

**An economic analysis of tourism demand and innovative tourism  
products: A case study of Lampang province in Thailand**

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**ABSTRACT**

This study used various quantitative methods to investigate tourism demand for Lampang province in Thailand. It aimed at five aspects: database of tourists, the tourism demand, the revisit of tourists, tourism expenditure and key success factors for innovative tourism products. The results reflected all these aspects. The scope and methodology of this study may construct a principle in economic analysis of tourism demand and innovative tourism products in general.

*Keywords:* Tourism demand, Innovative tourism products, Quantitative approach, Consumer behavior, Lampang

*JEL Classification:* L83, O12, D12

## 1. Introduction

Lampang province is a famous province for tourism in Northern Thailand. The province is an only province in Thailand that let horse carriages operate for tourism. Moreover, there are a lot of tourism sites and events including historical, natural, and cultural sites and events. Although the fame of Lampang tourism is not comparable to Chiang Mai whose tourism sector is number one in Northern Thailand, Lampang is full of natural, social and cultural capital to serve as a good tourism destination of Thailand.

This study was aimed to five objectives; to construct a database of tourists visiting Lampang, to study the tourism demand for Lampang, to study factors affecting revisit to the province, to study factors affecting tourists' expenditures in Lampang, and to investigate the potential of new tourism products in Lampang. With the information provided by this study, the local government will be able to enhance the tourism sector of Lampang. The more income from tourism, the more well-being of Lampang people.

## 2. Methodology

Data collection was launched in 2003. The samples were divided into 3 groups: 520 Thai tourists found in Lampang, 500 Chiang Mai people, and 300 foreign tourists found in Chiang Mai. Total number of observations were 1,320. Quantitative methods were utilized to analyze various aspects of tourism demand. The methods were listed below.

TABLE 1. Methodology in the study of tourism demand

	Objectives	Methodology
2.1	The database of tourists visiting Lampang	Frequency, Percentage, Seasonal Index, Compare means
2.2	The tourism demand for Lampang	Poisson Regression, Logit
2.3	Factors affecting revisit to the province	Logit
2.4	Factors affecting tourists' expenditures in Lampang	Multiple Classification Analysis (MCA)
2.5	The potential of new tourism products in Lampang	Logit

## 3. Results and Discussion

There are 5 parts of results of the study, the database of tourists visiting Lampang, the tourism demand for Lampang, factors affecting revisit to the province, factors affecting tourists' expenditures in Lampang, and the potential of new tourism products in Lampang. The results were presented as followed.

### 3.1 The database of tourists visiting Lampang

Most of Thai tourists, 56.5 percent, were from Northern region including Chiang Mai (Table 2). They drove to Lampang (Table 3). Due to the beauty of natural resources beside the highway from Chiang Mai to Lampang, it is good to drive private cars to Lampang. Moreover, to travel to all of touring sites in Lampang white are scattered and distant to one another, tourists will be more comfortable if they have private cars.

TABLE 2. Hometowns of Thai tourists visiting Lampang

Hometowns	Number of Thai tourists	Percentage
1. Bangkok	78	15.0
2. Central region except Bangkok	37	7.1
3. Chiang Mai	105	20.2
4. Northern region except Chiang Mai	190	36.5
5. Eastern region	37	7.1
6. Northeastern region	62	11.9
7. Southern region	11	2.1
Total	520	100.0

Source : Survey

TABLE 3. Vehicles of Thai tourist visiting Lampang

Vehicles	Number of Thai tourists	Percentage
Private car	355	71.14
Charter bus	82	16.43
Mass Transit Bus	29	5.81
Train	22	4.41
Airplane	11	2.20
Total	499	100.00

Source : Survey

Even though people thought that Lampang is a transit town where tourists passed without stop for a night, good accommodations (4 stars hotels) were convincing for

tourists who seek for a full-course touring around Lampang which more than a day was needed. Table 4 showed that more than half of Thai tourists decided to spend a night (or more) in Lampang.

TABLE 4. Decision of spending night(s) in Lampang

Spending night(s)	Number of Thai tourists	Percentage
Yes	302	58.1
No	218	41.9
Total	520	100.0

Source : Survey

More than 200,000 people spent the night in Lampang annually due to the statistics from Tourism Authority of Thailand in Table 5. This implied that a double visited Lampang, approximately 400,000 people a year. The highest season was in November where winter comes and the lowest season was in September when rain pours (Table 6).

TABLE 5 Number of tourists spending nights in accommodations in Lampang

Month	Number of Tourists			
	1999	2000	2001	2002
January	13,931	16,770	21,373	18,827
February	16,126	22,300	21,380	18,030
March	20,722	17,246	21,859	19,470
April	34,015	14,685	16,264	14,744
May	22,906	18,309	14,686	13,161
June	28,584	19,406	17,030	15,467
July	15,496	8,690	19,883	21,899
August	19,883	19,541	19,365	18,647
September	17,216	14,452	14,687	13,277
October	16,149	16,014	17,199	17,011
November	23,874	23,100	23,633	18,987
December	17,540	18,788	19,335	22,290
Total	246,442	209,301	226,694	211,810

Source : Tourism Authority of Thailand

TABLE 6. Seasonal Index of Lampang Tourism

Month	Seasonal Index
January	95.95
February	105.42
March	106.45
April	104.86
May	92.20
June	107.06
July	88.65
August	104.25
September	79.91
October	89.47
November	120.34
December	105.44

Source : Calculation

Tourists expected a lot about the beauty of nature and the culture. However, they found that that the beauty of nature was a little bit below the expectation (Table 7). The culture was similar to the expectation. No items were higher than the expectation, but rated good (the scores were 3 and above). These results reflected the power of expectation that made people come to visit a touring place.

TABLE 7. Difference between Expectation and Impressiveness of visiting Lampang

Items	Mean score of Expectation	Mean score of Impressiveness	t-statistics	sig.	Interpretation
Beauty of Nature	3.57	3.49	4.086	.000	Different
Culture	3.57	3.54	1.086	.278	Similar
Hospitality	3.40	3.32	2.904	.004	Different
Life style of local people	3.40	3.29	4.252	.000	Different
Elephants show	3.21	3.19	1.198	.232	Similar
Sight seeing	3.19	3.04	5.103	.000	Different
Souvenirs	2.99	2.99	0.627	.531	Similar
Food	2.96	3.00	-1.320	.188	Similar
Night Life Variety	2.54	2.56	-0.163	.870	Similar

Source : Survey

For the public services, the roads especially the highway from Chiang Mai to Lampang was the first impressive of tourists (Table 8). The highway was one of the most beautiful and safe highway in Thailand. This emphasized that the road was a right and worth investment to boost up tourism both for Chiang Mai and Lampang.

TABLE 8. Impressiveness of the public services

Public services	Mean score
Roads	3.57
Cleanliness of places	3.39
Infrastructure	3.32
Safety	3.27
Telephone network	3.20
Pollution control	3.18
Readiness of toilets	3.08

Source : Survey

The speed of services was the least impressive for private services (Table 9). This was due to Northern culture. The Northern people lives in the cool atmosphere and plentiful of food and drink. The geographical advantage makes them not to rush for anything. Therefore, any service for tourists usually comes slowly as their culture.

TABLE 9. Impressiveness of private services

Private services	Mean score
Convenience	3.46
Hospitality	3.40
Honesty	3.30
Hygiene	3.30
Value for money	3.27
Shops at touring sites	3.26
Speed of services	3.20

Source : Survey

Toilet, as expected, was the first request to improve the tourism sector (Table 10). Not only in Lampang but also in other provinces that there were not enough clean toilets for tourists. The cleanliness of places were also concerned for the improvement.

TABLE 10. Demand for rapid improvement

Items	Mean score
Toilet	2.52
Cleanliness of places	2.41
Shops at touring sites	2.29
Entrance fee of touring sites	2.11
Hospitality of local people	2.06

Source : Survey

For the final decision to revisit Lampang, 90 percent of Thai tourists said that they would come back to Lampang again (Table 11). With this result, Lampang is still charming for the Thai who would like to escape from the rapid growth of civilization of Chiang Mai. Lampang has its strong marketing position which people usually look over. The perfect place for relaxation where every minute moves slower than in Chiang Mai. Traditional food is cheaper without the sense of mass production. A town which full of smiles both from people and elephants.

TABLE 11. Decision to revisit Lampang

Decision to revisit	Number of Thai tourists	Percentage
Yes	470	90.6
No	49	9.4
Total	519	100.0

Source : Survey

For the foreign tourists, surveyed in Chiang Mai, it was surprising that more than 60 percent of them knew Lampang (Table 12). The little town was mostly presented to international community via guide books (Table 13). Friends and the power of 'word of mouth' was the second powerful source that made tourists know the province. However, only 44 percent of foreign tourists intended to visit Lampang in the trip they visited Thailand (Table 14).

TABLE 12. Do foreign tourists know Lampang?

Knowledge about Lampang	Number of foreign tourists	Percentage
Yes	196	65.3
No	104	34.7
Total	300	100.0

Source : Survey

TABLE 13. Sources that foreign tourists learned about Lampung

Sources	Number of foreign tourists	Percentage
Guide books	136	45.3
Friends	65	21.7
Documentary on airplanes	30	10.0
Medias in home countries	14	4.7
Television in Thailand	8	2.7
Newspaper in Thailand	7	2.3

Source : Survey

TABLE 14. Intention of foreign tourists (found in Chiang Mai) to visit Lampung

Intention to visit Lampung	Number of foreign tourists	Percentage
Yes	131	44.0
No	167	56.0
Total	298	100.0

Source : Survey

Among foreign tourists who intended to visit Lampung, the market belonged to the segment of 25 – 44 years old (Table 15), income range between \$2,001 - \$4,000 per month (Table 16), and spending one night in Lampung (Table 17). The average nights was 1.08 night.

TABLE 15. Age of foreign tourists who intended to visit Lampung

Age	Number of foreign tourists	Percentage
below 15 years old	0	0.0
15 – 24 years old	4	3.1
25 – 34 years old	52	39.7
35 – 44 years old	50	38.2
45 – 54 years old	25	19.1
55 – 64 years old	0	0.0
more than 64 years old	0	0.0
Total	131	100.0

Source : Survey



TABLE 16. Monthly income range of foreign tourist who intended to visit Lampung

Monthly income range	Number of foreign tourists	Percentage
below \$1,000	3	2.3
\$1,001 – \$2,000	25	19.1
\$2,001 – \$3,000	34	26.0
\$3,001 – \$4,000	34	26.0
\$4,001 – \$5,000	28	21.4
more than \$5,000	7	5.3
Total	131	100.0

Source : Survey

TABLE 17. Number of night(s) that foreign tourists intended to spend in Lampung

Number of night(s)	Number of foreign tourists	Percentage
Not spend night	30	22.9
1 night	64	48.9
2 nights	35	26.7
3 nights	1	0.8
4 nights	1	0.8
Total	131	100.0
Average nights	1.08	

Source : Survey

Beauty of nature, as the most expectation of Thai tourists, were also the most powerful reason for international tourists to visit Lampung (Table 18). Foreign tourists also expected to touch the rich of cultural capital as well as social capital via life style of local people. Their most favorite places to visit were natural sites (Table 19).

TABLE 18. Reasons to visit Lampung of foreign tourists

Reasons	Highest	High	Low	Lowest	Average
Beauty of Nature	87	40	3	1	<b>3.6260</b>
Culture	63	62	6	0	<b>3.4351</b>
Life style of local people	32	90	8	1	<b>3.1679</b>
Hospitality	37	80	10	4	<b>3.1450</b>
Souvenirs	36	67	26	2	<b>3.0458</b>
Sight seeing	26	85	18	2	<b>3.0305</b>
Elephants show	31	75	22	3	<b>3.0229</b>
Food	22	68	34	7	<b>2.8015</b>
Night Life Variety	12	36	71	12	<b>2.3664</b>

Source : Survey

TABLE 19. Touring sites that foreign tourists intended to visit in Lampung

Touring sites	Number of foreign tourists	Percentage
Natural sites	98	74.8
Cultural sites	34	26.0
Events and traditional sites	18	13.7

Source : Survey

The most influential reasons which avoided foreign tourists to visit Lampung was the lack of information (Table 20). People usually be risk-averse. Thus, tourists without information of a touring place usually not to risk their lives and time to visit the place. Without prior plan to visit Lampung, tourists might have not enough time for turning to Lampung. The lack of information might also let other provinces more interesting.

TABLE 20. Reasons not to visit Lampung of foreign tourists

Reasons	Highest	High	Low	Lowest	Average
No information about Lampung	81	63	23	0	3.3473
Not enough time	60	85	22	0	3.2275
Other provinces are more interesting	33	89	45	0	2.9281
Other places in other countries are more interesting	33	76	54	4	2.8263
Lampung is not interesting at all	24	58	77	8	2.5868
Visiting Lampung several times	20	45	86	16	2.4132
Expectation of bad experience	8	46	69	44	2.1078
Bad news about Lampung	6	33	87	4	2.0240
Too high expenditure	4	24	102	37	1.9701

Source : Survey

### 3.2 The tourism demand for Lampung

The tourism demand, in the economic discipline, is a relationship between the number of visit a place and the cost to visit, the income of visitors, and the characteristics of visitors. In this study, the travel cost model (TCM) was utilized to find the tourism demand. The result of analysis showed in table 21.

TABLE 21 The analysis of number of visiting Lampung using Travel Cost Model with Poisson Regression after elimination of insignificant variables

Poisson regression	Number of obs	=	465			
	LR chi2(4)	=	48.01			
	Prob > chi2	=	0.0000			
	Log likelihood	=	-1212.9811			
	Pseudo R2	=	0.0194			

time	Coef.	Std. Err.	z	P>z	[95% Conf. Interval]
<b>mpercap</b>	<b>-.0000823</b>	<b>.0000264</b>	<b>-3.121</b>	<b>0.002</b>	-.0001339 -.0000306
<b>salary</b>	<b>.0653271</b>	<b>.0170609</b>	<b>3.829</b>	<b>0.000</b>	.0318884 .0987658
<b>male</b>	<b>.1277663</b>	<b>.0506745</b>	<b>2.521</b>	<b>0.012</b>	.0284462 .2270864
age	.0003557	.0024623	0.144	0.885	-.0044704 .0051818
<b>_cons</b>	<b>1.143629</b>	<b>.07552</b>	<b>15.143</b>	<b>0.000</b>	.9956125 1.291645

Source : Calculation using Stata version 6.0

Technically, the number of visit to Lampung was Poison distributed. Thus Poison regression was suitable than OLS in estimating this model. Stata version 6.0 was used for the estimation.

The result, in table 21, revealed that the number of visit was affected negatively by the cost of visit (mpercap), positively by the income of visitors (salary). Besides, male tourists tended to visit Lampung more often than female.

After elimination of insignificant variable and trying to estimate the model again, all the significant variables were still significant with the same sign as previous estimation (Table 22). This confirmed the correct of the model.

TABLE 22. The analysis of number of visiting Lampung using Travel Cost Model with Poisson Regression after elimination of insignificant variables

Poisson regression	Number of obs	=	465			
	LR chi2(3)	=	47.98			
	Prob > chi2	=	0.0000			
	Log likelihood	=	-1212.9916			
	Pseudo R2	=	0.0194			

time	Coef.	Std. Err.	z	P>z	[95% Conf. Interval]
<b>mpercap</b>	<b>-.0000824</b>	<b>.0000263</b>	<b>-3.130</b>	<b>0.002</b>	-.0001341 -.0000308
<b>salary</b>	<b>.0665847</b>	<b>.0146694</b>	<b>4.539</b>	<b>0.000</b>	.0378333 .0953362
<b>male</b>	<b>.1274373</b>	<b>.0506237</b>	<b>2.517</b>	<b>0.012</b>	.0282167 .2266579
<b>_cons</b>	<b>1.151896</b>	<b>.0492496</b>	<b>23.389</b>	<b>0.000</b>	1.055368 1.248423

Source : Calculation using Stata version 6.0

The tourism demand in a broader sense links the decision to visit a place to the attributes of characteristics (the visitors) and the attributes of alternatives (the touring sites). The study of factors affecting decision to visit Lampang of foreign tourists using Logit model were one of the tourism demand in this sense. The result was shown in table 23.

In table 23, the role of information was significant in driving international tourists to visit Lampang. While other attributes of characteristics of visitors showed insignificantly influential to the decision, tourists who knew Lampang tended to go to the province more than the one did not know. They also tended to spend the night in Lampang (Table 24) because they know how to travel with a full-course in Lampang.

TABLE 23 Factors affecting decision to visit Lampang of foreign tourists using Logit model

Dependent Variable: LAMPANG				
Method: ML - Binary Logit				
Sample(adjusted): 1 300				
Included observations: 298				
Excluded observations: 2 after adjusting endpoints				
Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-1.996112	1.080063	-1.848145	0.0646
GENDER	-0.067680	0.292219	-0.231606	0.8168
AGE	-0.008153	0.019516	-0.417771	0.6761
SALARY	0.077707	0.122277	0.635502	0.5251
MARITAL	-0.029030	0.367243	-0.079050	0.9370
<b>KNOW</b>	<b>2.211058</b>	<b>0.334298</b>	<b>6.614027</b>	<b>0.0000</b>
ONLYTHAI	0.131901	0.341369	0.386388	0.6992
DAYALL	0.019132	0.022100	0.865694	0.3867
VISITED	0.267945	0.319527	0.838567	0.4017
Mean dependent var	0.439597	S.D. dependent var	0.497173	
S.E. of regression	0.448006	Akaike info criterion	1.202434	
Sum squared resid	58.00496	Schwarz criterion	1.314091	
Log likelihood	-170.1626	Hannan-Quinn criter.	1.247129	
Restr. log likelihood	-204.3780	Avg. log likelihood	-0.571015	
LR statistic (8 df)	68.43086	McFadden R-squared	0.167412	
Probability(LR stat)	1.01E-11			
Obs with Dep=0	167	Total obs	298	
Obs with Dep=1	131			

Source : Calculation using Eview version 3.0

Another aspect of tourism demand in the economic discipline, the number of nights spent in Lampang could be studied by the cost of staying in Lampang, the income of visitors, and other attributes of characteristics of visitors. However, due to the cross-sectional analysis, the price of accommodation did not vary. Thus the cost of staying in Lampang was ignored. Poisson regression was utilized again. The result showed in table 25.

TABLE 24. Factors affecting decision to spend night(s) in Lampang of foreign tourists using Logit model

Dependent Variable: SHELTER  
 Method: ML - Binary Logit  
 Sample(adjusted): 1 300  
 Included observations: 298  
 Excluded observations: 2 after adjusting endpoints

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-2.140966	1.071018	-1.999000	0.0456
GENDER	0.309392	0.294352	1.051096	0.2932
AGE	-0.016555	0.019433	-0.851911	0.3943
SALARY	0.079562	0.121709	0.653712	0.5133
MARITAL	-0.187963	0.362268	-0.518851	0.6039
<b>KNOW</b>	<b>1.662745</b>	<b>0.336929</b>	<b>4.934999</b>	<b>0.0000</b>
ONLYTHAI	0.472125	0.363270	1.299652	0.1937
DAYALL	0.014259	0.025460	0.560050	0.5754
DAYTHAI	-0.019758	0.033605	-0.587935	0.5566
VISITED	0.136201	0.315122	0.432218	0.6656
Mean dependent var	0.338926	S.D. dependent var	0.474141	
S.E. of regression	0.453032	Akaike info criterion	1.218594	
Sum squared resid	59.10856	Schwarz criterion	1.342657	
Log likelihood	-171.5704	Hannan-Quinn criter.	1.268255	
Restr. log likelihood	-190.8156	Avg. log likelihood	-0.575740	
LR statistic (9 df)	38.49023	McFadden R-squared	0.100857	
Probability(LR stat)	1.42E-05			
Obs with Dep=0	197	Total obs	298	
Obs with Dep=1	101			

Source : Calculation using Eview version 3.0

TABLE 25. The analysis of the number of nights spent in Lampang using Poisson Regression

Poisson regression      Number of obs = 131  
 LR chi2(10) = 20.63  
 Prob > chi2 = 0.0238  
 Log likelihood = -149.54385      Pseudo R2 = 0.0645

nights	Coef.	Std. Err.	z	P>z	[95% Conf. Interval]
<b>gender</b>	<b>.3727558</b>	<b>.2240393</b>	<b>1.664</b>	<b>0.096</b>	<b>-.0663532</b> <b>.8118648</b>
age	-.0127384	.0126587	-1.006	0.314	-.037549      .0120723
salary	.037501	.0767843	0.488	0.625	-.1129934      .1879954
marital	-.1107298	.2376745	-0.466	0.641	-.5765632      .3551036
onlythai	.3055351	.2806887	1.089	0.276	-.2446046      .8556748
dayall	.0016356	.0151246	0.108	0.914	-.0280081      .0312794
daythai	.0008437	.0215605	0.039	0.969	-.0414141      .0431015
visited	-.0690132	.195201	-0.354	0.724	-.4516002      .3135738
budget1	-.0000441	.0003364	-0.131	0.896	-.0007034      .0006153
<b>budget2</b>	<b>.0002185</b>	<b>.0001302</b>	<b>1.678</b>	<b>0.093</b>	<b>-.0000367</b> <b>.0004737</b>
_cons	-.643347	.8143891	-0.790	0.430	-2.23952      .9528264

Source : Calculation using Stata version 6.0

In this model, the income of visitors (salary) was insignificant to the number of night in Lampang but the budget which tourists would spend in Lampang (budget2) play the positive role instead. Moreover, the male tourists tended to spend more nights in Lampang more than female.

### 3.3 Factors affecting revisit to the province

The demand to revisit a place can be studied by Logit model. The linkage between the decision to revisit Lampang and its influential factors were displayed in table 26.

TABLE 26. Factors affecting decision of Thai tourists to revisit Lampang

Dependent Variable: C\_BACK Method: ML - Binary Logit  
 Sample(adjusted): 1 520  
 Included observations: 493  
 Excluded observations: 27 after adjusting endpoints

Variable	Coefficient	Std. Error	z-Statistic	Prob.
<b>C</b>	<b>-6.501111</b>	<b>1.350634</b>	<b>-4.813378</b>	<b>0.0000</b>
<b>MPERCAP</b>	<b>0.002164</b>	<b>0.000707</b>	<b>3.058691</b>	<b>0.0022</b>
<b>BEAUTY1</b>	<b>2.228244</b>	<b>0.392933</b>	<b>5.670793</b>	<b>0.0000</b>
<b>MALE</b>	<b>-0.881920</b>	<b>0.381512</b>	<b>-2.311643</b>	<b>0.0208</b>
<b>SALARY</b>	<b>0.461498</b>	<b>0.142349</b>	<b>3.242019</b>	<b>0.0012</b>
<b>DAYS</b>	<b>-0.265827</b>	<b>0.135277</b>	<b>-1.965065</b>	<b>0.0494</b>
LUM_P	0.658318	0.444685	1.480413	0.1388
Mean dependent var	0.902637	S.D. dependent var	0.296753	
S.E. of regression	0.263611	Akaike info criterion	0.498463	
Sum squared resid	33.77252	Schwarz criterion	0.558105	
Log likelihood	-115.8712	Hannan-Quinn criter.	0.521881	
Restr. log likelihood	-157.3903	Avg. log likelihood	-0.235033	
LR statistic (6 df)	83.03824	McFadden R-squared	0.263797	
Probability(LR stat)	8.88E-16			
Obs with Dep=0	48	Total obs	493	
Obs with Dep=1	445			

Source : Calculation using Eview version 3.0

Tourists who spent a lot of money in Lampang tended to revisit the province ( the variable MPERCAP in table 26). It was not surprising because Lampang is good for shopping and food. Visitors who were impressed by the beauty of nature (BEAUTY1) tended to make another trip to Lampang. Female tourists would visit the town again rather than male (the negative sign for the variable MALE). This might probably because there was not much adventurous sites for male but shopping destinations for female instead. The richer the tourists, the more they would revisit (SALARY). This could be said that that Lampang is a 'normal goods' in the sense of economics. However, the more day they spent, the less probability to revisit (the negative sign for the variable DAYS). This was because Lampang could be traveled around by 2-3 days. If a tourist traveled much at a time, there would nothing for him or her to go to another time.

### 3.4 Factors affecting tourists' expenditure in Lampung

The expenditure of tourists can be studied by the Multiple Classification Analysis (MCA). The result was shown in Figure 1 below.

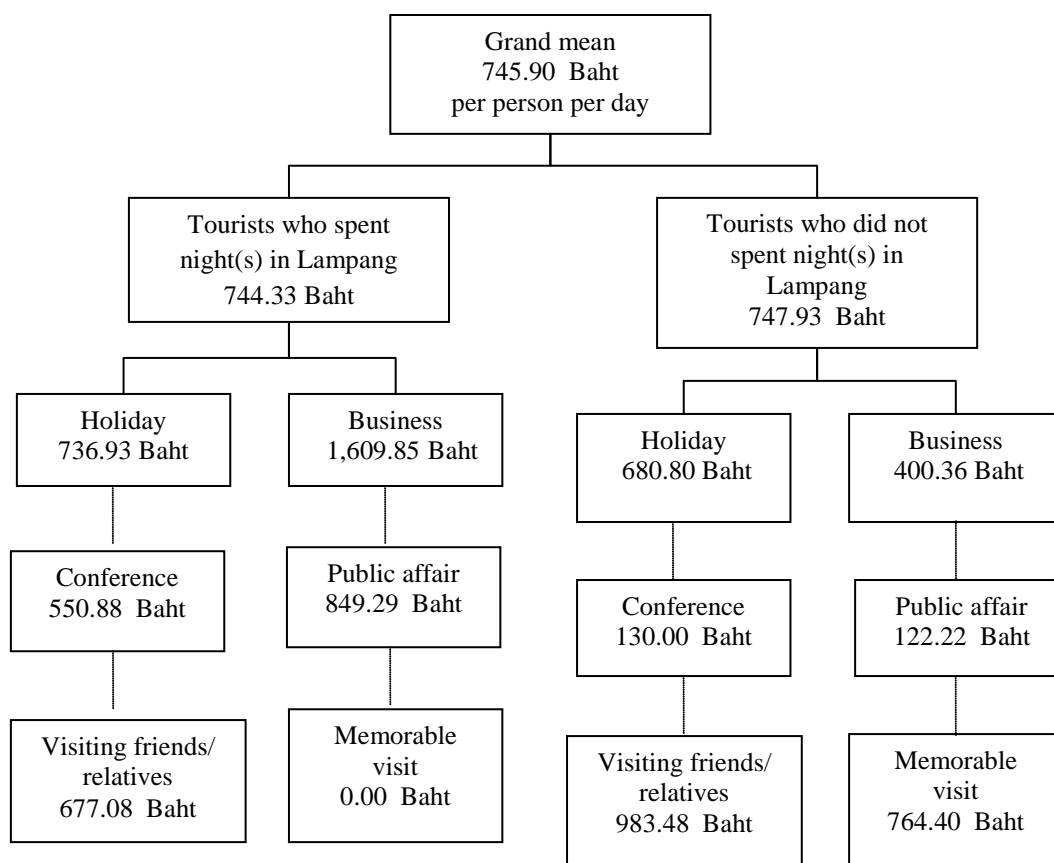


Figure 1. MCA Result of Expenditure Analysis of Thai tourists

The overall expenditure in Lampung was around 746 baht for a person in a day. Separating tourists into two groups, it was almost the same for tourists who did and did not spend the night in Lampung. Rather, separating tourists for their main purpose in visiting Lampung showed some more interesting figures. The biggest spender in Lampung was businessmen (or businesswomen) who stayed in Lampung at least a night. They spent about 1,600 baht a person a day, a more than double of the average spending. The second biggest group was people who came to visit friends or relatives without staying in Lampung. They spent around 983 baht. This group tended to pay much because they had to buy something for their friends or relatives. Moreover, the third largest group was people who came for public affair and spent a night or more in the province. They paid much because their offices would take care of their bills.

### 3.5 The potential of new tourism products in Lampung

Lampung offered 4 new tourism products in 2003. First, *Klong Pu Ja Festival with Ceramic Fair*. Second, *Wang Huar bamboo raft community at the "Lampung Lake"*. Third, *San Kam Paeng – Jae Sorn Route*. Finally, *Ban Sa-ded agricultural community*. The local government was not sure about the success of the new products. Thus this study investigated tourists who were interesting to visit or attend the new products. Logit model was used to analyze. The results were shown in table 27 -30.

*Klong Pu Ja Festival* is a cultural event. In this event, local Lampung people dress in traditional clothes and come out to celebrate with large drums (*Klong*). The name of the large drum is *Pu Ja* which means the respect to the Buddha. Meanwhile, the *Ceramic Fair* is a commercial event. Ceramics is the top product of Lampung. People come from all around the country to buy ceramics. The local government would like to combine these two events in order to gather massive people for both tourism and commercial purpose in one moment.

TABLE 27. Factors affecting decision to attend Klong Pu Ja Festival with Ceramic Fair

Dependent Variable: THINK1  
 Method: ML – Binary Logit  
 Sample(adjusted): 1 520  
 Included observations: 508  
 Excluded observations: 12 after adjusting endpoints  
 Convergence achieved after 3 iterations  
 Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-3.431300	0.692818	-4.952669	0.0000
<b>TOILET</b>	<b>0.334988</b>	<b>0.150480</b>	<b>2.226125</b>	<b>0.0260</b>
<b>WELCOME</b>	<b>0.730305</b>	<b>0.184450</b>	<b>3.959373</b>	<b>0.0001</b>
Mean dependent var	0.519685	S.D. dependent var		0.500105
S.E. of regression	0.487523	Akaike info criterion		1.342179
Sum squared resid	120.0276	Schwarz criterion		1.367162
Log likelihood	-337.9134	Hannan-Quinn criter.		1.351976
Restr. log likelihood	-351.7250	Avg. log likelihood		-0.665184
LR statistic (2 df)	27.62305	McFadden R-squared		0.039268
Probability(LR stat)	1.00E-06			
Obs with Dep=0	244	Total obs		508
Obs with Dep=1	264			

Source : Calculation using Eview version 3.0



For the success of the event, good toilet management is the significant factors to cope with massive people. Moreover, the hospitality of Lampang people to welcome tourists are needed to ensure the satisfaction of the visitors.

*Wang Hur* is a community which occupied a very large well. The well was once utilized as a mine. After the mine was over, the well was filled by water. Local people of *Wang Hur* set bamboo rafts into the the well. They operate the community as a restaurant with romantic atmosphere.

The key success factors found from the Logit model was the hospitality of *Wang Hur* local people. Visitors would not go to risky places where local people did not want to welcome strangers. Moreover, the decoration of lights would create the atmosphere of the community especially in the night time to be a nicely romantic place to visit.

TABLE 28. Factors affecting decision to visit Wang Huar bamboo raft community at the “Lampang Lake”

Dependent Variable: THINK2  
 Method: ML - Binary Logit

Sample(adjusted): 1 520  
 Included observations: 468  
 Excluded observations: 52 after adjusting endpoints  
 Convergence achieved after 3 iterations  
 Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-2.518621	0.669780	-3.760370	0.0002
<b>WELCOME</b>	<b>0.503257</b>	<b>0.184145</b>	<b>2.732936</b>	<b>0.0063</b>
<b>LIGHT1</b>	<b>0.275286</b>	<b>0.099580</b>	<b>2.764485</b>	<b>0.0057</b>
Mean dependent var	0.476496	S.D. dependent var		0.499982
S.E. of regression	0.492421	Akaike info criterion		1.360890
Sum squared resid	112.7526	Schwarz criterion		1.387483
Log likelihood	-315.4483	Hannan-Quinn criter.		1.371354
Restr. log likelihood	-323.8756	Avg. log likelihood		-0.674035
LR statistic (2 df)	16.85451	McFadden R-squared		0.026020
Probability(LR stat)	0.000219			
Obs with Dep=0	245	Total obs		468
Obs with Dep=1	223			

Source : Calculation using Eview version 3.0

*San Kam Pang – Jae Sorn Route* is an alternative route between Chiang Mai and Lampang. The route is mountainous and slippery in the raining season. However, the government invested to pave the road for tourism purpose. The road nowadays is approachable but good for only four-wheeled drives.

TABLE 29 Factors affecting decision to ride on San Kam Paeng – Jae Sorn Route

Dependent Variable: THINK3

Method: ML - Binary Logit

Sample(adjusted): 1 520

Included observations: 502

Excluded observations: 18 after adjusting endpoints

Convergence achieved after 3 iterations

Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-1.466845	0.471929	-3.108194	0.0019
<b>MONEY</b>	<b>6.82E-05</b>	<b>2.45E-05</b>	<b>2.779005</b>	<b>0.0055</b>
<b>TOILET</b>	<b>0.430848</b>	<b>0.145703</b>	<b>2.957041</b>	<b>0.0031</b>
Mean dependent var	0.525896	S.D. dependent var	0.499827	
S.E. of regression	0.492337	Akaike info criterion	1.363469	
Sum squared resid	120.9554	Schwarz criterion	1.388680	
Log likelihood	-339.2307	Hannan-Quinn criter.	1.373360	
Restr. log likelihood	-347.2863	Avg. log likelihood	-0.675758	
LR statistic (2 df)	16.11120	McFadden R-squared	0.023196	
Probability(LR stat)	0.000317			
Obs with Dep=0	238	Total obs	502	
Obs with Dep=1	264			

Source : Calculation using Eview version 3.0

TABLE 30. Factors affecting decision to visit Ban Sa-ded agricultural community

Dependent Variable: THINK4

Method: ML - Binary Logit

Sample(adjusted): 1 520

Included observations: 485

Excluded observations: 35 after adjusting endpoints

Convergence achieved after 3 iterations

Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-4.753059	0.807249	-5.887971	0.0000
<b>MONEY</b>	<b>6.54E-05</b>	<b>2.55E-05</b>	<b>2.568997</b>	<b>0.0102</b>
<b>BUY1</b>	<b>0.549947</b>	<b>0.144431</b>	<b>3.807689</b>	<b>0.0001</b>
<b>TOILET</b>	<b>0.616248</b>	<b>0.173603</b>	<b>3.549750</b>	<b>0.0004</b>
<b>AGE</b>	<b>-0.024503</b>	<b>0.010242</b>	<b>-2.392425</b>	<b>0.0167</b>
<b>ANI</b>	<b>0.361808</b>	<b>0.149542</b>	<b>2.419445</b>	<b>0.0155</b>
Mean dependent var	0.377320	S.D. dependent var	0.485216	
S.E. of regression	0.458019	Akaike info criterion	1.223957	
Sum squared resid	100.4852	Schwarz criterion	1.275720	
Log likelihood	-290.8096	Hannan-Quinn criter.	1.244295	
Restr. log likelihood	-321.4273	Avg. log likelihood	-0.599607	
LR statistic (5 df)	61.23534	McFadden R-squared	0.095255	
Probability(LR stat)	6.75E-12			
Obs with Dep=0	302	Total obs	485	
Obs with Dep=1	183			

Source : Calculation using Eview version 3.0

Key success factors for tourism purpose found from the analysis was the toilet management along the route. Since the road is mountainous, it was not comfortable for female tourists to travel on this route without clean toilet available. Moreover, the travelers should have much money. The four-wheeled drives are needed. Necessary survival tools should also prepared in cars.

The last new tourism products, *Ban Sa-Ded* agricultural community. They grows pineapples. The community want to raise income from letting people to come see their agricultural life style. Home stay is also planned to offer by some families.

Indeed, the key success factors for *Ban Sa-Ded* agricultural community is the money of tourists. Visitors expect that they may probably have to buy agricultural products and pay something for families who offer the home stay. Thus, they expect to bring some money for the trip (the positive sign of variable MONEY). The tourists who tended to visit the community are those who love shopping (the positive sign of variable BUY1). Besides, clean toilets should be provided. Younger visitors should be the target as the sign of variable AGE was negative. Lastly, the animal lover is another segment which may be potential to the tourism product (the positive sign of variable ANI1).

#### 4. Conclusion

Major finding for the Thai tourists found in Lampang was that Lampang was seemingly suitable for visitors driving private cars. It was because touring sites in Lampang were scattered and far away from one another. Major group of the tourists were youngsters, aging between 25 – 34 years old. Their salaries ranged between 5,000 – 8,000 baht per month. Mostly they came by group. Moreover, half of the Thai tourists were from the North.

Expectation of the natural beauty was the major drive for the Thai tourists to Lampang. After visiting, the tourists showed no difference between their satisfaction and the prior expectation. In addition, satisfied tourists also tended to purchase souvenirs and try new tourism products. The Thai tourists were statistically predictable to visit Lampang more than once a year (1.27 times). Besides, the number of visit would be increased if expenditures of the trip could be lessened. Income of tourists was another factor positively drove up the number of visit. Male tourists, furthermore, seemed to come back to visit Lampang more often than the female. The appreciation of touring sites especially the natural beauty played the major role for the demand to revisit.

Major finding for Chiang Mai people was that half of them were interested to visit Lampang in the next year round. This finding was supported by information that 20 percent of the Thai tourists found in Lampang were from Chiang Mai. The Chiang Mai market, accordingly, was thus at high potential for Lampang tourism promotion.

Chiang Mai people was driven by the old heritage and beautifully natural scenery of Lampang. They mentioned especially the pleasure receivable along the forestry highway route between Chiang Mai and Lampang. However, three major obstacles blocking Chiang Mai people to visit Lampang were no enough free time, demand for

living at home, and too high frequency of visit. Moreover, they also mentioned that there was no newly exciting site or event released to attract tourists to Lampang.

Major finding for foreign tourists found in Chiang Mai was that 65 percent of them knew Lampang. They were given information of the province via guide books mostly written in English. The knowledge of Lampang not only arouse the foreign tourists to visit Lampang but also captured them in Lampang's accommodations. The reason was that information made tourists have exact places aiming to visit while the scattered places made them spend more than a day to fulfill. Foreign tourists revealed high interest and expectation in Lampang's natural beauty and the cultural heritage. Accordingly, they mostly aimed for natural touring sites.

Information showed highly significance in attraction of the foreign tourists to Lampang. Unless knowing Lampang, most of foreigners showed no willingness to visit the province. On the other hand, receiving more information of other provinces drove this group of tourists to those provinces instead, and remained not enough time for Lampang. Thus, informational competition should be at high concern for Lampang tourism promotion.

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