

Journal of Tourism and Hospitality

Research Article

Wang JH. Tourism Hospit Open Acc: THOA-102.

DOI: 10.29011/THOA -102. 100002

What Are the Key Operational Indicators If Homestays in Macau Are Legalized?

Jen-Hung Wang*

Faculty of Business, City University of Macau, China

*Corresponding author: Jen-Hung Wang, Faculty of Business, City University of Macau, China. Tel: +85385902655; Email: wangjenhung@cityu.edu.mo

Citation: Wang JH (2018) What Are the Key Operational Indicators If Homestays in Macau Are Legalized?. Tourism Hospit Open Acc: THOA-102. DOI: 10.29011/THOA -102. 100002

Received Date: 28 February, 2018; Accepted Date: 26 March, 2018; Published Date: 03 April, 2018

Abstract

Macau homestay business is illegitimate. Therefore, when travelling in Macau, visitors mostly choose to stay at hotels. However, staying at hotels is rather expensive. Hence, if Macau homestays become legitimate, not only visitors can have more accommodation options, but the local economy may be more buoyant. The purposes of this study are (1) To construct the evaluation indicators of Macau homestays from the perspectives of the academics and the proprietors; (2) To analyze the key factors among academics, homestay proprietors, and consumers, and compare their differences. In addition, this study takes Analytic Network Process (ANP) to obtain the weight and the ranking of aspects and criteria to learn the key factors. The results reveal that: (1) Academics, homestay proprietors and consumers all place importance on Homestay Operation and Management the most; (2) Academics and homestay proprietors also value *Surroundings of the Building and Features* and *Homestay Geist and Community Co-prosperity*. Consumers, academics and homestay proprietors all give weight to *Surroundings of the Building* and *Features and Homestay Facilities*.

Keywords: ANP (Analytic Network Process); Evaluation Indicator; Homestay; Macau

Introduction

The growing work pressure has made travelling as the best way to relieve stress in a society pursuing high efficiency [1], and recreational activities and tourism has steadily become part of modern life [2]. Based on the World Tourism Organization data, concerning global tourism market, there are approximately seven hundred million people travelling abroad every year. The scale of global tourism sector including both domestic and international tour takes up over 10% of the global GDP (Gross Domestic Product), which has reached an amount of 3.5 trillion US dollars. Tourism 2020 Vision, which was published by World Tourism Organization in 2001, also indicated that the number of tourists in 2020 would reach 1.56 billion persons, showing a growth of 1.76 times comparing to the 565 million persons in 1995 [3].

As for Macau, the 2016 Yearbook of Statistics shows that there were 21,998,100 tourist's arrivals in 2006 and 30,950,300 in 2016. In 2006, 10,682,700 tourists stayed overnight while 15,703,600 did so in 2016. The statistic reveals that the total

numbers of tourists and tourist overnight grew yearly. However, Macau's homestay business is illegitimate, so visitors majorly stay in hotels. Macau's hotel occupancy is 86.4% in November, 2017 [4], but the accommodation price is quite high. If Macau government can legalize the homestay business, not only can tourists have more accommodation options, but it can drive the economy.

Hing, McCabe, Lewis and Leiper [5] indicate that the homestays turned into an emerging sector with great potential. And it could be the local culture endorser [6]. Homestays are usually located near significant culture, history or nature attractions [7]. It got positive implications covering increasing individual's income, improving the living environment for local residents driving relevant industry development [8]. Macau got Portuguese-influenced cultures and European-style architecture, which can combine with homestay to develop in-depth tourism here, which, would allow tourists to learn more about the local Macau's customs and cultures.

The homestays and hotels vary in their functions, business model and natures [9-17]. Yen et al. [10] indicate that the greatest difference between the two is the connection with local environment

and communities. Hotel business has more sufficient funds and focuses more on facilities and standardized services. Homestays are more of side business and relatively financially insufficient. They generally require the surrounding environment to introduce nearby natural and cultural resources, provide various experiences of local lives and thrive with nearby communities.

The Feasibility Study on Family Hostel by Macau Government Tourism Office (2014) revealed that 62.5% interviewees agree with the family hostel concept [18], which means that, even though the present regulations and complementary facilities of Macau government do not reach the conditions for developing this industry, the residents do have expectations. Hence, if the Macau homestay business is enacted into law in the future, it must have a set of evaluation index. Base on this ground, the purposes of this research are: (1) to construct an evaluation index for Macau homestay from both academic and pragmatic perspectives; (2) to analyze the key factors valued by academics, homestay proprietors and consumers and compare the differences; (3) the results will be provided for Macau government as a noteworthy evaluation reference when homestays become legalized in the future.

Literature Review

Definition

There is no customary name for homestay, for instance, it is "B&B" (Breakfast and Bed) in Great Britain, "B&B" or "Inn" in the United States, "Pension" or "Minshuku" in Japan, and "Homestay" in Taiwan. "Homestay" is used in this research. Based on the definitions in past researches [9, 12, 19-25] and Macau's current conditions, this research defines it as "accommodation leased to tourists, which are spare rooms of private dwellings or those of vacant tenements rebuilt to complex buildings".

Feature, Function and Category of Homestay

Homestay is a choice of accommodation different from hotels and blends in with local abundant environment resources, which satisfy consumers' expectation for getting close to nature and experiencing local customs [26]. Homestay business got market niches between commercial hotels and personal, family-style private guest houses [27]. This research has organized homestay's features, functions and types as in (Table 1-3).

Researcher	Year	Feature						
Ou & Gian [8, 38]	1997 a,b	Affordable pricing for the public and self-service. The facilities are not necessarily luxurious or splendid, but must be with safety and sanitation. The service might not be decent, but is with local, home-feeling hospitable atmosphere along with human warmth.						
Cheng [39]	1998	With certain number and proper scope. Maintaining present landscape and minimizing damages to the nature. Preserving or promoting traditional characteristics. Reinforcing functions of community and improving community environment. Working along with local special natural resources, landscapes and industries and building up distinguishing features. Combining various recreational activities, making it both entertaining and informative.						
Yen et al. [10]	2006	Utilizing spare rooms of a dwelling. Side business. Small accommodation capacity. Proprietors (Hosts) receive guests personally and get to know and converse with guests. Participating in community events, driving the community vigor and assisting with improving community's environment. Blending with local cultures, landscapes, ecologies, environment resources and experiencing the lives and eco-activities in agriculture, forestry, fishing and animal husbandry.						
Lin et al. [12]	2007	The greatest differences from hotel are the architecture of homestays, providing tourist home- like accommodation and atmosphere, hospitality, the interaction between the hosts and guests with local specialties and delicacies, and integrating local resources and features. Such specia accommodation allows tourists to experience local customs.						
Hu et al. [40] 2007		To solve the accommodation issue at tourist spots effectively. To create tourism revenue source for the local effectively. To provide tourists inexpensive and comfortable accommodation. To create job opportunity for farming villages with serious outmigration and to provide the local stable living. To fully utilize spare places in a dwelling to increase the local's income.						

Wu et al. [14]	2008	The specialty of homestay is that its characteristics are different from ordinary lodges and hotels. It makes tourists stay away from the bustling cities and experience the lives close to nature and interact with hosts. The greatest point is that the hosts provide their kindness and hospitality and the home-like atmosphere along with the accommodation.
Wu [16]	2010	Homestays are generally located at areas with abundant tourism resources. Their most crucial difference from ordinary hotels and resorts is their warm hospitality and home-like coziness beyond basic lodging service.
Sun [41]	2011	To promote the integration of nature, tourism, recreation and industry development. To provide home atmosphere. To increase side-business income and peasants' earnings. To accelerate the urban and rural affiliation.
Albacete-Sáez et al. [11]	2007	The architecture must be in harmony with local elements. The building provides only limited beds or rooms. There are no upscale facilities, such as fitness centers or saunas.

 Table 1: Homestay Feature.

Researcher	Year	Function
Yen et al. [10]	2006	1. Industry economy; 2. Recreation and experience; 3. Ecological conservation; 4. Education and passing on cultures; 5. Social affiliation.
Sun [41]	2011	It allows tourists to participate in farm lives, obtain countryside experience and makes urban residents learn the customs and traditions in farming villages.

 Table 2: Homestay Function.

Researcher	Year	Category
Han & Ku [42]	1992	1. Suite; 2. Guest room; 3. Shared Room; 4. Complex; 5. Farm house complex.
Cheng [39]	1998	1. Farm house; 2. Coastal house; 3. Hot spring lodging; 4. Sport lodging; 5. Traditional house; 6. Culinary-oriented; 7. European Villa.
Regulations for the Management of Home Stay Facilities [46]	2001	1. Ordinary; 2. With features.
Chen & Chang [43]	2002	1. Art creation; 2. Vintage style; 3. Scenery and vacation; 4. Experiencing farming life; 5. Experiencing community customs.
Hsieh, Liu & Lin [44]	2004	1. Farm house; 2. Coastal house; 3. Hot spring lodging; 4. Sport lodging; 5. Traditional house; 6. Culinary-oriented; 7. Mountain House; 8. Fishing Village; 9. Complex.
Yeh, Ho, Li, Chen & Cheng [45]	2010	1. Environment resources; 2. Cultures and customs; 3. Life experience; 4. Architecture; 5. Local delicacies.
Yu et al. [6] 2010		Scenic homestays merged with the environment. Scenic homestays intermingled with landscapes. Scenic homestays with culture experiencing. Relationship style of homestays merged with the environment. Relationship style of homestays intermingled with landscapes. Relationship style of homestays with culture experiencing. Skill style of homestays merged with the environment. Skill style of homestays intermingled with landscapes. Skill style of homestays with culture experiencing.

 Table 3: Homestay Category.

Related Researches

Keling and Entebang [28] have advanced a series of innovation characteristics, namely: products, participants and principals applied by the entrepreneurs. The findings indicate that innovation constructs are strongly correlated with Dayak homestay business performance. The findings of Rasoolimanesh, Dahalan, and Jaafar [29] show a strong positive effect for perceived value on the satisfaction of homestay guests. The purpose of Kontogeorgopoulos, Churyen, and Duangsaeng [30] is to explore the implications of successful participation in homestay tourism in Thailand. They advance 10 standards (Accommodation, Food, Safety, Hospitality, Tour programs, Natural resources and the environment, Culture, Creation of value for community products, Homestay management, and Public relations) and 31 indicators. Biswakarma [31] focuses on measuring tourist satisfaction towards home stay. They advance 5 factors (Amenities & Safety, Reception, Local Cuisine & Accommodation, Local Life style & Costumes, and Cultural Performance) and 22 items.

Construct the Framework

Preliminary Framework

After reviewing the references, it is considered that the research framework of Hu, Wang and Wang [32] has covered aspects and criteria mentioned in the past researches; that is, it is more comprehensive. Therefore, this research took it as the preliminary framework, including 5 aspects and 30 criteria as shown in (Table 4).

Aspect	Criterion						
	To utilize natural ventilation sufficiently (A1)						
	To utilize plenty natural light (A2)						
	To use non-toxic paint (A3)						
Surroundings of the Building and Features (A)	To maintain the land's vitality and good condition in the process of design and construction (A4)						
(-3)	To incorporate the local heritage and landscape elements into design (A5)						
	The beautification and uniqueness of the interior design (A6)						
	Greenization and uniqueness of the garden design (A7)						
	Service attitude (ex. reception service, to treat lodgers with voice of the customers) (B1)						
	Pick-up service (offering free pick-up service) (B2)						
Service Quality (B)	Information service (ex. local hot spot, tour route planning) (B3)						
	Catering service and quality (ex. the hosts prepare diversified breakfast in person, freshness of ingredients) (B4)						
	Cooking facilities (ex. kitchen) (C1)						
	Parking space (C2)						
Homestay Facilities (C)	Safety facilities (ex. emergency lighting setting, fire prevention settings) (C3)						
	Medical aid (ex. first-aid box) (C4)						
	Room settings (C5)						

	Room tidiness (D1)							
	Room coziness (D2)							
	Room privacy (D3)							
Homestay Operation and	Safety (ex. lodger insurance and room safety) (D4)							
Management (D)	Room themes and features, ex. oceanic themes (D5)							
	Homestay features (ex. aboriginal culture) (D6)							
	Overall ambience forming (D7)							
	Overall tidiness and hygiene (D8)							
	Degree of interaction between hosts and lodgers (E1)							
	Guiding services (E2)							
Homestay Geist and Community	Arranging local experiential activities and food (E3)							
Co-prosperity (E)	Contribution for living quality of local community (E4)							
	Initiating preserving actions toward local resources (E5)							
	Promoting and preserving local cultural resources (E6)							

Table 4: Preliminary Framework.

Final Framework

This study invited four experts (one Macau academic and three Taiwan homestay proprietors) (Table 5) to take part in the interview and then constructed the final framework. In the interview, the Macau academic is a native and familiar with the local environment. He thinks that Macau is pretty small, and the land is expensive, which implies the homestays may not have more room for gardens and parking space; therefore, he suggests removing the criteria: Greenization and uniqueness of the garden design (A7) and Parking space (C2). He also thinks that Macau's public transportation is convenient, so Pick-up service (offering free pick-up service) (B2) can be excluded. The study adopts these suggestions and the final framework includes 5 aspects and 27 criteria (Table 6).

Expert	Attribute	Affiliation	Location
A	Academic	Institute for Tourism Studies (IFT)	Macau
В		Europe Villa	
С	Practice	Frog Grandma's Home	Nantou, Taiwan
D		Sun Moon Lake Full House Resort	

Table 5: Experts' Information (Construct the Final Framework).

Aspect	Criterion					
	To utilize natural ventilation sufficiently (A1)					
	To utilize plenty natural light (A2)					
Surroundings of the Building and	To use non-toxic paint (A3)					
Features (A)	To maintain the land's vitality and good condition in the process of design and construction (A4)					
	To incorporate the local heritage and landscape elements into design (A5)					
	The beautification and uniqueness of the interior design (A6)					

	Service attitude (ex. reception service, to treat lodgers with voice of the customers) (B1)							
Service Quality (B)	Information service (ex. local hot spot, tour route planning) (B2)							
	Catering service and quality (ex. the hosts prepare diversified breakfast in person, freshness of ingredients) (B3)							
	Cooking facilities (ex. kitchen) (C1)							
Hamastay Facilities (C)	Safety facilities (ex. emergency lighting setting, fire prevention settings) (C2)							
Homestay Facilities (C)	Medical aid (ex. first-aid box) (C3)							
	Room settings (C4)							
	Room tidiness (D1)							
	Room coziness (D2)							
	Room privacy (D3)							
Homestay Operation and	Safety (ex. lodger insurance and room safety) (D4)							
Management (D)	Room themes and features, ex. oceanic themes (D5)							
	Homestay features (ex. aboriginal culture) (D6)							
	Overall ambience forming (D7)							
	Overall tidiness and hygiene (D8)							
	Degree of interaction between hosts and lodgers (E1)							
	Guiding services (E2)							
Homestay Geist and Community	Arranging local experiential activities and food (E3)							
Co-prosperity (E)	Contribution for living quality of local community (E4)							
	Initiating preserving actions toward local resources (E5)							
	Promoting and preserving local cultural resources (E6)							

Table 6: Final Framework.

Criteria Relevancy

After completing the final framework, two experts (Table 7) were invited to fulfill the criteria relevancy (the influence of column criteria on row criteria). The level of influence scores from 0 to 100. "0" means no influence at all and "100" is total influence. After the two experts finished scoring, the means were calculated, and four relevancy charts were created, covering relevancy score 60 (included) and over, 70 (included) and over, 80 (included) and over, and 90 (included) and over. Taking the relevance chart scoring over 60 as the example, if the influence score of column criteria on row criteria is 60 or more, it means they are relevant, but if the score is under 60, it means they are irrelevant. Such rule is also applicable for the other 3 charts. After completing relevancy charts, the research found that, only in the charts scoring over 60 (included), each criterion could generate weights and tend stable (after self-multiplication, the weights are consistent). Based on this ground, the score of 60 or over was set to be the threshold as shown in (Table 8).

Expert	Attribute	Location	
A	Academic	Institute for Tourism Studies (IFT)	Macau
Е	Practice	Lan-Ying Home	Jiufen, Taiwan

Table 7: Experts' Information (Construct the Criteria Relevancy).

	A1	A2	A3	A4	A5	A6	В1	B2	В3	C1	C2	С3	C4	D1	D2	D3	D4	D5	D6	D7	D8	E1	E2	E3	E4	E5	E6
A1															•						•						
A2				•		•									•												
A3																	•										
A4					•	•																					
A5				•		•											•	•	•							•	
A6		•			•												•	•	•								
В1								•	•													•	•	•			
В2							•															•	•	•			•
В3																								•			
C1									•		•																
C2										•							•										
C3																	•										
C4											•					•	•			•							
D1										•					•						•						
D2	•	•				•							•	•							•						
D3													•				•										
D4										•	•	•	•		•	•											
D5					•	•							•						•	•							
D6				•	•	•							•					•		•				•	•		
D7				•	•	•			•				•		•			•	•								
D8										•				•	•												
E1							•	•															•	•		•	•
E2							•	•														•		•			
ЕЗ							•	•	•													•	•		•	•	•
E4																								•		•	•
E5			•	•	•														•	•	•	•			•		•
E6				•	•														•	•		•	•	•	•	•	

Table 8: Criteria Relevancy.

Methodology and Research Design

ANP (Analytic Network Process)

In the real environment, there are many decision-making problems cannot just take the pure hierarchical relationship to construct the framework, because the high- and the low-level element may exist the dependence relationship and interaction [33]. As a result, Saaty [33] advanced ANP which has dependence and feedback, and in 2001 [34], he recommended using ANP to solve the problem of interdependent relationships among the criteria or alternatives. In ANP, when nodes correspond to levels or components, that means there exists the network feedback in a system [35].

The elements in the nodes may influence some or all elements in other nodes. In the network, all the nodes can be source nodes, intermediate nodes or sink nodes. The relationship in the network is represented by the arc and the direction of arrow means dependence relationship [33]. When the two nodes have the external dependence, it will be represented by the two-way arrow; the nodes in the elements have the internal dependence, it will be represented by the circle arc [36].

ANP has four steps [33, 37]: 1) Establish the model and the framework; 2) Do the pairwise comparison to get the priority vector; 3) Construct the supermatrix; 4) Choose the best alternative. In our study, we do not have the alternatives; therefore, we just finish from step 1 to 3.

Research Design

Object, Scope, and Sampling

The localities this research studied are about Taiwan and Japan as shown in Table 9 for Macau's future homestay business models. Currently, there is no legalized homestay in Macau, so this research could not examine the homestay guests here. The samples are students of City University of Macau (majorly nonnative students) were taken as the consumer samples in this research, which can be the significant information for learning what criteria consumers value when Macau homestay business becomes legalized in the future. This research also distributed questionnaires to academics and proprietors to compare their differences from consumers. 5 were given to academics and 4 were valid. 3 were sent to proprietors and 2 were valid. 109 were distributed to consumers and 87 were valid.

Homestay	Location
Pa Fan Keng, Lan-Ying Home	Jiufen, Taiwan
Europe Villa, Frog Grandma's Home, Sun Moon Lake Full House Resort	Nantou, Taiwan
Lake's Heart, Green Willow, Simple Happiness	Hualien & Ilan, Taiwan
Guest House Lantern Gion, Hostel HARUYA Book, Hostel HARUYA Kyoto, Hana Hostel Kyoto	Kyoto, Japan

Table 9: Visited and Inspected Homestay.

Questionnaire Design

The questionnaire is separated into two parts: 1) ANP

Questionnaire: Do the pairwise comparison of aspect/criterion which has dependence; 2) Demographic variable: Sex, Age, Marriage Status, Job, Education, and Average Monthly Income.

Validity

This research constructed the preliminary framework from literature review, and then built the final framework through expert interview. Therefore, it is with content validity and expert validity.

Results and Analysis

Analyze the Aspects and the Criteria

The Super Decisions program was adopted in this research to make sure the value of each comparison matrix's C.I. (Consistency Index) is less than 0.1 [35]. Then, Super Decisions program was used for obtaining Unweighted Supermatrix, Weighted Supermatrix, and Limiting Supermatrix of each questionnaire. For easy-reading, only the values of Limiting Supermatrix representing the results are demonstrated in this paper. At last, Arithmetic Average was applied to the values of Limiting Supermatrix to get the average weights and ranking.

Aspect

For Academics, Homestay Proprietors, Customers and the Overall, they all values Homestay Operation and Management (D) the most. In addition, Academics and Homestay Proprietors' second important aspects are Surroundings of the Building and Features (A) and Homestay Geist and Community Co-prosperity (E), and Customers and the Overall are about Surroundings of the Building and Features (A) and Homestay Facilities (C) (Table 10).

Aspect	Academics		Proprietors		Customers		Overall	
	Weight	Ranking	Weight	Ranking	Weight	Ranking	Weight	Ranking
A	0.1781	3	0.3232	2	0.2019	3	0.2344	2
В	0.0523	5	0.0578	5	0.0554	5	0.0552	5
С	0.1760	4	0.1121	4	0.2908	2	0.1930	3
D	0.3859	1	0.3528	1	0.3146	1	0.3511	1
Е	0.2077	2	0.1542	3	0.1373	4	0.1664	4

Table 10: The Weight and the Ranking of the Aspect.

Criterion

For Academics, Homestay Proprietors, Customers and the Overall, the criteria they value are almost the same. The difference only lies in ranking as follows: To incorporate the local heritage and landscape elements into design (A5), Service attitude (ex. reception service, to treat lodgers with voice of the customers) (B1), Information service (ex. local hot spot, tour route planning) (B2), Homestay features (ex. aboriginal culture) (D6), Overall ambience forming (D7), Degree of interaction between hosts and lodgers (E1), Arranging local experiential activities and food (E3) and Promoting and preserving local cultural resources (E6) (Table 11).

Criterion	Academics		Proprietors		Consumers		Overall	
	Weight	Ranking	Weight	Ranking	Weight	Ranking	Weight	Ranking
A1	0.0149	19	0.0088	16	0.0135	20	0.0124	20
A2	0.0095	21	0.0139	14	0.0254	15	0.0163	16
A3	0.0053	23	0.0038	24	0.0077	23	0.0056	23
A4	0.0065	22	0.0306	11	0.0202	17	0.0191	15
A5	0.0392	9	0.0687	4	0.0575	3	0.0551	6
A6	0.0312	12	0.0323	10	0.0519	5	0.0385	11
B1	0.1457	1	0.1861	1	0.1438	2	0.1585	1
B2	0.1359	2	0.1806	2	0.1468	1	0.1544	2
В3	0.0044	25	0.0055	23	0.0065	24	0.0055	24
C1	0.0014	26	0.0009	26	0.0032	26	0.0018	26
C2	0.0039	24	0.0009	25	0.0058	25	0.0035	25
C3	0.0008	27	0.0005	27	0.0029	27	0.0014	27
C4	0.0159	18	0.0085	18	0.0241	16	0.0162	17
D1	0.0175	16	0.0058	21	0.0097	22	0.0110	22
D2	0.0335	10	0.0232	13	0.0409	11	0.0325	12
D3	0.0133	20	0.0053	22	0.0179	19	0.0122	21
D4	0.0208	15	0.0092	17	0.0291	14	0.0197	14
D5	0.0270	13	0.0140	15	0.0357	13	0.0256	13
D6	0.0612	5	0.0632	5	0.0574	4	0.0606	4
D7	0.0408	8	0.0427	9	0.0475	8	0.0437	9
D8	0.0234	14	0.0072	19	0.0103	21	0.0136	19
E1	0.1019	3	0.0824	3	0.0481	7	0.0775	3
E2	0.0601	6	0.0526	7	0.0367	12	0.0498	8
E3	0.0781	4	0.0493	8	0.0513	6	0.0596	5
E4	0.0192	17	0.0084	20	0.0184	18	0.0153	18
E5	0.0393	11	0.0340	12	0.0437	10	0.0390	10
E6	0.0495	7	0.0617	6	0.0437	9	0.0516	7

Table 11: The Weight and the Ranking of the Criterion.

Conclusion and Suggestion

Conclusion

Aspects

For Academics, Homestay Proprietors, Customers and the Overall, their each top priority is Homestay Operation and Management (D), which means the homestay proprietors' management abilities and strategies are quite important, such as how to utilize their marketing combinations to make their business more competitive. In addition, Academics and Homestay Proprietors think that the second important aspects are Surroundings of the Building and Features (A) and Homestay Geist and Community Co-prosperity (E), and Customers and the Overall are Surroundings of the Building and Features (A) and Homestay Facilities (C). This indicates that the difference between the two is that the former focuses more on the interaction among homestay hosts and consumers and hopes homestays can drive local economy while the later values more homestays' facilities. Such results meet part of the research of Hu et al. [32].

Criteria

For Academics, Homestay Proprietors, Customers and the Overall, the criteria they value the most important are majorly the same. The difference only lies in ranking as follows: To incorporate the local heritage and landscape elements into design (A5), Service attitude (ex. reception service, to treat lodgers with voice of the customers) (B1), Information service (ex. local hot spot, tour route planning) (B2), Homestay features (ex. aboriginal culture) (D6), Overall ambience forming (D7), Degree of interaction between hosts and lodgers (E1), Arranging local experiential activities and food (E3) and Promoting and preserving local cultural resources (E6).

Suggestion

The suggestions below are proposed based on feasible pragmatic consideration.

a. Takingthecurrentregulations as the basis to build homestays ones. Based on current Macau regulations, this research suggests the homestay business can take Land Law, Safety Regulations for Fire Prevention, Hygiene Standards, and so on as the references to draw up applicable regulations. In addition, this research has found the Ordinance 83/96/M stipulates that accommodation with lodging and breakfast but without dining service is deemed as residence. Such concept meets the definition of homestay, so when drawing up the regulations, Macau government can refer this ordinance as the basis.

- b. Buying up vacant tenements and merging in with shopping complex. Macau government or conglomerates can acquire vacant tenements and transfer them into homestays. Such action can not only increase the house utilization rate but drive the economy. Meanwhile, through the interviews with Taiwan homestay proprietors, it was found that they all agreed the idea that homestay business indeed can stimulate local economy. Furthermore, this research proposes three design ideas for vacant tenements: (1) they can be only renovated as homestay buildings, only for lodging purpose; (2) the ground floor can be designed as public facilities, such reading rooms, fitness rooms, lounges and so on; (3) the ground floor can be commercial venues, such as supermarkets or restaurants, to increase the total revenues.
- c. Win-win for official-academics and industry-academics. Someeducational institutes in Macau provide tourism programs, such as City University of Macau and Institute for Tourism Studies. So, under the circumstance that Macau government or conglomerates buy and manage the properties, the homestays can provide internships, and students can obtain more practical experiences, carrying out the spirit of "learning from doing, practicing while learning". Students can acquire academic credits in this way. Consequently, this can achieve win-win condition in both official-academics and industry-academics.
- d. Job creation. During the tenement renovation, the preliminary work needs spatial designers and construction professionals. After the renovation completed, there will be job demand for homestay agents and cleaning staffs, which would create

- more job opportunities for local residents and further drive the economy.
- e. Setting up the marketing strategies. Macau government and conglomerates can combine homestay business with tourist attractions as tour package to raise Macau's visibility and publicity. For example, the Portuguese culture can be the main theme for developing more extensive packages and products.
- f. Opening up free market. There are many black-market homestays in Macau at the moment. Therefore, this research believes that, once the homestays are legalized, not only can local residents' income be boosted but the lodgers' safety can be guaranteed.

The Feasibility Study on Family Hostel by Macau Government Tourism Office (2014) revealed that, 33% do not agree homestay business. Among the interviewees not supporting homestay business, 70% have major concern over the social order and security issue [18]. Moreover, if the competitiveness is to be enhanced, homestay business can set as free market, which is the self-employed proprietors apply the approvals and run the business individually. In addition, in the future, when Macau government evaluating qualified homestays, the evaluation criteria that this research proposes can be the basis. This research has classified the criteria into two groups: the essential and the additional, as shown in (Table 12). 5-point scale can apply to each criterion for overall evaluation, 1 as the worst and 5 as the best. If a homestay meets the qualificatory score, such as 70, it will obtain approval and get the license to run the business. The license can be set for certain length of time, such as 2 years, and be renewed after re-evaluation.

Aspect	Criterion	Essential	Additional
	To utilize natural ventilation sufficiently (A1)	•	
	To utilize plenty natural light (A2)	•	
Surrounding of the Building	To use non-toxic paint (A3)	•	
and Features (A)	To maintain the land's vitality and good condition in the process of design and construction (A4)	•	
	To incorporate the local heritage and landscape elements into design (A5)		•
	The beautification and uniqueness of the interior design (A6)		•
	Service attitude (ex. reception service, to treat lodgers with voice of the customers) (B1)	•	
Service Quality (B)	Information service (ex. local hot spot, tour route planning) (B2)	•	
	Catering service and quality (ex. the hosts prepare diversified breakfast in person, freshness of ingredients) (B3)	•	

Homestay Facilities (C)	Cooking facilities (ex. kitchen) (C1)		•
	Safety facilities (ex. emergency lighting setting, fire prevention settings) (C2)	•	
	Medical aid (ex. first-aid box) (C3)	•	
	Room settings (C4)	•	
	Room tidiness (D1)	•	
	Room coziness (D2)	•	
	Room privacy (D3)	•	
Homestay Operation and	Safety (ex. lodger insurance and room safety) (D4)	•	
Management (D)	Room themes and features, ex. oceanic themes (D5)		•
	Homestay features (ex. aboriginal culture) (D6)		•
	Overall ambience forming (D7)		•
	Overall tidiness and hygiene (D8)	•	
	Degree of interaction between hosts and lodgers (E1)		•
	Guiding services (E2)		•
Homestay Geist and	Arranging local experiential activities and food (E3)		•
Community Co-prosperity (E)	Contribution for living quality of local community (E4)	•	
	Initiating preserving actions toward local resources (E5)	•	
	Promoting and preserving local cultural resources (E6)	•	

Table 12: Essential/Additional Criterion.

Contribution

Macau's homestay business is not legitimate at present. Thus, the greatest contribution of this research is that it has built feasible evaluation criteria for Macau's homestay evaluation reference for the future. The proposed plans are also viable strategies when Macau planning homestay business.

Limitation and Future Work

The biggest limitation of this research is that homestay business in Macau is illegitimate. Therefore, the in-depth interviews with Macau homestay proprietors could not be carried out and sampling and investigation on Macau homestay consumers could not be run either. This research suggests that the directions for future studies can be: (1) expanding the sampling scope, such as hotels, to compare their differences and (2) adding more aspects, such as satisfaction or loyalty, to deepen and broaden the research.

References

 Rong JY (2002) Travel Agency: Principles, Practices, and Operations. Taipei: Yang-Chih.

- Liou TL, Chen JW (2009) The Study of Influence of Perceptions in Tourism Developing Impact to Tourism Developing Attitudes of Residents of Dahshi's Old Streets. NPUST Humanities and Social Sciences Research 3: 20-36.
- Chen ZX, Chang RX (2008) Introduction to Leisure and Recreation Industry. Taipei: Yang-Chih.
- Statistics and Census Service (DSEC) (2017) 2016 Yearbook of Statistics. Macau.
- Hing N, McCabe V, Lewis P, Leiper N (1998) Hospitality Trends in the Asia-Pacific: A Discussion of Five Key Sectors. International Journal of Contemporary Hospitality Management 10: 264-271.
- Yu CC, Hu JS, Yeh CY, et al. (2010) The Differentiation Strategies by Applying External Resource Characteristics and Internal Capabilities -Home-stay Industry. Journal of Business Administration 86: 115-144.
- Lin WT (Trans & Eds), Stutts AT, Wortman JF (Author) (2008) Hotel and Lodging Management: An Introduction. 2nd ed. Taipei: EC Link.
- 8. Ou SJ, Gian HG (1997a) Visitors' Characteristics and Demands of Pension in Agriculture Tourism Areas. Horticulture NCHU 22: 135-147.
- Lin SY (2005) Analysis of Product Levels of Leisure Industry A Case Study of Taiwan B&B Service Quality. Journal of Customer Satisfaction 1: 145-168.

- Yen CH, Chang CJ, Jian LL, et al. (2006) A Study of Evaluation Indicators for Taiwan Home Stay Facility. Journal of Farmers' Organizations 8: 133-175.
- Albacete-Sáez CA, Fuentes-Fuentes MM, Lloréns-Montes FJ (2007) Service Quality Measurement in Rural Accommodation. Annals of Tourism Research 34: 45-65.
- Lin SC, Tsai CY, Chiou LW, et al. (2007) Improving Guests' Behavioral Intentions Based on Lodging Experiences Using Hualien Bed & Breakfast as an Example. Journal of Tourism and Travel Research 2: 73-92.
- 13. Shi MJ (2008) The Study of Quality Accreditation for Taiwan's Bed and Breakfast. Unpublished Master Thesis, Taiwan: Asia University.
- Wu CH, Chang YM, Lin YH, Hsieh MJ, et al. (2008) Discussion Taiwanese Hotel Policy and the System: The Possibility of Hotel Combines an Everlasting Development of the Ecosystem Tour. Chia Nan Annual Bulletin: Humanity 34: 817-830.
- Lin SY, Lin MC, Liu GY, et al. (2010) Taiwan Host B&B Quality Accreditation. Quality Magazine 46: 32-34.
- Wu CC (2010) The Case Study of Key Success Factors of Homestay
 The Resource Based Theory Perspective. Journal of Management Practices and Principles 4: 142-163.
- Gao ZQ (2011) The Study on Evaluation Indicators for Special B&B Inn - The Example of Seashore Type. Unpublished Master Thesis, Taiwan: Kai Nan University.
- Macau Daily News (2014).http://www.Macaudaily.com/html/2014-12/18/content 960228.htm. (Retrieved on 2014/12/18).
- Morrison AM, Pearce PL, Moscardo G, Nadkarni N, O'Leary JT, et al. (1996) Specialist Accommodation: Definition, Markets Served, and Roles in Tourism Development. Journal of Travel Research 35: 18-26.
- Richardson K (2003a) International Education: Homestay Theory versus Practices. Proceedings of the International Education Research Conference. Auckland, New Zealand.
- Richardson K (2003b) International Education: The Quality of Homestay Services. Proceedings of 17th IDP Australian International Education Conference. Melbourne, Australia.
- 22. Gutel H (2008) The Home Stay: A Gendered Perspective. Frontiers: The Interdisciplinary Journal of Study Abroad 15: 173-188.
- Chang CP, Guo DB (2010) Key Success Factors for the Operating of Hostel Industry in Taiwan: An Exploration of the Trends of Legal Hostels in Southern Part of Taiwan. Journal of Far East University General Education 4: 153-164.
- Pan LC, Hsia TC, Kao HL, Huang SC, et al. (2013) B&B and Leisure Farms in the Diamond Model Analysis of Business Performance. Journal of Liberal Arts and Social Sciences Chienkuo Technology University 32: 15-32.
- Liu MT, Wu PC (2014) Establishing Customer Expected Images of Bed and Breakfasts. Journal of Tourism and Leisure Studies 20: 205-240.

- 26. Chen SF, Chiu TY (2006) Consumer Behavior of B&B Tourists: Case in Hualien. Journal of Dahan Institute of Technology 21: 155-173.
- Sherry JEH (1993) The Legal Status of Bed-and-Breakfast Operations.
 The Cornell Hotel and Restaurant Administration Quarterly 34: 12-13.
- Keling W, Entebang H (2017) Dayak Homestay Entrepreneurs Innovation Characteristics. Journal of Tourism and Management Research 2: 101-112.
- Rasoolimanesh SM, Dahalan N, Jaafar M (2016) Tourists' Perceived Value and Satisfaction in a Community-based Homestay in the Lenggong Valley World Heritage Site. Journal of Hospitality and Tourism Management 26: 72-81.
- Kontogeorgopoulos N, Churyen A, Duangsaeng V (2015) Homestay Tourism and the Commercialization of the Rural Home in Thailand. Asia Pacific Journal of Tourism Research 20: 29-50.
- Biswakarma G (2015) On the Dimensionality of Measuring Tourist Satisfaction towards Homestay. International Journal of Hospitality & Tourism Systems 8: 51-63.
- Hu YC, Wang JH, Wang RY (2012) Evaluating the Performance of Taiwan Homestay Using Analytic Network Process. Mathematical Problems in Engineering 24.
- 33. Saaty TL (1996) Decision Making with Dependence and Feedback: The Analytic Network Process, Pittsburgh, PA: RWS Publications
- Saaty TL (2001) Decision Making with Dependence and Feedback: The Analytic Network Process, 2nd ed. Pittsburgh, PA: RWS Publications.
- Saaty TL (1980) The Analytic Hierarchy Process, New York, NY: McGraw-Hill.
- Sarkis J (2003) Quantitative Models for Performance Measurement Systems - Alternate Considerations. International Journal of Production Economics 86: 81-90
- Meade LM, Sarkis J (1999) Analyzing Organizational Project Alternatives for Agile Manufacturing Processes: An Analytical Network Approach. International Journal of Production Research 37: 241-261.
- Ou SJ, Gian HG (1997b) Visitors' Characteristics and Motivations of Pension in Agriculture Tourism Areas. Journal of Tourism Studies 3: 1-14.
- 39. Cheng SH (1998) Research on Homestay System. Taiwan Provincial Transportation Division, Tourism Office, Taichung, Taiwan.
- Hu HY, Kung JS, Wang CY, et al. (2007) Study on Supply-Demand Characteristics of Homestays Featuring in Local Commercial Activities. Land Issue Research Quarterly 6: 68-84.
- Sun CT (2011) Preliminary Study on Taiwan Homestay Industry Development and Issues- Creating a Window of Opportunity under Current Regulations and the Wave of Agricultural Recreation. Land Issue Research Quarterly 10: 51-70.
- Han HT, Ku CH (1992) A Study in the Applyment of Hostel-residental Architecture during the Development of Recreation on Agriculture Land in Taiwan. Journal of Chinese Society of Agric. Engineers 38: 38-55.

- 43. Chen CL, Chang DY (2002) Types of Taiwan's Homestays in Farming Villages and Their Marketing Strategies. Newsletter of Agricultural Management 33: 16-20.
- 44. Hsieh CJ, Liu YS, Lin FJ, et al. (2004). A Study on the Home Stay Manager's Decision-Making Style of Marketing. Chinese Journal of Agribusiness Management 10: 90-120.
- 45. Yeh LT, Ho HY, Li YC, Chen HC, Cheng FY, et al. (2010) The Study on Consumer Behavior of City Home Stay in Taichung County. Journal of Toko University 5: 114-129.
- 46. Tourism Bureau, M.O.T.C (2001) Regulations for the Management of Home Stay Facilities.
- 47. Statistic and Census Service (DSEC) (2017). http://www.dsec.gov.mo/ Statistic.aspx?NodeGuid=f22bc742-c891-4988-9b6e-3952db8000e9. (Retrieved on 2017/12/30).