THE PROPOSED GAP MODEL IN COMMUNITY-BASED TOURISM FOR FREE INDEPENDENT TRAVELLER BY USING 5A ANALYSIS: THE CASE OF CHIANG MAI PROVINCE

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Abstract - With the fast development of the world tourism, Chinese tourists traveling consumption behavior has changed simultaneously. Their destination tourism trend for local history, and cultural food are not included shopping as main purpose. Community-based tourism developing concept is exactly match to the tourists changing behavior. To enhance the development of community-based tourism will not only enrich tourists traveling experience but also catch up the huge market and develop potential for local communities' benefit. This paper will illustrate 5A theory criteria to construct community-based tourism. CommonKADS technique helps to design for knowledge capture and analysis from the community on both supply and demand side.

Keywords - Community-based tourism, 5A theory in tourism, CommonKADS, knowledge management, FIT in post 90's.

I. INTRODUCTION

Over the past decades, tourism industry has experienced continued growth and deepening diversification to become one of the fastest growing economic sectors in the world. International tourism generated export earnings US$ 1.6 trillion and accounted 10% of world's GDP (UNWTO, 2017). Nowadays, Mainland China is by far the biggest source of visitors to many nearby countries and territories, including direct neighbors Hong Kong, Macau, Thailand, Japan, as well as South Korea, Vietnam (China Outbound Tourism Research Institute, 2018). Thailand is ranking the top three destinations when Chinese people choosing their abroad traveling destination.

From the recent situation, statistic shows that tourism is the economic pillar of Thailand which has directly contributed to 17.7 percent (2.52 trillion Baht) of Thai GDP in 2016 (Tourism Authority of Thailand). Besides, according to the arrival tourists during 2014-2018 were found that, compared with other nationality arrivals, the number of Chinese tourists over 10 million in 2018 continue ranking top one and far surpassing from other countries in arrivals travelling to Thailand. Therefore, maintain and keep expanding Chinese tourism market is necessary for better future Thailand tourism development.

In recent years, Chinese tourists have changed their traveling concept and their consumption. According to Annual report of China outbound tourism development in 2017, Chinese tourists are changing their traveling behaviour from shopping as the relatively main purpose to have unique experiences during their travels such as visiting historical sites, trying local cuisine, shopping for local products, and various other unique options. As a huge Chinese tourism and changing behavior of Chinese tourists, there is a vital issue to understand tourists demands and their expectations which encourage an enrichment of traveling experience and bring benefits to supply side. Currently, travelling is not only about enjoying the beautiful scenic of the destinations but also about the specific purposes and needs of tourists. Many kinds of tourism are well known by tourists like ecotourism, medical tourism and educational tourism. Community-based Tourism (CBT) has also developed in recent years and in Thailand and it has gained significant recognition in both domestically and internationally for community development. However, because of the unique bottom up development character, many communities have difficulty in economically sustaining themselves due to poor or lack of marketing capacity and government recognized in CBT standard. On the one hand, CBT providers don't know their market needs and barely having knowledge of customers' changing tourism behavior. On the other hand, tourists as the demand side do not have the proper information to make a rational and informed decision on the type of tourism package they choose. Chinese tourists' changing behavior match to the concept of community-based tourism. The gap between CBT providers and target tourists will not only hinder the development of community but also disappoint tourists and bring them terrible traveling experience.

II. LETERATURE REVIEW

Community-based tourism is travel to local indigenous communities that have invited outsiders to experience their customs, food, lifestyle, and set of beliefs. Local participation includes the empowerment and involvement of communities in decision-making, implementation and identifying local problems (France,1998) as well as introducing something that is adapted to local needs (Lea, 1988). It has often been cited as an alternative to mass tourism and an approach for tourism to become more sustainable. If developed well, CBT can become a

poverty alleviation mechanism and a way to access improvements in quality of life, providing empowerment and greater economic benefit to individuals in local communities (MacKinnon, 2009). As community-based tourism enables the tourist to discover local habitats and wildlife, and celebrates and respects traditional cultures, rituals and wisdom, simultaneously community will be aware of the commercial and social value placed on their natural and cultural heritage through tourism, and this will foster community conservation of these resources.

Originally, the acronym "FIT" stood for "Foreign Independent Tour," but now it is most commonly used to describe a fully independent traveller or tourist called as "Free Independent Traveller" (FIT) (Lundberg, D. 1985). They arrange anywhere in age from millennials to retirees with an emphasis on enjoying the local food, architecture, history, and culture. Its core characteristic and traveling concept is tightly match to the CBT definition. Besides Outbound Chinese Tourism Chinese tourism and consumption trends: 2017 survey jointly issued by Nielson and Alipay provides an in-depth analysis of current consumption and payment behaviours of outbound Chinese tourists travelling overseas and assesses future trends. Results showed in table 1, compared with package travel, semi-independent travel, customized travel, 49% of Chinese tourists prefer to choose independent travel, although is less than Non-Chinese independent travel, it's still the number one ranking choice in different forms of traveling. Which means FIT accounting for a big market in outbound tourism, and there's huge potential to attract this group of tourists in community-based tourism development, so this paper chooses FIT as one scale of research target group selection.

Table1:Traveling Forms Preferred by Chinese and Non-Chinese Comparation

	Chinese tourists	Non-Chinese tourists
Package travel	34%	13%
Semi-independent travel	42%	29%
Independent travel	49%	70%
Customized travel	25%	21%

Source: Nielson and Alipay (2017)

Similarly, in the Chinese context: the "post-70s" generation (people born between 1970 and 1979), the "post-80s" (between '80 and '89), and the "post-90s" (those born between '90 and '99). Market research, since the 90's has consistently communicated an increasing demand for authentic local experiences, interaction, and participating in hands-on activities, rather than simply seeing destinations (CBT Standard Handbook, 2013). More accurately and for better research being developed, FIT in post 90's at age of 20-29 will be chosen as this research target group.

The reason why tourists choose a destination is based on the extent of destinations' attractiveness and interestedness in influencing tourists' satisfaction. The assessment of destination potential helps to indicate and rate the importance of existing destination resources in each region or province. And the assessment of destination potential has five major components called 5A (Dickman,1996) including access, accommodation, amenities, attraction, awareness. Through literature review, only general definition of each "A" wasdefined by previous scholars for the whole tourism industry. Table 2 bellow shows the definitions and comparation of each "A".

Table2: 5A Theory General Definitions for Each "A"

5A theory	Author: Korawan (2015)	Author: Fanta Beyene (2017)
Access	Transport is needed to physically move tourists from where they live to where they are visiting. Internationally, air transport dominates the movement of international visitors.	The major requirements for visitor access include: safe and convenient public transport, well signed and maintained roads, parking facilities at major attractions, links between transport modes and attractions, public transport from parking areas to the site of activities, such as special events or festivals and safe walking and cycling (Dickman, 1996). Sometimes modes of transport can be attractions in their own right. Ferries, steam trains and scenic roads with viewing areas both provide access and can be attractions in themselves (Emphadhu& Ruschano2007).
Accommodation	All destinations need accommodations, otherwise tourists will have nowhere to sleep. This is	Although day trippers spend money on consumable items, overnight visitors have a variety of needs,

	basic enough, but investors will only invest in accommodation infrastructure if there is sufficient economic return. In recent years the market has seen a proliferation of accommodation types from basic camping and backpacking facilities to mega-resorts. Of paramount importance is building the right type of facility to suit the needs of a profitable segment of the market (Mentioned as advisory by author).	including accommodation, dining and are also more likely to spend on attractions and activities. A variety in style and quality of accommodation in a region/ town provides an important means to increase the economic impact of visitors (Dickman, 1996).
Amenity	Amenities are the services that are required to meet the needs of tourists while they are away from home. They include public toilets, signage, retail shopping, restaurants and cafes, visitor centers, telecommunications and emergency services.	They are services that most visitors take for granted until they are not there: visitor information centers, telecommunications, roads, drinking water, toilet blocks, rubbish bins, signage, park benches etc. A community that provides attractions but no amenities is unlikely to maximize economic benefit from tourists, while destinations that develop amenities without attractions will be frustrated by the lack of visitors (Dickman, 1996).
Attraction	Tourism attractions are places of interest that tourists visit, normally for inherent or exhibited cultural value, historical significance, natural or built beauty, or amusement opportunities.	Attractions are the primary motivation for traveling. They may be a primary destination such as heritages or secondary destinations which are interesting places to visit on the way to primary destination. Attraction designates a single unit, site or area identified in tapping people during their leisure time (Swarbrooke, 2002). Scholars often identified three major taxonomies of attractions on the route, which are (i) natural, (ii) historical and manmade, and (iii) cultural and ethnic.
Awareness	Having the best attractions, access, accommodation and amenities in the world is totally useless if the awareness factor is missing. Awareness in this sense has three meanings; firstly, local people must have a positive attitude toward tourism, secondly, those who directly interface with tourists must have strong, positive attitudes towards tourists, and the third is market awareness.	Having the best attractions, access, accommodation and amenities in the world is totally useless if the awareness factor is missing. Awareness in this sense has three meanings. Firstly, the local population must have a positive attitude toward tourism. Secondly, those in the front line of tourism, that is, those who directly interface with tourists must have strong, positive attitudes towards tourists. This includes the shops, post offices, road houses and the many other businesses that come in contact with tourists, not just the hotels and restaurants. In all a local community must be made aware of the value of tourism. The third plank in the awareness platform is market awareness. The destination or more importantly, the destination's image

		must be a strong, positive one and firmly implanted in the tourist's mind (Dickman, 1996).

In summary, this paper will develop 5A theory into detailed criteria with group of key words and definitions by interviewing tourism academic experts based on each basic A's definition to design a specificcriteria suitable for community-based tourism. With the developed 5A criteria, target communities can be chosen with randomly picking key words to assess the typical ones as research target area.

As 5A criteria is developed, CommonKADS as the methodology focusing on the allocation and usage of experts experience assets, and consequently providing tools for sharing knowledge management process (kujiro and Hirotaka, 1995) will be applied to analyze the CBT provider's products and services as in supply side. CommonKADS has six knowledge models inside and these models can be developed. If all of them been developed. Then process are able to perform step-by-step to transform the organizational needs and requirements into advanced design specifications for knowledge-based systems. The six models are: organization model, task model, agent model, knowledge model, and communication model, design model. From the perspective of knowledge acquisition, this paper will use knowledge model to elicit knowledge from experts. It has three layers:task knowledge layer, inference knowledge layer, and domain knowledge layer. Within these knowledge layers, knowledge map can be created to show the analysis results of CBT supply side. Knowledge Management is a relatively new concept related to how best to help people share and leverage their expertise (Barquin, 2001). Knowledge Management is the strategy and process used to enable the creation and flow of relevant knowledge through a business to create organizational, customer and consumer value (David Smith, Unilever). Knowledge Management can help the development of an integrated strategic plan (Karagiannis and Apostolou, 2004). Knowledge management in this paper will be used to direct the process of the whole framework and the knowledge workers are community developers, entrepreneurs as well as tour guides. Knowledge management will help to enhance the competitive advantage of the community and rearrange its resources to attract more tourists.

III. METHODOLOGY DESIGN

Conceptual framework plays an important role in leading the research general structure. Problem identification is done as the first process trough literature review and observing the real community development situation. Then it was found that community supply side can not match the target market tourists demand side. Knowledge management is applied in analyzing and solving this existing problem. It provides tools very helpful in methodology design for the whole research. At the same time interview with questionnaire will be used to capture knowledge for analysis. Expected output will show the knowledge map gap between supply side and demand side. And the concept framework is shown in figure 1 bellow.

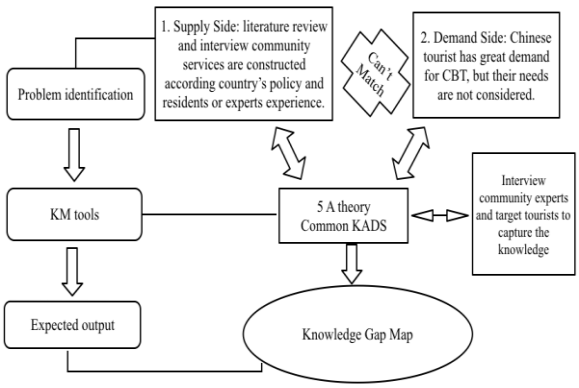


Fig. 1. Conceptual framework

For this whole research, five steps of methodology design are structured in table 3 bellow.

Table3: Methodology design for CBT

Steps	Theories	Tools and Techniques	Outputs
1. Knowledge Audit (Problem Identification)		-Literature review -Observation	Current problem between: - Chiang Mai community's development situation. - Chinese tourists changing behavior and their demand situation. -Target group narrow down
2. Knowledge Capture	5A theory	-Literature review -In-depth interview	-5A criteria for CBT -Community services providing knowledge from supply side. -Target area narrow down

3. Knowledge analysis	Common-KADS	Ontology Questionnaire	--Tourists expectation for communities as demand side. - Gap analysis
4. Knowledge validation		Experts interview	- Validate results - Design Contents
5. Knowledge sharing		Sharing section	- Design content sharing.

Step 1Knowledge audit: through literature review and observation to audit the knowledge of community-based tourism and Chinese tourists changing behavior, then identify the problem existing in communities supply side and tourists demand side.
Step 2Knowledge capture from academic experts, community experts, and target tourists.

Literature review will also be done to capture the definition of 5A theory and CommonKADS methodology.

- Through literature review the general definition of 5A theory will be captured then interview the academic expert in Social Research Institute, Chiang Mai University by using questionnaire to construct criteria details for community-based tourism and research target Chinese tourist group. After that, sample areas will be selected under the 5A criteria direction.
- Community experts are then interviewed to capture their knowledge of sample areas which is the supply side in CBT and the knowledge of communities' products and services supplied.
- Step 3Knowledge analysis step will use CommonKADS methodology to analyse the knowledge captured in step 2.
- Knowledge model with task, inference, domain layers give detailed analysis to the characteristics of 5A for community-based tourism.
- Questionnaire is designed to capture the knowledge of the target group needs and expectations as demand side with online and offline filed study randomly sending to target tourist group - FIT in post 90's.
- Effective questionnaire results will be collected to analyze and compare with the knowledge captured before from the supply side. Then the gap between both sides can be analyzed.

Step 4This step will help author reassure the results gained in above four steps and make the results more reliable, different experts can provide broader views and suggestions. Then experienced tour guide will be interviewed and help to give advice in design contents for enhancing the development of community-based tourism.
Step 5Sharing section will be performed in the form of meeting and all the results will be shared for more future researcher reference.

IV. RESULTS AND ANALYSIS

According to literature review, with the previous scholars' definition, 5A definitions were concluded specially for community-based tourism. Awareness is replaced by activity in this research, because activities are the practical ways to bring local population's awareness into reality. So, the study will focus on activities to learn what contents does the community provide to tourists for development.

Table4: 5 A definition for CBT

5A	Definitions for CBT
Access	Access includes airport, seaport, land terminals. In community, land terminals are needed most. And no matter public or private, it can transit tourists to their destinations safely. It also includes the ease of connections, the clarity of signs and quality of infrastructure.
Accommodation	Tourism requires that a person travels outside normal environment for more than 24 hours, a place to stay for at least one night is essential. Hotels, inns, B&Bs, hostel, homestay, campsites could all be the choice of accommodation for tourists during they are traveling. And many other factors cost, space, safety will also be considered when tourists decide to choose where to live.
Amenity	Amenities are services make a trip more convenient and comfortable for tourists inside the community. They generally include Parking, information center (provide tourism staff, local guide service as well) pathway, signs, toilet, shop, souvenir, food restaurant, rubbish bins, telecommunications, internet, electricity etc.
Activity	Local population have a positive attitude towards developing community-based tourism first, then they are willing to arrange local activities and interact with tourists actively. Bring tourists enjoyable experience during the activity.

Attraction	Tourism attractions are things can attract people from across the world to visit. They can be natural, cultural or recreation sites, buildings which exhibited the cultural value, historical significance, or even human's wisdom and creation.

After 5A theory for community-based tourism definitions are concluded, key words as criteria under each "A" is developed by interviewing and rechecking with the academic expert as well as supervisor. All the key words are included in each "A" are shown follow.

- **Access:** route, distance, traffic sign, transportation.
- **Amenity:** parking, information center, pathway, sign, toilet, souvenir shop, food restaurant, rubbish bins.
- **Accommodation:** cost, facility, space, breakfast, type, environment, atmosphere, location.
- **Activity:** learning and experiencing local traditions and lifestyles, learning culture and history, hands-on activities.
- **Attraction:** view, building, temple, museum.

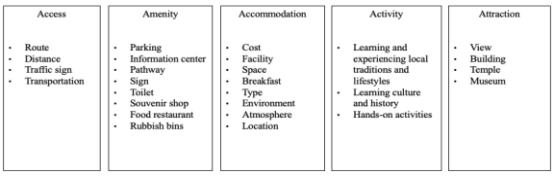


Fig.2. 5A Key words acquired for criteria construction

There are different communities in Chiang Mai, after interviewing with the community experts, five communities are selected first, and they respectively are "Wua Lai" community, "Lam Chang" community, "Wat Ket" community, "Warorot" community, and "KlangWiang" (at town center) community. The 5A criteria are used for assessment these five communities. With the final ranking score, "KlangWiang" community is selected as target area with highest ranking 5 scores compared with the other four communities.

Table5: Target area selection according to 5 A criteria

Community areas in Chiang Mai city	A 1 Main city	A 2 Inform-ation center	A 3 Homest-ay	A 4 Muse-um	A 5 Acti-vity	Rank-ing score
Wua Lai	×	✓	✓	✓	✓	4
Lam Chang	✓	✓	✓	×	✓	4
Wat Ket	×	✓	✓	✓	×	3
Warorot	×	×	✓	×	×	1
KlangWiang (Town Center)	✓	✓	✓	✓	✓	5

Ontology of CommonKADS is used to analyze the task, inference, domain knowledge and the link connections between each other. The flowing figure3 is showing the relationships among main task the characteristics of 5A for community-based tourism, subtasks access, amenity, accommodation, activities, and attraction, and all the inferences under each subtask.

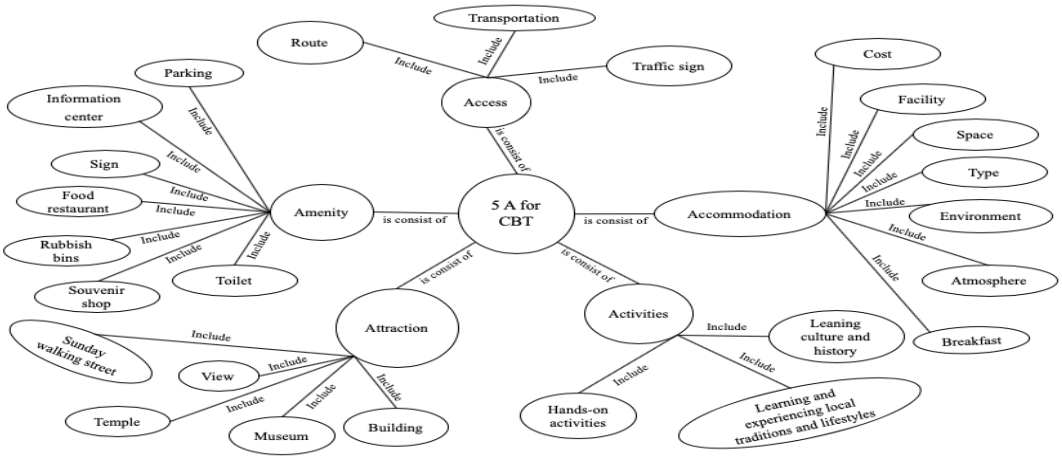


Fig.3. The characteristic analysis of 5 A for CBT by CommonKADS

Transportation is analyzed as the first inference. Its domain knowledge and subdomain knowledge are analyzed and structured in the following table. Here in this research paper, author only shows the result of characteristics

analysis of subtask access with its reference of transportation. For the rest of the subtasks and references should also be analyzed within CommonKADS methodology step by step. The following table 6 are detail results gained after analysis.

Table6:The subtask characteristics analysis of access by CommonKADS

Task	Infere-nce	Domain		Subdomain	
				Positive	Negative
The charact-eristics of A1-access	Trans-port-ation	Car	Taxi,	Safe,	Expensive, Hard to get
			Grab	Promotion for discount, easy to get, clean, kind service, convenient, fast, air conditioner,	No government support yet (not a big problem for customer)
		Tricy-cle	Man-ual	Convenient at main city spots, good view,	Expensive
			Auto: TukTuk	Good view,	Expensive
		Red car		Easy to get	Language barrier, expensive crow and time waste-need to waiting for all seats taken, hot-no air conditioner
		Bus		Cheap, air conditioner	Very limited stops, takes time-fixed roots, waiting for long time-fixed time schedule and few shifts
		Bicycle		Cheap renting fee	Not easy to find-fixed spots, dangerous-no bicycle lane, hot- usually high temperature outside in Thailand.
		Motorbike		Convenie-nt-free to set off and stop	Dangerous-local people ride fast, driving license needed or will be fined by police-Chinese driving license doesn't work here, familiar with road condition-incase any accident happen and avoid traffic jam in case heat stroke

CONCLUSIONS

This paper scoped down the target group-FIT in post 90's Chinese tourists with their changing traveling concept and behavior match tightly to the development concept of community-based tourism which has been identified with developing problem of having little knowledge of their target market needs and expectations. Through literature review This paper has developed 5 A theory into detailed criteria for community-based tourism including the specific definitions, key words and definitions. Then with the criteria, narrowed down target area-"KlangWiang" is chosen for moredeep-going research. Based on the criteria, CommonKADS methodology is applied for analyzing the community provider supply side into the task, inference, domain knowledge scope. The paper has shown parts of the results analyzed through this methodology. If any other future research may use this methodology, this whole process maybe developed as needed.

ACKNOWLEDGMENTS

My greatest gratitude goes first and foremost to Asst. Prof. Dr. NapapornReeveerakul, my supervisor, for her constant careful guidance and general encouragement. Without her patient instruction, this research would not be finished to this point. I would also like to express my thanks to all the teachers who

are always willing to give me advice and suggestions when there's a problem in doing the research.

Finally, thanks to my classmates, friends and beloved families, without their fully love, all round support and heart-warming accompany, it would be much harder for me to finish this research.

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