographic characteristics of tourists composed of gender, age, education, status, job and the average of income.

Part2: The questionnaires about behavior characteristics of tourists composed of the objectives to travel, form of tourism, activities to do between travel, the media searched for travel information, trip expenditure, the image of a hotel that friendly with environment, green area and consideration of green tourism.

3.3 The population and sample

The population used in this research about tourists travelling to Chiang Mai by simple random sampling were 286 series that the researcher to collect the data from September 2018 to December 2018 at Chiang Mai walking street, Tha phae gate, Wat Phra That Doi Suthep and Nimmana Haeminda Road. In the questionnaire to identify the name hotel that tourists to stay and then bring to verify or investigate a green hotel or not. By referencing a database from the list of hotels that have been Green Leaf Foundation and Department of environmental quality promotion. (Green Leaf Foundation, 2009), Department of environmental quality promotion: DEQP, 2015), (Department of environmental quality promotion: DEQP, 2016) and (Department of environmental quality promotion: DEQP, 2018)

Variables	Explanation
Dependent variable	
ACC	Decision to stay green hotel ACC Determine 0 = Not stay and 1 = Stay
Independent variable	
GEN	Gender Determine 0 = Male and 1 = Female
AGE	Age (Year)
ACC	Decision to stay green hotel Determined 0 = Not stay and 1 = Stay
EDU	Education Determine 0 = No education/ 1 = Primary education/ 2 = Secondary education 3 = Bachelor's degree/ 4 = More than bachelor's degree and 5 = Etc.

Variables	Explanation
STAT	Status Determine 0 = Single/ 1 = Marriage and 2 = Etc.
JOB	Job Determine 0 = Student/ 1 = Government officer and state enterprises 2 = Private company/ 3 = Freelance/ 4 = Merchant 5 = Farmer and 6 = Etc.
INC	The average of income (Baht/ person)
Dependent variable	
ACC	Decision to stay green hotel Determine 0 = Not stay and 1 = Stay
Independent variable	
INC	The average of income (Baht/ person)
OBJ	Objectives to travel Determine 1 = To study art, culture, music, architecture and history 2 = To relaxed and avoid disorder 3 = To entertain with important festival 4 = To meet cousin or friend and 5 =Etc.
FT	Form of tourism Determine 1 = Travel alone/ 2 = Travel with another person 3 = Travel group (more than 3 persons)/ 4 = Tour group and 5 = Etc.
AT	Activities to do between travel Determine 1 = Sightseeing lifestyle and well-being of local people 2 = Natural conservation, hiking, camping and watching wild animals 3 = Health activities such as spa and therapy 4 = Pray, sightseeing the ancient remains and 5 = To relax (no collect activities)/ 6 = Etc.
MT	The media searched for travel information Determine 1 = Posts on the Internet/ 2 = Website about tourism 3 = Tourism magazine/ 4 = Tourism book 5 = Suggest from other person and 6 = Etc.
EXP	Trip expenditure (Baht/ person)
IME	The image of a hotel that friendly with environment Determine 0 = No consider/ 1 = Consider and 3 = Etc.
GA	Green area Determine 0 = No consider/ 1 = Consider and 3 = Etc.
CT	Consideration of green tourism Determine 0 = No think/ 1 = Think

Table 1 Variables in Logistic Regression

4. Result and Discussion

A study of the factors that affect decision of tourists to stay in green hotel in Chiang Mai can be summarized as follows:

4.1 Demographic characteristics of tourists to visiting in Chiang Mai. Found that the most of the tourists are female as a 51.75%. The most of the tourists are student as a 25.87% and they are 21-30 years old as a 60.84% and they also have the bachelor's degree as a 55.59%. As well as they are single as a 69.93 and has the average of income more than 20,000 Baht as a 6.08%. As a details of the variables shown in table 2

Data	Amount	Percentage
Job		
Student	74	25.87
Government officer/ state enterprises	35	12.24
Private company	67	23.43
Freelance	26	9.09
Merchant	28	9.79
Farmer	3	1.05
Etc.	53	18.53
Total	286	100
The average of income		
Less than 5,000	3	2.10
5,000-10,000	24	7.34
10,001-15,000	12	4.20
15,001-20,000	16	5.59
More than 20,000	231	80.77
Total	286	100

Table 2 Demographic characteristics of tourists

4.2 Behavior characteristics of tourists come to Chiang Mai. From the samples of research participant were 286 series. Found that the most of tourists that to visiting in Chiang Mai have the objectives of travel to relaxed and avoid disorder as a 62.24% and usually have to travel as a group (more than 3 persons) as a 34.97% and the tourists do not like to do the activity in other words just travel to relax as a 27.27% and before the tourists will go travel, they will study tourism attraction in posts on the internet as a 56.64%. In each trip the most of tourist will pay the average of trip expenditure more than 20,000 Baht as a 34.27% and considering to the image of hotel that friendly with environment, green area and they also would have considered tourism in Green Tourism for the next trip as a 98.25%, 98.60% and 98.25% respectively. As a details of the variables shown in table 3

Data	Amount	Percentage
Trip expenditure		
Less than 5,000	43	15.03
5,000-10,000	91	31.82
10,001-15,000	21	7.34
15,001-20,000	33	11.54
More than 20,000	98	34.27
Total	286	100
The image of a hotel that friendly with environment		
No consider	4	1.40
Consider	281	98.25
Etc.	1	0.35
Total	286	100
Green area		
No consider	3	1.05
Consider	282	98.60
Etc.	1	0.35
Total	286	100
Consideration of green tourism		
Don't think	5	1.75
Think	281	98.25
Total	286	100.00

Table 3 Behavior characteristics of tourists

4.3 From the result (Table 4) showed a statistically significant at the 0.10 level, the factors that affect the decision of the tourists to stay in a green hotel in Chiang Mai that finding the most of gender (female) will decision to stay in a green hotel more than gender (male) because may they respect about green hotel and attend about the environment of the hotel. Job (student) that impact of decision to stay in a green hotel by they should be attend about the green hotel to relaxed the problem or stress from learning. The image of a hotel that friendly with environment that impact with decision of the tourists to stay in a green hotel because the environment of the hotel that beautiful or better will help the tourists can decision to stay in their hotel more. Trip expenditure that impact to the decision of the tourists to stay in a green hotel because hotel that about conserve the environment or the hotel that friendly with the environment may have the cost price to stay their hotel, so to make the tourists would be pay more than the normal hotel and if the hotel that friendly with the environment, it will make the tourists have the decision to stay here or will consider to stay in their hotel again when they visiting in Chiang Mai.

Variables	Coefficient	P-value
C	-18.477	1.000
GEN	2.042**	.017
AGE	-0.033	.468
EDU	0.149	.728
STAT	0.663	.278
JOB	0.623***	.001
INC	0.000	.742
OBJ	-0.467	.153
FT	-0.351	.259
AT	0.152	.499
MT	-0.876*	.096
EXP	0.000*	.081
IME	20.433	1.000
GA	0.000	.999
CT	-5.547***	.006
R-squared = 0.183		N = 286

Note: ***, **, * mean the significant at the 0.01 level, 0.05 level and 0.1 level respectively.

Table 4 The factor that affect the decision of tourists to stay in a green hotel in Chiang Mai

5. Conclusion

From the result found that the factors that affect the decision of the factors that affect the decision of the tourists to stay in a green hotel in Chiang Mai are Gender, Job, The image of a hotel that friendly with environment, Trip expenditure and Consideration of green tourism that consistency with Kritsada Thiyawiwattananukool and Somskaow Bejranonda (2016) according to the most of the tourists are marriage will have trend to travel more than single and it has consistency about if the people have more income or increasing of income will effect to the decision of the tourists to stay in a green hotel. Sangdeun Ratinthorn (2012), Nantaporn Sriwilai (2013) and Arm Nakornthab and Surachai Chancharat (2013) according to the tourists will find the tourism attraction on the internet and the tourists have the objective to travel about relaxed and consistency with Kritsada Thiyawiwattananukool and Somskaow Bejranonda (2016) according to the environment that the effect of decision to stay in a green hotel but it has contrast with Mingsam Kawsaard (2010) and Thiridchai Chuawbumrong (2019) according to the tourists prefer to travel alone more than group travel and will pay more trip expenditure too.

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