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Frontier Tourism in the pattern of Twin Cities located in Thailand and Lao People's Democratic Republic on Structural Model

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Abstract: This paper aim is to create a structural model for Frontier Tourism in the pattern Twin Cities located in Thailand and Lao People's Democratic Republic. This research is using Structural Equation Modeling (SEM) by AMOS Program. The data were collected from 800 samples from tourists visiting Muang District, Nakhon Phanom Province, Thailand and Thakhek and Khammouan in Lao People's Democratic Republic. This study formulated a final structural model according to the combined opinions gathered from Muang District, Nakorn Phanom Province, Thailand and Thakhek District, Khammouan Province, Lao People's Democratic Republic, as the external environmental factors consisted of the following 2 components: 1) Political Legal Environment and 2) Ecological and Natural Environment. The internal environmental factors consisted of the following 2 components: 1) Tourism Enterprises and Infrastructure of Tourism and 2) Tourism Resources. The twin cities model included Events and Infrastructure.

Keywords: Structural Model, Frontier Tourism, Twin Cities, Thailand, Lao People's Democratic Republic.

Introduction

The important service sector which can stimulate the world's economy and create different marketing values of each country is tourism. Tourism is considered as an important tool to improve the global economy and society. It reduces problems of poverty, creates employment, small enterprises, and the development of infrastructure, facilities and income creation in the country. Tourism is likely to have potential for expansion at a high level, in the next decades (Pongpanarat, 2017). In 2015, the World Tourism Organization (UNWTO) found that the number of tourists around the world had risen in 2014 from 52 million people or 4.6% to 1,186 million tourists. Moreover, tourism makes 10% of Gross Domestic Product (GDP) globally providing 284 million positions and \$1,260 billion income showing the significant growth of tourism around the

globe. For many decades, tourism has played a role in experiencing new things for people around the world who travel to gain new experiences in different places. It also helps to decrease commercial obstacles when facilitating the tourists resulting in the stimulation of the economy as people spend their money buying things. At the same time, it supports the expansion of investment as well as employment which are the key factors in the effective stimulation of the economy (World Tourism Organization, 2016).

Nakhon Phanom province which is the fronting city in the Northeastern part with a fertile and beautiful landscape, long history, and a variety of cultures and races. The sacred Phra That Phanom is established here as well; it has been a respected pantheon of the city in history, and there are many more of Buddha's relics in the city making Nakhon Phanom the city of "Phra That". Moreover, as Nakhon Phanom used- to be a prosperous city located on the banks of the Mekong River, it is a melting pot of various cultures of different races. Hence, Nakhon Phanom possesses cultures and traditions that are unique and interesting, and nowadays, it is an important frontier crossing spot to The Lao PDR. Nakhon Phanom also has convenient transportation and an airport which support its tourism potential; thus, it is another interesting tourist destination in Thailand (Tourism Authority of Thailand, 2009). The area connection of twin cities, Nakhon Phanom Province-Khammouan District, Lao People's Democratic Republic was made by the construction of the Third Thai-Lao Friendship Bridge (Nakhon Phanom-Khammouan). The Bridge acted as the door to connect the two cities. After the construction of the bridge was completed, there was economic expansion and continual city development. The Bridge created more economic support toward twin cities, leading to industrial development and infrastructure development that would support the economic development, transportation, investment, international tourism, especially tourism in the upper part of the Northeast region of Thailand, the central part of The Lao PDR and Vietnam. The connected area was also linked to China, connecting China's frontier, the Indochina region, with ports of Vietnam. China was connected with the Northeast region of Thailand (Office of Industrial Economics, 2012).

Thailand and Lao, PDR always have good relationships due to their closeness in terms of topography, arts and culture, international politics and economy. These two cities share their frontier which is interesting and has tourism potential. The author saw problems and the importance of the connection of the Mekong group's tourism route, so the author desired to study innovation in frontier tourism management in twin cities, located near the Mekong River, the area between Thailand and The Lao PDR, in order to gain new knowledge and create ways to improve tourism through new management innovations that would be applied with Thailand's tourism management in the future.

Literature Review

Frontier Tourism

Timothy (2006) claimed that during the 20th century, opinions relating to determination of sovereign authority, law, screening cross-border goods through customs and taxes, control of

people flow, and the creation of cultural and language barriers are added in the context of frontiers being developed at different levels. The objectives of developed frontiers are as follows: 1) National or international frontiers have a strong influence on national politics and have obvious influence on nature including the environment within the economic system. They also affect cultural and social interactions when the state authority accepts borderlands without separating the activities and mindscapes of people. 2) Subnational frontiers define state areas such as provinces and organizations. It can be considered as a secondary frontier specification significantly affecting people's experiences. 3) Tertiary frontiers, such as the city and municipality, are strong and have influence on interaction between people. Therefore, these types of frontiers may have effects on border property tax examination, law enforcement, and insurance coverage. Consequently, frontiers will be complicated with multi-dimensional phenomenon. In addition, their history as well as borderland development indicate the limit of their organizations, people's lives and identity creation.

Phillip (2009) said that a "frontier" was an area in-between space to explain transition phenomenon in the area in terms of two dimensions, temporal and spatial, to understand the phenomena of the economy, political geography, and social changes happening in the area. He indicated that the concept of frontier is a tool encouraging heuristic study that enables us to understand the development as a form of social transition concerning temporal and spatial aspects. He divided borderland into three types of area as follows: 1) Agricultural frontiers, in terms of spatial condition, refer to farmland and forests. The definition of this area came from it having complicated relationships resulting from multi-interactions or collisions, for example, the need for conservation, agricultural production and industry reform – changing from multi-plant farming to single-plant farming or using the area for commercial purposes. 2) Peri-urban frontiers refer to the countryside and city encroaching upon each other in the form of the economy and society. 3) National frontiers are located between countries having different economies and politics under the concept of regional integration. This integration enables the two national frontiers to utilize their borderland. For example, after the Cold War, a national frontier was a place creating opportunities for countries that were unequal and had an economic gap because of political history; deep rooted from imperialism and regional geopolitics.

As previously mentioned, a "frontier" in this research indicates the special characteristics of cities located along Thailand's border connecting to a neighboring country, Lao PDR. Thailand and Lao PDR are separated by natural resources such as a river, mountains, or a boundary line according to the agreement between the two countries. The frontier also has potential for economic, social, cultural, and environmental growth due to its advantages of location where people of inner and outer cities can associate with each other. Associating with inner cities refers to contacting close by cities in the same country, developed and administrated by the same government. On the other hand, associating with outer areas refers to developing relationship that gives benefits to frontier cities, which

become unique cities, especially cities that have remarkable natural resources and can be promoted as attractions which tourists can visit. The visits can bring about an exchange in many forms. These advantages can create a lot of benefits in the area, and the consequences also intensify the importance of the frontier cities' roles – these cities increase the income of the country and can be a hub of various developments with the help of a strong economic, social, cultural, and environmental relationship between the two countries.

Urban Tourism

Urban development nowadays is a consequence of people living in a city and economic growth. The bigger the economic growth, the more developed the city becomes. This includes the development of utilities, public assistance and the physical environment of the city (Borchardt, 2013). Tourism then plays an important role in urban area development; it is an important symbol of the city's image and also a unit of pleasant area to plan a development of urban tourism. Some specific problems that need to be solved are natural conflicts and traffic problems especially in the heart of the city. Most of the urban development plan should consider many variables (Dora & Zrinka, 2006).

The study of a city's categorization has to consider its role, composition, features, the selection of suitable theories of urban development, and its success. Indicating factors, composition criteria, and supporting factors which can be applied to the city plan in other countries will result in successful city development leading to suitable city plans for the context of Thai society and for further application. This works especially with the cities with special features and play an important role in driving the country's development such as entertainment tourism cities, industrial cities, government-service centre cities, education cities, and shipment and logistics centre cities. It is necessary to have a suitable and sustainable guideline for the development in the future in order to help solve problems in these areas as well as serve the country's development effectively (Poojinda & Boonsom, 2016). Therefore, the author has collected theories about suitable and successful city development as well as indicating factors, composition criteria, and other supporting factors which can be applied to city development to plan tourism. The factors are as follow: 1) External Environment which consists of political and legal environment, and social, cultural and environmental environment, 2) Internal Environment which consists of tourism businesses, tourism resources, and tourism infrastructures. (Akville & Gabriele, 2015)

Twin Cities for Tourism

Habibah et al. (2013) conducted a study about the successful factors in developing tourism from city to city in Malacca, Malaysia and identified that the co-development measures were 1) Enabling Leadership, 2) Engaging in Shared Goals and Practices, 3) Tourists' Preferences Reciprocity, 4) The Melayuness Factor, 5) Emerging

Consumers of the Malacca Straits Development Region, and 6) Geographical Location and Accessibility.

International Centre for Local and Regional Development (2009) conducted the project planning framework for cross-border cooperation between Newry of the United Kingdom and Dundalk of the Republic of Ireland by gathering research and cooperation in in the sub-region regarding cross-border Dundalk Newry-through strategic planning and integrated development by improving environmental management to support tourism and recreation. The results of the study revealed that there were 6 factors in cities development; 1) Economic competitiveness, 2) Sustainable development, 3) Improved community cohesion, 4) Preservation of the natural and cultural heritage, 5) Increased efficiency resulting from the coordination of infrastructure investment and 6) Up-skilling for an economically productive workforce. Time had changed the concept of border between two countries, and it became the subject of interest at the local level cooperation. At present, the concept of “Binational” is widely discussed. Town twinning in Europe and North America accepted the importance of the local in terms of history and background. stated that the binational cities in the past was based on these factors.

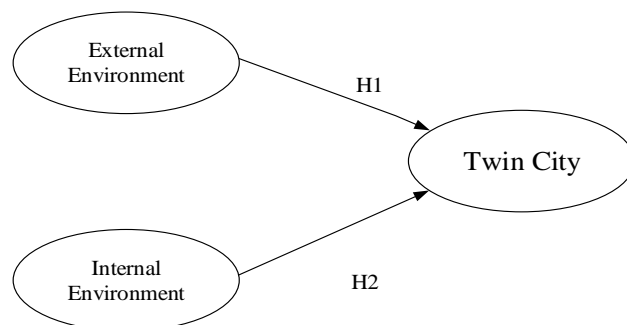
1. Origin: The origins of adjunct border cities started in the same period, such as Narva and Ivangorod. However, the development of each city progressed separately after divided. (the United States of America / Mexico)
2. Age: The increase in the integration of the two sides in the boundary that may occur began in the 19th century (Narva / Ivangorod), between Europe and the US border region and Mexico after World War II, and German and Polish border, after the collapse of the Soviet Union. The timing of separation and integration from the sequence of events causes both cities to have similar and different changes.
3. Size: Border cities that are between each other, and have different sizes. The size of population can be the case study, and it will be more effective if the size is big.
4. Appearance: It depends on the specific history of that city. The appearance of the building and the urban landscape may be similar or different.
5. Culture: The scholars identify that the twin cities division is based on two categories; 1) the twin cities use their state languages and 2) some twin cities speak 2 languages and share the dialect.
6. Minorities: In most border cities, there are only minorities from neighboring countries live in. However, there a lot of Russian in Baltic and a lot of Mexican in the US border.
7. Relations; Most of the border twin cities have the relationship in solving problems together. The locals often

cross the borders for the relaxing trip, buy and sell things, work and contact each other.

As mentioned above, the author gathered criteria in matching twin cities in both domestic level and international level. The author studied various keywords such as, twin cities, sister cities, local government international partnerships/alliances and city-to-city transnational linkages/networks. The author thought that aforementioned relationships had same goals and objectives. Therefore, the author summarized the criteria in matching twin cities and applied with the research on the Frontier Tourism Innovation Management in The Pattern of Twin Cities Mekong River Communities between Thailand and The Lao People's Democratic Republic, (Amarawadee et.al.) as following :

- 1) History
- 2) Culture
- 3) Geography
- 4) Location
- 5) Politics
- 6) Border Regime
- 7) Infrastructure
- 8) Symbolic
- 9) Minorities
- 10) Community Participation
- 11) Relations
- 12) Agreements
- 13) Linkage of Public Service
- 14) Events

Framework and hypotheses are formed from these theories which is reinforced by previous studies that the author concluded is as follows:



H1: Factors of the external environment of frontier cities between Muang District in Nakhon Phanom, Thailand and Muang Thakhek in Khammouan, Lao PDR affect the Twin City pattern between Muang District in Nakhon Phanom, Thailand and Muang Thakhek in Khammouan, Lao PDR

H2: Factors of the internal environment of frontier cities between Muang District in Nakhon Phanom, Thailand and

Muang Thakhek in Khammouan, Lao PDR affect the Twin City pattern between Muang District in Nakhon Phanom, Thailand and Muang Thakhek in Khammouan, Lao PDR

Methodology

The analysis of the external environment relating the structure of the development of frontier cities in the pattern of Twin Cities between Muang District in Nakhon Phanom, Thailand and Muang Thakhek in Khammouan, Lao PDR consists of the following factors shown in the table 1

Table 1. Factors of the External Environment Relating to the Structure of the Development of Frontier Cities in the Pattern of Twin Cities

Factor	Items
1. Political and Legal Environment : PLE	PLE 1 : Tourism Policy
	PLE 2 : Restrictions for Person from Particular Countries to Arrive (migratory restrictions, visas)
	PLE 3 : International Agreements
2. Economic Environment : EE	EE 1 : Monetary Policy
	EE 2 : Budget for Tourism Development
	EE 3 : Employment
	EE 4 : National Income
3. Socio-cultural Environment : SCE	SCE 1 : Demography
	SCE 2 : Education
	SCE 3 : Health Security
	SCE 4 : Criminogenic Situation
4. Ecological and Natural Environment : ENE	ENE 1 : Water Pollution
	ENE 2 : Air Pollution
	ENE 3 : Soil Pollution
	ENE 4 : Noise Pollution
5. Technological Environment : TE	TE 1 : Website
	TE 2 : Social Media
	TE 3 : Mobile Applications
	TE 4 : Virtual Reality and Augmented Reality

The analysis of the internal environment relating the structure of the frontier city development in the pattern of Twin Cities between Muang District in Nakhon Phanom and Muang Thakhek in Khammouan, Lao PDR consists the following factors shown in the table 2

Table 2. Internal Environment Factors Relating to the Structure of the Development of Frontier Cities in the Pattern of Twin Cities

Factors	Items
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6. Tourism Resource : TR	TR 1 : Historical Resources
	TR 2 : Natural Resources
	TR 3 : Art and Cultural /Traditional /Event Resources
7. Tourism Enterprises : TEP	TEP 1 : Travel Agency and Tour Operation
	TEP 2 : Transportation
	TEP 3 : Recreation Enterprise
	TEP 4 : Accommodation
	TEP 5 : Restaurant
	TEP 6 : Souvenir Shop
8. Infrastructure of Tourism : IT	IT 1 : Tourism Information
	IT 2 : Financial Institutions
	IT 3 : Logistics
	IT 4 : Safety for Tourists

The analysis of the pattern of Twin Cities between Muang District in Nakhon Phanom, Thailand and Muang Thakhek in Khammouan, Lao PDR consists of the following factors shown in the table 3

Table 3. Factors of Twin City Pattern between Muang District in Nakhon Phanom, Thailand and Muang Thakhek in Khammouan, Lao PDR

Factors	Items
9. Twin Cities : TC	TC 1 : History
	TC 2 : Culture
	TC 3 : Geography
	TC 4 : Location
	TC 5 : Politics
	TC 6 : Border Regime
	TC 7 : Infrastructure
	TC 8 : Symbolic
	TC 9 : Minorities
	TC 10 : Community Participation
	TC 11 : Relations
	TC 12 : Agreements

Factors	Items
	TC 13 : Linkage of Public Service
	TC 14 : Events

Result and Discussion

The Results of Confirmatory Factor Analysis (CFA) According to the Combined Opinions between the Muang District of Nakorn Phanom, Thailand and Thakhek and Khammouan in the The Lao People's Democratic Republic

Confirmatory factor analysis (CFA) (Arbuckle, 2011) was carried out to assess the statistical result values and to confirm whether or not the group variables were a model fit. The analysis was carried out in order to confirm that variable grouping could be divided into 2 parts: 1) confirmatory factor analysis on external environment factors and 2) internal environment factors related to the development structure of the frontier cities in the pattern of twin cities according to the combined opinions between the Muang District of Nakorn Phanom, Thailand and Thakhek and Khammouan in the The Lao People's Democratic Republic.

Confirmatory Factor Analysis on External Environment Factors and Internal Environment Factors Related to the Development Structure of Frontier Cities in the Pattern of Twin Cities According to the Combined Opinions between the Muang District of Nakorn Phanom, Thailand and Thakhek and Khammouan in the The Lao People's Democratic Republic

It was confirmed that variables could be categorized into 3 factor groups consisting of the following: **Factor Group 1:** Economic Political Legal and Socio-cultural (EE and PLE and SCE), **Factor Group 2:** Ecological and Natural and Economic Environment (ENE and EE), and **Factor Group 3:** Technological Environment (TE), respectively. By inputting data into the program, all were model fit. The results of the analysis revealed that the model did not fit, so it was necessary to improve the model. According to MI (Modification Indices), it was found that some pairs of variables in the model had yielded relevant analytical results. The author, therefore, used the variable cutting method by firstly cutting EE1, EE2, PLE1, and EE3 from Economic Political Legal and Socio-cultural (EE and PLE and SCE) . Secondly, ENE3, ENE4, and EE4 were cut out from Ecological and Natural and Economic Environment (ENE and EE); and thirdly, TE2 and TE1 were cut out from Technological Environment (TE). Then the relationship lines of the error values (Error: e) for some pairs of variables (e11-e13), which had resulted in repetition, could be linked. The results contributed to model fit with the value of Chi-square = 13.449, df = 10, p = .200 (> .05), CMIN / DF = 1.345 (<3), GFI. = .995 (> .90), and an RMSEA = .021 (<.08) (Arbuckle, 2011). The 1st Order Confirmation Factor Analysis, (1st Order CFA) is shown in Figure 1 and the 2nd Order Confirmatory Factor Analysis, (2nd Order CFA) is shown in Figure 2

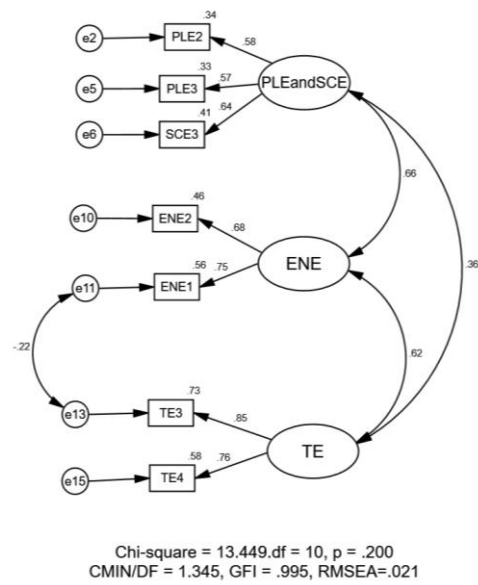


Figure 1

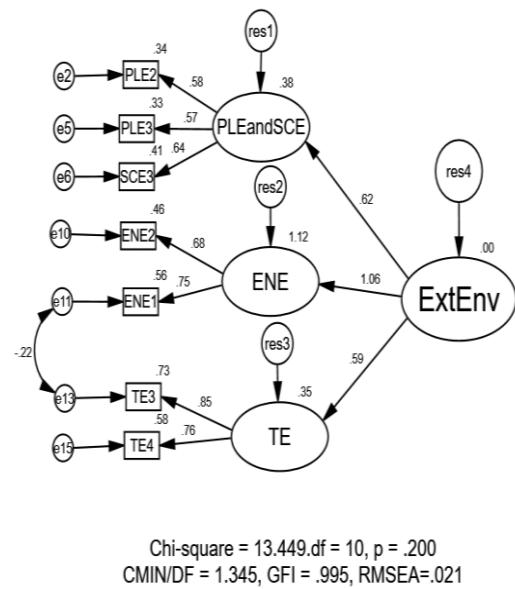
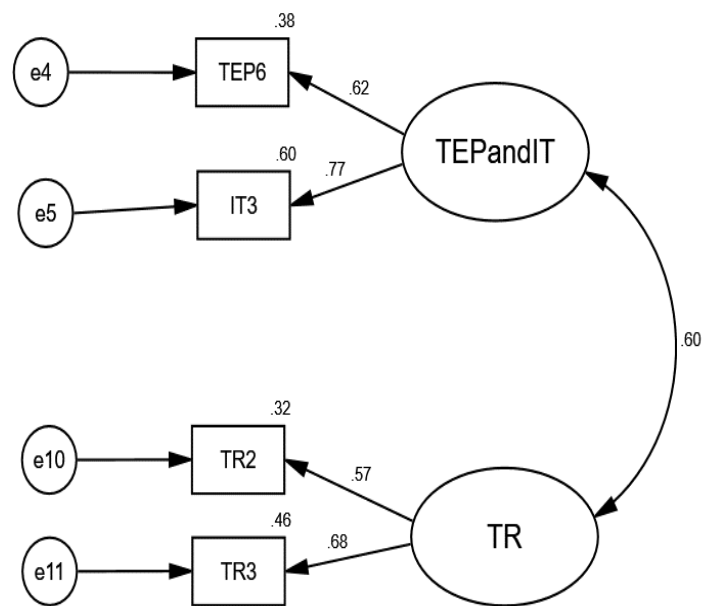


Figure 2

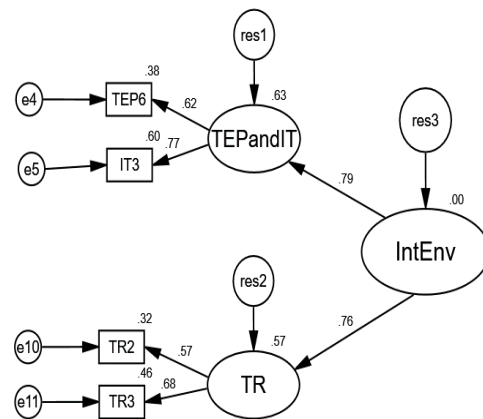
Confirmatory Factor Analysis on Internal Environment Factors Related to the Development Structure of Frontier Cities in the Pattern of Twin Cities According to Combination Opinions between the Muang District of Nakorn Phanom, Thailand and Thakhek and Khammouan in the The Lao People’s Democratic Republic.

The analysis was carried out to confirm that the variables could be categorized into 2 factor groups. **Factor Group 1** was Infrastructure of Tourism and Tourism Enterprises and (IT and TEP) and Factor Group 2 was Tourism Resources and Tourism Enterprises (TR and TEP), which contributed to model fit by inputting the data into the program. The results from the analysis revealed that the model did not fit, so it was necessary to improve the model. According to MI (Modification Indices), it was found that some pairs of variables in the model had yielded relevant analytical results. The author therefore cut out some variables that had yielded repetitive outcomes. Firstly, IT2, IT1, TEP2, TEP3, TEP1, and IT4 were removed from Infrastructure of Tourism and Tourism Enterprises (IT and TEP). Secondly, TR1 and TEP5 were cut out from Tourism Resource and Tourism Enterprises (TR and TEP). As a result, the model was completely fitted with Chi-square = 2.070, df =1, p = .150 (>.05), CMIN/DF = 2.070 (<3), GFI = .999 (>.90), and an RMSEA = .037 (<.08) (Arbuckle, 2011) . The 1st Order Confirmatory Factor Analysis (1st Order CFA) was illustrated in Figure 3 and the 2ndOrder Confirmatory Factor Analysis (2ndOrder CFA) was showed in Figure 4



Chi-square = 2.070.df = 1, p = .150
 CMIN/DF = 2.070, GFI = .999, RMSEA=.037

Figure 3



Chi-square = 2.070, df = 1, p = .150
 CMIN/DF = 2.070, GFI = .999, RMSEA=.037

Figure 4

Structural Model According to the Combined Opinions between the Muang District of Nakorn Phanom, Thailand and Thakhek and Khammouan in the The Lao People’s Democratic Republic

Structural Model (Byrne, B.M, 2010) served to show "Influence between Factors or Latent Variables” that had affected (Effect) other factors based on the empirical data collected from the sample group. It was compared to the model that had previously been studied in order to determine whether or not it was model fit. The model with goodness of fit yielded CMIN- *p* (Chi-square Probability Level) > 0.05, CMIN/DF (Relative Chi-square) <3 , GFI (Goodness of Fit Index) >.90 , and RMSEA (Root Average Square Error of Approximation) < .0 8 (Arbuckle, 2 0 1 1) . The results from the analysis of the structural model was as follows:

Table 4. Standardized Residual Covariances of Structural Model According to Combination Opinions between the Muang District of Nakorn Phanom, Thailand and Thakhek and Khammouan in the The Lao People’s Democratic Republic

	TC7	TC14	TR2	TR3	TEP6	IT3	ENE1	ENE2	PLE3	PLE2
TC7	0.026									
TC14	0.035	0.024								
TR2	0.638	-0.141	0.022							
TR3	-0.318	0.307	0.055	0						
TEP6	1.461	-0.904	-0.748	0.435	0					

IT3	-0.442	0.416	0.22	-0.085	0	0				
ENE1	1.023	0.819	-0.67	-1.817	-0.585	-0.687	0			
ENE2	0.391	0.394	0.316	-0.388	0.861	0.182	0.209	0.104		
PLE3	-1.392	-0.602	0.21	0.432	-0.207	0.336	0.576	-0.388	0.019	
PLE2	-0.509	-0.428	0.721	0.921	0.861	-0.046	0.093	-0.777	0.054	0

As shown in Table 4, it was found that standardized residual covariances of each pair of the latent variables were between + 2 and -2. This showed good indicators (Hair et al., 2010).

Table 5. Regression Weight Values and Significant Values of Structural Model According to the Combined Opinions between the Muang District of Nakorn Phanom, Thailand and Thakhek and Khammouan in Lao People’s Democratic Republic.

Factors (Cause-Effect)		Estimates	S.E.	C.R.	P	Significant Effect	
PLE	<---	ExtEnv	1			Sig.	
ENE	<---	ExtEnv	1.034	0.13	7.951	***	Sig.
TEP and IT	<---	IntEnv	1			Sig.	
TR	<---	IntEnv	0.669	0.077	8.696	***	Sig.
Twin City	<---	ExtEnv	0.402	0.231	1.74	0.082	Not Sig.
Twin City	<---	IntEnv	0.606	0.19	3.183	0.001	Sig.
PLE2	<---	PLE	1			Sig.	
PLE3	<---	PLE	0.969	0.103	9.38	***	Sig.
ENE2	<---	ENE	1			Sig.	
ENE1	<---	ENE	0.993	0.09	11.023	***	Sig.
IT3	<---	TEP and IT	1			Sig.	
TEP6	<---	TEP and IT	0.786	0.064	12.271	***	Sig.
TR3	<---	TR	1			Sig.	
TR2	<---	TR	0.924	0.108	8.532	***	Sig.
TC14	<---	Twin City	1			Sig.	
TC7	<---	Twin City	0.734	0.082	8.986	***	Sig.
*** P < 0.001							
As shown in Table 5.27, it was found that all factors and variables had significantly influenced each other based on the hypothesis (at the level of 0.05, *** P-value <0.001), except for the external environment, which had not affected the twin cities (P-value = 0.082).							

Table 6. Standardized Regression Weights of Structural Model According to

Combination Opinions between the Muang District of Nakorn Phanom, Thailand and Thakhek and Khammouan in the Lao People's Democratic Republic People's Democratic Republic.

Factors (Cause-Effect)			Estimates
PLE	<---	ExtEnv	0.876
ENE	<---	ExtEnv	0.743
TEPandIT	<---	IntEnv	0.902
TR	<---	IntEnv	0.671
TwinCity	<---	ExtEnv	0.264
TwinCity	<---	IntEnv	0.503
PLE2	<---	PLE	0.567
PLE3	<---	PLE	0.594
ENE2	<---	ENE	0.686
ENE1	<---	ENE	0.733
IT3	<---	TEPandIT	0.769
TEP6	<---	TEPandIT	0.622
TR3	<---	TR	0.669
TR2	<---	TR	0.574
TC14	<---	TwinCity	0.705
TC7	<---	TwinCity	0.525

As shown in Table 6, the influences of the standardized regression weights between factors to factors and factors to variables in the structural model are displayed.

Results of Hypothesis Testing of Structural Model According to the Combined Opinions between the Muang District of Nakorn Phanom, Thailand and Thakhek and Khammouan in Lao People's Democratic Republic

Hypotheses	Relationships	Standardized Path Coefficient	Results	Significance (<i>p</i>)
H1	External Environment - ---> Twin City	0.264	Rejected	0.082

H2	Internal Environment -- --> Twin City	0.503	Supported	0.001
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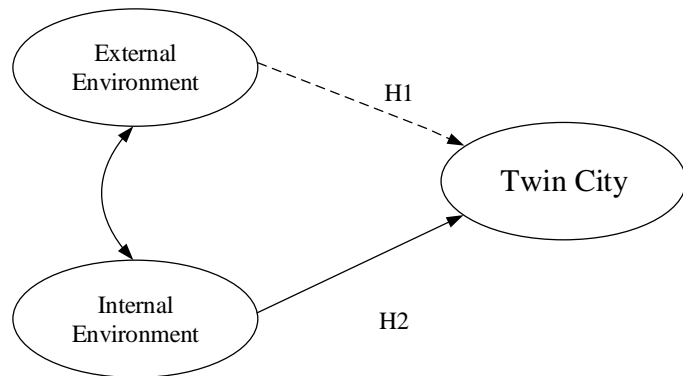
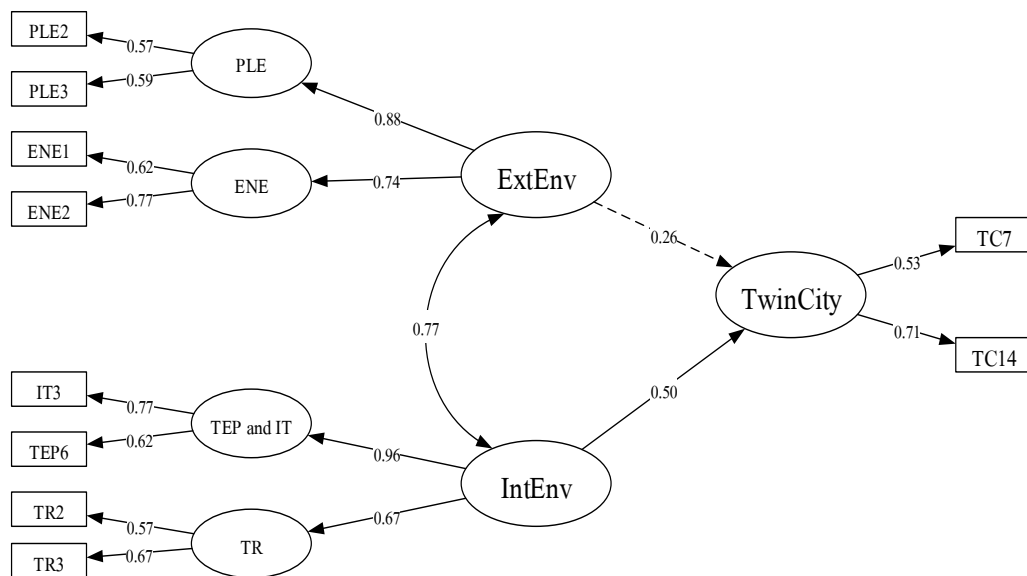


Figure 5 Results of Hypothesis Testing of Structural Model According to the Combined Opinions between the Muang District of Nakorn Phanom, Thailand and Thakhek and Khammouan in the Lao People's Democratic Republic

As shown in Table 5 it can be explained that the external environment factors (External Environment: Ext Env) according to combination opinions between the Muang District of Nakorn Phanom, Thailand and Thakhek and Khammouan in the The Lao People’s Democratic Republic had not influenced the pattern of the twin cities. In contrast, according to the combined opinions between the Muang District of Nakorn Phanom, Thailand and Thakhek and Khammouan in the The Lao People’s Democratic Republic the internal environment factors (External Environment: Ext Env) had significantly influenced the pattern of the twin cities (Sigt H2).



Chi-square = 35.431 df = 25 , p = .081
CMIN/DF = 1.417, GFI = .991, RMSEA= .023

Figure 6 The Structural Model According to the Combined Opinions between the Muang District of Nakorn Phanom, Thailand and Thakhek and Khammouan in the The Lao People's Democratic Republic

According to Figure 5.21, it was found that the internal environment factors (External Environment: Ext Env) according to combination opinions between the Muang District of Nakorn Phanom, Thailand and Thakhek and Khammouan in the The Lao People's Democratic Republic had consisted of the following 2 components:

1) Political Legal Environment (PLE) included International Agreements (PLE3) with a weight value of number one (0.59), followed by Restrictions for Person from Particular Countries to Arrive (migratory restrictions, visas) (PLE 2) (0.57).

2) Ecological and Natural Environment (ENE) included Air Pollution (ENE 2) with a weight value of number one (0.77), followed by Water Pollution (ENE 1) (0.62)

The internal environment factors (Internal Environment: Int Env) according to combination opinions between the Muang District of Nakorn Phanom, Thailand and Thakhek and Khammouan in the The Lao People's Democratic Republic consisted of 2 components as follows:

1) Tourism Enterprises and Infrastructure of Tourism (TEP and IT) included Logistics (IT 3) with a weight value of number one (0.77), followed by Souvenir Shops (TEP 6) (0.62)

2) Tourism Resource (TR) included Art and Cultural /Traditional /Event Resources (TR 3) with a weight value of number one (0.67), followed by Natural Resources (TR 2) (0.57)

According to the analysis, it was found the external environment factors regarding the combination opinions between the Muang District of Nakorn Phanom, Thailand and Thakhek and Khammouan in the The Lao People's Democratic Republic had not affected the pattern of the twin cities (Reject H1) ($P\text{-value} = 0.082 > 0.05$). In contrast, the internal environment factors according to the combination opinions between the Muang District of Nakorn Phanom, Thailand and Thakhek and Khammouan in the The Lao People's Democratic Republic had significantly affected the pattern of the twin cities (Sig H2) ($P\text{-value} = 0.001 < 0.05$). The pattern of twin cities had included Events (TC 14) with a weight value of number one (0.71), followed by Infrastructure (TC 7) (0.53).

Conclusions and Recommendations

Conclusions

Structural Model According to Combined Opinions from Muang District of Nakorn Phanom, Thailand and Thakhek of Khammouane, Lao People's Democratic Republic

External Environment: According to the combined opinions from Muang District of Nakorn Phanom, Thailand and Thakhek of Khammouane, Lao People's Democratic Republic, significant

external environmental factors consisted of the following 2 components:

1) Political and Legal Environment (PLE), including International Agreements (PLE3), followed by Restrictions for Persons from Particular Countries to Arrive (migratory restrictions, visas) (PLE3)

2) Ecological and Natural Environment (ENE), including Air Pollution (ENE 2), followed by Water Pollution (ENE 1)

Internal Environment: According to the combined opinions from Muang District of Nakorn Phanom, Thailand and Thakhek of Khammouane, Lao People's Democratic Republic, significant internal environmental factors consisted of the following 2 components:

1) Tourism Enterprises and Infrastructure of Tourism (TEP and IT), including Logistics (IT 3), followed by Souvenir Shops (TEP 6)

2) Tourism Resources (TR), including Art and Cultural /Traditional /Event Resources (TR 3), followed by Natural Resources (TR 2)

Significant factors of the twin cities model included Events (TC 14), followed by Infrastructure (TC 7).

Recommendations

Government sectors that are involved in the development of provincial tourism can apply: Policy and strategy recommendations toward driving the promotion of twin-city tourism. The author has proposed 5 strategies for provincial development, as follows:

1. Legal and Political Environment of the Twin Cities
2. Ecological and Natural Environment of the Twin Cities
3. Tourism Enterprises and Infrastructure of Tourism in the Twin Cities
4. Tourism Resources in the Twin Cities
5. Twin Cities Model

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