VISITOR MANAGEMENT IN COMMUNITY-BASED CULTURAL TOURIST ATTRACTION MODEL

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ABSTRACT

This research aims to analyze the structural equation model of Visitor Management in community-based cultural tourist attraction model which consists of 4 variables: 1) Visitor Management, 2) Visitor Satisfaction, 3) Visitor Behavior, and 4) Behavioral Intention. The questionnaire survey was developed to collect data from 600 visitors in the community-based cultural tourist attraction in Chiang Khan, Loei Province, Thailand. The results show that Visitor Management has a direct positive influence on Visitor Satisfaction, Visitor Management has a direct positive influence on Visitor Behavior, Visitor Management has an indirect positive influence on Behavioral Intention through Visitor Satisfaction in the form of a mediator, Visitor Management has an indirect positive influence on Behavioral Intention through Visitor Behavior in the form of a mediator, Visitor Satisfaction has a direct positive influence on Behavioral Intention, and Visitor Behavior has a direct positive influence on Behavioral Intention.

I. INTRODUCTION

The growth in community tourism has both positive and negative impacts on local communities. The positive impacts include an improvement of life quality of people in the community, a convenience from infrastructure development, an increase of jobs and income from local people producing local handicrafts as souvenirs for visitors. The practices preserve values and cultures of the local identity (Thanawan, 2013). The presentation of local culture is said to be a source of income enhancing the economic status of the community. In other words, people in the community earn extra income from producing or selling cultural products (Meekaew, 2012). Nonetheless, the influx of numerous visitors contrasts with the limitation of tourist resources or attractions which unavoidably causes problems in a destruction of both natural resources and environment as well as the cultural way of life of people in the local community (Buakwan, Chaikot, & Suwanwong, 2016).

Chiang Khan is one of the tourist attractions in Thailand with its rich cultural venues, local ways of life, serene nature, especially the old wooden houses community along the Mekong River which is well known as Chiang Khan walking street. Moreover, the Tai Dam cultural community has been developed by its own people to be another cultural tourist attraction making Chiang Khan one of the most popular tourist destinations. Chiang Khan is another area that has been affected by mass tourism, for example, some traditions have been excessively modified to accommodate tourists causing an alteration of original traditions. This can be seen from tourists’ imitation behavior such as dressing that has changed the community’s dress identity (Thanawan, 2013), or local culture that rather has become a commodity for visitors to experience without appreciating its value (Meekaew, 2012).

The behavior of an individual visitor is a factor affecting the tourist attractions. Therefore, the management of an individual visitor’s behavior is a vital factor to be considered for reducing such negative effects on the tourist...
attractions (Wang, 2019). In addition, Garrod (2006) asserts that an individual visitor may cause negative effects on both tourist resources and experiences of other visitors. These negative effects include the visitors’ unconscious behavior which contradicts to the cultural standards and norms. For example, dressing inappropriately, taking pictures of people, or entering certain areas without permission, just to name a few. In line with Wang (2018), tourists’ behavior can be a significant factor affecting tourist attractions. Several academic scholars also studied about a sustainable development of tourist attractions by adapting the concept of visitor management as a strategic plan for managing the tourist areas. Albrecht (2017) states that visitor management can be a part of rules, regulations, law, or visitor management in the vulnerable tourist areas.

Zelenka & Pásková (2012); Ritchie (2010); Leask (2010); Pásková, (2008); Weaver & Lawton (2013) claim that visitor management affects an adjustment of visitor behavior and visitor satisfaction. Consequently, visitor satisfaction results in visitors revisit and recommend the place. Darnell & Johnson (2001); Chen & Tsai (2007; Gallarza & Saura (2006); Petrick & Sirakaya (2004); Bigne, Sanchez & Sanchez (2001); and Weaver & Lawton (2002) explain about the visitor’s revisiting that it shows visitor satisfaction. Similarly, Othakanon (2012) mentions that an intention of the visitor’s revisiting is a result from visitor behavior. In the same way, visitor satisfaction with the place and the revisiting to the place and to get services result from an individual behavioral intention.

In this research, therefore, the researcher aims to study the factor of visitor management in the tourist areas affecting the visitor satisfaction and the visitor behavior which will subsequently affect the behavioral intention.

II. METHODOLOGY

This study was conducted by using a quantitative research method. The primary and secondary data were analyzed in this study. The primary data was collected from the questionnaire surveys. The secondary data was obtained from academic journals and books for the literature review. The sample size for this study were 600 visitors visiting the community-based tourist attraction in Chiang Khan District, Loei Province, Thailand. The participants completed the questionnaire surveys. The data was analyzed by the SPSS software (AMOS) for Confirmatory Factor Analysis (CFA) and Structural Equation Model (SEM) to analyze the relationship and effects of the variables in this study. The research hypotheses are as follows.

H1: Visitor Management has a direct influence on Visitor Satisfaction in the community-based cultural tourist attraction.

H2: Visitor Management has a direct influence on Visitor Behavior in the community-based cultural tourist attraction.

H3: Visitor Satisfaction has a direct influence on Behavioral Intention in the community-based cultural tourist attraction.

H4: Visitor Behavior has a direct influence on Behavioral Intention in the community-based cultural tourist attraction.

H5: Visitor Management has a direct influence on Behavioral Intention in the community-based cultural tourist attraction.

Figures 1 shows the research hypotheses model of this study.
Results of Confirmatory Factor Analysis (CFA)

Confirmatory Factor Analysis (CFA) (Hair et al., 2010) is used to measure the statistical results and confirm whether the variables fit the model perfectly (Model Fit). According to the CFA analysis, there are four variables in this study: Visitor Management, Visitor Satisfaction, Visitor Behavior, and Behavioral Intention.

1.) Confirmatory Factor Analysis of Visitor Management

The Confirmatory Factor Analysis (CFA) of Visitor Management is used to confirm the variables which are categorized into 2 groups: 1.) Hard Visitor Management, and 2.) Soft Visitor Management, respectively. The model shows a good consistency with evidence-based data, Chi – Square = 145.931, df = 133.0, Sig. = 0.209 > 0.05, and CMIN/df. = 1.097 < 2.0, the consistency of statistical values with the Comparative Fit Index: CFI = 0.998 > 0.90, Goodness of Fit Index: GFI = 0.979 > 0.90, Adjusted Goodness of Fit Index: AGFI = 0.957 > 0.90, Root Mean Square Error of Approximation: (RMSEA) = 0.013 < 0.05, Root Mean Square Residual: (RMR) = 0.012 < 0.05, Normed fit index (NFI) = 0.980 > 0.90, and Incremental fit index (IFI) = 0.998 > 0.90. The analysis shows that these indices meet the set criteria which can be summarized that the model has its validity as illustrated in figure 2.

2.) Confirmatory Factor Analysis of Visitor Satisfaction

Fig. 1. Research model

Fig. 2. Confirmatory Factor Analysis of Visitor Management
The Confirmatory Factor Analysis (CFA) of Visitor Satisfaction is used to confirm the variables which are categorized into 4 groups: 1.) Attraction, 2.) Activities, 3.) Accessibility, and 4.) Service, respectively. The model has a good consistency with evidence-based data with Chi – Square = 32.434, df = 43.0, Sig. = 0.880 > 0.05, and CMIN/df. = 0.754 < 2.0, the consistency of statistical values with the Comparative Fit Index: CFI = 1.000 > 0.90, Goodness of Fit Index: GFI = 0.993 > 0.90, Adjusted Goodness of Fit Index: AGFI = 0.979 > 0.90, Root Mean Square Error of Approximation: (RMSEA) = 0.000 < 0.05, Root Mean Square Residual: (RMR) = 0.006 < 0.05, Normed fit index (NFI) = 0.993 > 0.90, and Incremental fit index (IFI) = 1.002 > 0.90. The analysis shows that these indices meet the set criteria which can be summarized that the model has its validity as illustrated in figure 3.

![Confirmatory Factor Analysis of Visitor Satisfaction](image.png)

Fig. 3. Confirmatory Factor Analysis of Visitor Satisfaction

3.) Confirmatory Factor Analysis of Visitor Behavior

The Confirmatory Factor Analysis (CFA) of Visitor Behavior is used to confirm the variables which are categorized into 3 groups: 1.) Perception, 2.) Learning, and 3.) Attitude, respectively. The model had good consistency with evidence-based data with Chi – Square = 85.313, df = 87.0, Sig. = 0.531 > 0.05, and CMIN/df. = 0.981 < 2.0, the consistency of statistical values with the Comparative Fit Index: CFI = 1.000 > 0.90, Goodness of Fit Index : GFI = 0.985 > 0.90, Adjusted Goodness of Fit Index: AGFI = 0.968 > 0.90, Root Mean Square Error of Approximation: (RMSEA) = 0.000 < 0.05, Root Mean Square Residual: (RMR) = 0.011 < 0.05, Normed fit index (NFI) = 0.982 > 0.90, and Incremental fit index (IFI) = 1.000 > 0.90. The analysis shows that these indices meet the set criteria which can be summarized that the model has its validity as illustrated in figure 4.
4.) Confirmatory Factor Analysis of Behavioral Intention

The Confirmatory Factor Analysis (CFA) of Behavioral Intention is used to confirm the variables which are categorized into 2 groups: 1.) Revisit Intention, and 2.) Recommend, respectively. The model has a good consistency with evidence-based data with Chi – Square = 14.526, df = 8.0, Sig. = 0.069 > 0.05, and CMIN/df. = 1.816 < 2.0, the consistency of statistical values with the Comparative Fit Index: CFI = 0.996 > 0.90, Goodness of Fit Index: GFI = 0.994 > 0.90, Adjusted Goodness of Fit Index: AGFI = 0.973 > 0.90, Root Mean Square Error of Approximation: (RMSEA) = 0.037 < 0.05, Root Mean Square Residual: (RMR) = 0.008 < 0.05, Normed fit index (NFI) = 0.992 > 0.90, and Incremental fit index (IFI) = 0.996 > 0.90. The analysis shows that these indices meet the set criteria which can be summarized that the model has its validity as illustrated in figure 5.

5.) The Confirmatory Factor Analysis of the Visitor Management structural model for the community-based cultural tourist attraction, Chiang Khan District, Loei Province
The analysis of the Confirmatory Factor Analysis of the Visitor Management structural model for cultural community-based tourist attraction, Chiang Khan District, Loei Province, shows 4 variables: Visitor Management, Visitor Satisfaction, Visitor Behavior, and the variable of Behavioral Intention. The results of the analysis reveal that the model is consistent with the empirical data which is at a good level. The value of Chi – Square = 48.538, df = 39.0, Sig. = 0.141 > 0.05, and CMIN/df. = 1.245 < 2.0, the consistency of statistical values with the Comparative Fit Index: CFI = 0.999 > 0.90, Goodness of Fit Index: GFI = 0.984 > 0.90, Adjusted Goodness of Fit Index: AGFI = 0.937 > 0.80, Root Mean Square Error of Approximation: (RMSEA) = 0.027 < 0.05, Root Mean Square Residual: (RMR) = 0.011 < 0.05, Normed fit index (NFI) = 0.995 > 0.90, and Normed fit index (NFI) = 0.999 > 0.90. The analysis shows that these indices meet all 7 configured criteria which can be summarized that the model is consistent with the empirical data which illustrated in figure 6.

![Diagram](image.png)

Fig. 6. Overall picture of the second confirmatory model of the visitor management model for the community-based cultural tourist attraction, Chiang Khan District, Loei Province

Structural Equation Model

The analysis of the Structural Equation Model of Visitor Management for the community-based cultural tourist attraction, Chiang Khan District, Loei Province aims to assess the fit and validity of the estimated Visitor Management model and to adjust the model to be more statistically fit by modifying the variables (Modification Indices). The fit and validity of the Structural Equation Model is considered from the variable weights and the R2 value to determine the covariance of the indicators. The results of the analysis of the Structural Equation Model are summarized in figure 7 as well as in table 1 and 2.
Fig. 7. Standardized output of SEM

Table 1

<table>
<thead>
<tr>
<th>Index</th>
<th>Criteria</th>
<th>Value</th>
<th>Result</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig.</td>
<td>&gt; 0.05</td>
<td>0.160</td>
<td>Fit</td>
<td>Hair et al. (2010), Bollen (1989) and Sorbon (1996)</td>
</tr>
<tr>
<td>CMIN/df.</td>
<td>&lt; 2.0</td>
<td>1.379</td>
<td>Fit</td>
<td>Bollen (1989), Diamantopoulos, Siguaw (2000)</td>
</tr>
<tr>
<td>GFI</td>
<td>&gt; 0.90</td>
<td>0.995</td>
<td>Fit</td>
<td>Hair et al. (2006), Browne and Cudeck (1993)</td>
</tr>
<tr>
<td>AGFI</td>
<td>&gt; 0.90</td>
<td>0.973</td>
<td>Fit</td>
<td>Durande-Moreau and Usunier (1999), Harrison walker (2001)</td>
</tr>
<tr>
<td>NFI</td>
<td>&gt; 0.90</td>
<td>0.996</td>
<td>Fit</td>
<td>Hair et al. (2010), Mueller (1996)</td>
</tr>
<tr>
<td>IFI</td>
<td>&gt; 0.90</td>
<td>0.999</td>
<td>Fit</td>
<td>Hair et al. (2010), Mueller (1996)</td>
</tr>
<tr>
<td>CFI</td>
<td>&gt; 0.90</td>
<td>0.999</td>
<td>Fit</td>
<td>Hair et al. (2010), Mueller (1996)</td>
</tr>
<tr>
<td>RMR</td>
<td>&lt; 0.05</td>
<td>0.003</td>
<td>Fit</td>
<td>Diamantopoulos, Siguaw (2000)</td>
</tr>
<tr>
<td>RMSEA</td>
<td>&lt; 0.025</td>
<td>0.025</td>
<td>Fit</td>
<td>Hair et al. (2010), Browne and Cudeck (1993)</td>
</tr>
</tbody>
</table>

The analysis of the 7 indices is consistent with the empirical data. The analysis shows that the Structural Equation Model of Visitor Management for the community-based cultural tourist attraction, Chiang Khan District, Loei Province is consistent with that empirical data conditions indicating the statistically acceptable level. The variables including Visitor Management, Visitor Satisfaction, Visitor behavior, and Behavioral Intention show consistency with the configurated criteria. In sum, the estimated model contains validity (OK Fit Confirm). The summary of the SEM results is shown in table 2.

Table 2. The results of SEM of Visitor Management for the community-based cultural tourist attraction, Chiang Khan District, Loei Province

<table>
<thead>
<tr>
<th>Variable (path)</th>
<th>λ</th>
<th>SE.</th>
<th>t-value</th>
<th>Sig.</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>0.76</td>
<td>0.04</td>
<td>13.538</td>
<td>0.000*</td>
<td>58.0%</td>
</tr>
<tr>
<td>Behavior</td>
<td>0.83</td>
<td>0.04</td>
<td>18.774</td>
<td>0.000*</td>
<td>70.0%</td>
</tr>
<tr>
<td>Behavioral Intention</td>
<td>0.08</td>
<td>0.09</td>
<td>0.775</td>
<td>0.439</td>
<td>89.0%</td>
</tr>
<tr>
<td>Behavioral Intention</td>
<td>0.34</td>
<td>0.10</td>
<td>3.339</td>
<td>0.000*</td>
<td>89.0%</td>
</tr>
<tr>
<td>Behavioral Intention</td>
<td>0.59</td>
<td>0.07</td>
<td>8.479</td>
<td>0.000*</td>
<td>89.0%</td>
</tr>
</tbody>
</table>

*p < 0.05

The model of the Visitor Management for the community-based cultural tourist attraction includes variables of Visitor Management, Visitor Satisfaction, Visitor Behavior, and the dependent variable is Behavioral Intention. The results of the Structural Equation Model are assessed by the regression coefficient of the independent variables standard scores. The results of the coefficient indicating the influence of the variables are summarized in detail as follows.
1.) Visitor Management consists of 2 observable variables: Hard Visitor Management (VIS1) and Soft Visitor Management (VIS2). The regression coefficient weight is between 0.84 – 0.89, the squared multiple correlation ($R^2$) is accounted for 71.0% - 79.0%. The results of the Visitor Management structural equation test indicate two direct influence paths and two indirect influences paths as detailed below.

1.1) The Visitor Management has a direct positive influence on Visitor Satisfaction. The regression coefficient is equal to 0.76, the error variance is 0.04, the t – value is 13.538, and Sig. = 0.000 < 0.05. The influence on changing is accounted for 58.0% which is statistically significant at 0.05.

1.2) The Visitor Management has a direct positive influence on Visitor Behavior. The regression coefficient is equal to 0.83, the error variance is 0.04, the t – value is 18.774, and Sig. = 0.000 < 0.05. The influence on changing is accounted for 70.0% which is statistically significant at 0.05.

1.3) The Visitor Management has an indirect positive influence on Behavioral Intention through Visitor Satisfaction in the form of a mediator. The regression coefficient is equal to 0.45 (0.76 x 0.59).

1.4) The Visitor Management has an indirect positive influence on Behavioral Intention through Visitor Behavior in the form of a mediator. The regression coefficient is equal to 0.28 (0.83 x 0.34).

2.) Visitor Satisfaction consists of 4 observable variables (SAT1- SAT4): Tourist attractions, Tourist Activities, Tourist Accessibility, and Services. The regression coefficient weight is between 0.60 – 0.87, the squared multiple correlation ($R^2$) is accounted for 36.0% - 75.0%. The results of the Visitor Satisfaction structural equation test indicate one direct influence path as detailed below.

2.1) The Visitor Satisfaction has a direct positive influence on Behavioral Intention. The regression coefficient is equal to 0.59, the error variance is 0.07, the t – value is 8.479, and Sig. = 0.000 < 0.05. The influence on changing is accounted for 89.0% which is statistically significant at 0.05.

3.) Visitor Behavior consists of 3 observable variables (BEH1- BEH3): Recognition, Learning, and Attitude. The regression coefficient weight is between 0.63 – 0.85, the squared multiple correlation ($R^2$) is accounted for 39.0% - 72.0%. The results of the Visitor Behavior structural equation test indicate one direct influence path as detailed below.

3.1) The Visitor Behavior has a direct positive influence on Behavioral Intention. The regression coefficient is equal to 0.34, the error variance is 0.10, the t – value is 3.339, and Sig. = 0.000 < 0.05. The influence on changing is accounted for 89.0% which is statistically significant at 0.05.

4.) Behavioral Intention is a result variable of the Structural Equation Model of the Visitor Management for the community-based cultural tourist attraction, Chiang Khan District, Loei Province. There are 2 observable variables (RI1- RE1): Revisit Intention and Recommendation. The regression coefficient weight is between 0.59 – 0.86, the squared multiple correlation ($R^2$) is accounted for 35.0% - 74.0%.

### III. RESULTS FROM HYPOTHESES TESTING

According to the analysis of the Structural Equation Model of the Visitor Management for the community-based cultural tourist attraction, the results from hypotheses testing are summarized as follows:

The results support H1 or Visitor Management has a direct positive influence on Visitor Satisfaction in the community-based cultural tourist attraction with the weight of 0.76. The influence on changing is accounted for 58.0% which is statistically significant at 0.05.

The results support H2 or Visitor Management has a direct positive influence on Visitor Behavior in the community-based cultural tourist attraction with the weight of 0.83. The influence on changing is accounted for 70.0% which is statistically significant at 0.05.

The results support H3 or Visitor Satisfaction has a direct positive influence on Behavioral Intention in the community-based cultural tourist attraction with the weight of 0.59. The influence on changing is accounted for 89.0% which is statistically significant at 0.05.
The results support H4 or Visitor Behavior has a direct positive influence on Behavioral Intention in the community-based cultural tourist attraction with the weight of 0.34. The influence on changing is accounted for 89.0% which is statistically significant at 0.05.

The results reject H5 or Visitor Management has a direct influence on Behavioral Intention in the community-based cultural tourist attraction which is statistically significant at 0.05.

IV. CONCLUSION

This research shows the influence between the variables and the research results can be summarized as follows: Visitor Management has a direct positive influence on Visitor Satisfaction, Visitor Management has a direct positive influence on Visitor Behavior, Visitor Management has an indirect positive influence on Behavioral Intention through Visitor Satisfaction in the form of a mediator, Visitor Management has an indirect positive influence on Behavioral Intention through Visitor Behavior in the form of a mediator, Visitor Satisfaction has a direct positive influence on Behavioral Intention, and Visitor Behavior has a direct positive influence on Behavioral Intention.

REFERENCES

