Chapter 3

Methodology

This study of a local integration model of the creative migrant class in creative city development for the senior tourism sector used qualitative research, and developed a research design following the knowledge management concept. Following the research's conceptual framework, the methodology was separated into eight steps; 1) Analyze Chiang Mai Creative City, 2) Understand Thai and international Senior tourists' behavior and needs, 3) Capture potential and gap of tourism enterprise cluster, 4) Evaluate tourist destinations which are appropriate for senior tourists in Chiang Mai, 5) Creative class analysis, 6) Creative problem solving, 7) Capability Maturity Model (CMM), and 8) Closed loop tourism supply chain.

3.1 Conceptual Framework

The conceptual framework from Figure 3.1 shows that the problem examined by this study is the interplay between an aging society and urbanization, which in turn affects the city. This study focused on senior tourists and the creative class who travel and migrate to Chiang Mai city.

In the scope of senior tourists, the study targeted three sample groups; the first was comprised of Thai and international senior tourists and involved a literature review, survey with questionnaire, on-site observations, as well as in-depth interviews in some specific cases; the second captured the potential and gaps of the tourism enterprises cluster; and the third studied tourist attractions using a literature review, and set tourism standards by employing a 5 A ranking, surveys, and ranking the potential destination.

In the scope of the migrant creative class, this study referred to the local integration knowledge model with the creative class, reviewed this in Lan Na knowledge based society, tested the Lan Na local integration knowledge model, then analyzed using

69

creative problem solving and a capability maturity model that can be used to drive the creative city's sustainable development.
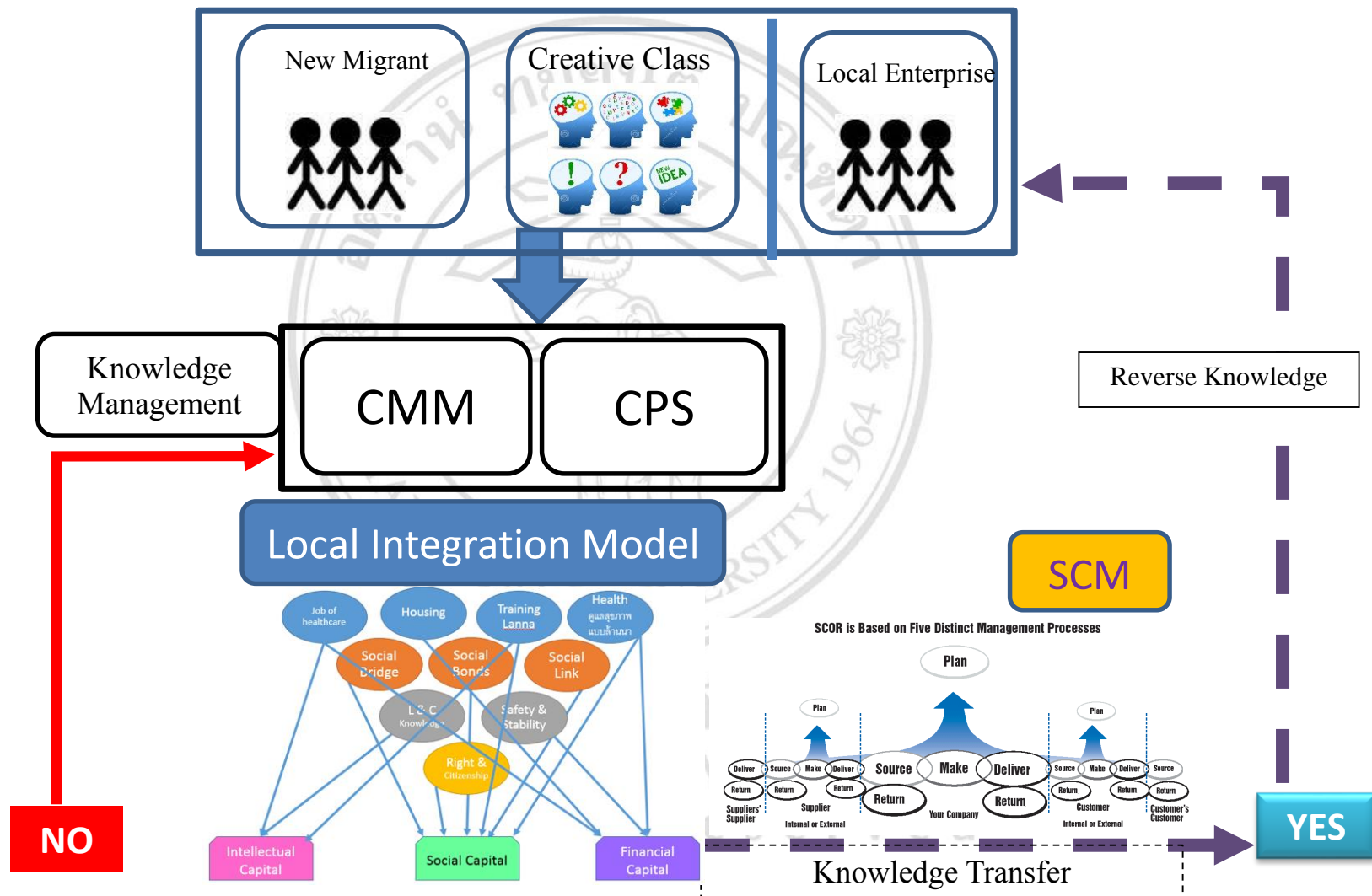
Figure 3.1 Conceptual Framework of the study

3.2 Methodological Design

The eight steps of the methodological design of this study are shown in Table 3.1.

Table 3.1 Methodological design of a local integration model of the creative migrant class in creative city development for the senior tourism sector

Step	*Concept & Theories*	*Tools & Technique*	*Expected output*
1. Analyze Chiang Mai Creative City	• Ontological	• Literature review	Initial findings of Chiang Mai creative city
2. Understand Thai and international senior tourists' behavior and needs (Demand side)	• Capture knowledge	• Literature review • Survey with questionnaire • Observed by on site research	Knowledge of tourist behavior and needs
3. Capture potential and problem of tourism enterprise cluster	• Ontological • Knowledge audit • Gap analysis	• Semi-structured interview • Finding Gap analysis between senior tourists' need and tourist enterprises	Potential and problem of tourism enterprises
4. Evaluate tourist destinations which are appropriate for senior tourists in Chiang Mai (Supply Side)	• Knowledge map	• Literature review • 5 A Criteria • Senior tourist destination criteria • Ranking	• Potential senior tourist destination • To structure and better deliver the data of tourist attractions for tourist and enterprise

Table 3.1 Methodological design of a local integration model of the creative migrant class in creative city development for the senior tourism sector (Continued)

Step	Concept & Theories	Tools & Technique	Expected output
5. Creative class analysis	• Local integration knowledge model • Knowledge elicitation • Annotation ontology	• Set agenda • In-depth interview • Transcribe	Lan Na local integration metric
6. Creative problem solving	• Creative problem solving	• Seminar • Fishbone diagram • Mind map • Concept map • Validation	Concept of creative problem solving
7. Capability maturity	• Capability maturity model	• Develop validation form	Validate output
8. Closed Loop tourism supply chain	• Tourism supply chain	• Closed loop tourism supply chain for creative city development	Creative city sustainable development

Step 1 *Analyzed Chiang Mai Creative City*

Before studying the local integration model of the creative migrant class in creative city development for the senior tourism sector, it is necessary to study the background of Chiang Mai and Lan Na. This includes study regarding the successful and unsuccessful cases of creative enterprises in Chiang Mai, as well as the factors necessary for making Chiang Mai a creative city. Ontology and a literature review were used for gathering information and knowledge about Chiang Mai for the initial findings.

73

Step 2 *Understand Thai and international senior tourists' behavior and needs (demand side)*

This step involved three tools and techniques, including a literature review, survey with questionnaire, and observations by on site research.

- Literature review focusing on the situation, behavior and needs of senior tourists, and statistics of domestic and international senior tourists in Thailand and northern Thailand. A knowledge audit of senior tourist needs and behaviors was conducted by reviewing relevant literature and organizing in-depth interviews with Thai and international senior tourists.

- Captured knowledge and collected data from 200 Thai and 200 international senior tourists, using questionnaires as research tools.

- The questionnaires were designed to explore traveling behaviors, tourism style, decision factors and special needs of senior tourists. Questions were related to the topic as follows:

    o Personal information; gender, age, domicile, education, source of income, average monthly income, and health problem,

    o Tourists' behavior;

        ▪ How often do they travel?

        ▪ What kind of tourist attractions do they prefer to visit?

        ▪ When do they prefer to travel?

        ▪ How long do they spend away for a visit?

        ▪ Who do they usually travel with?

        ▪ Who usually makes the plans for and arranges their trips?

        ▪ Do they prefer to visit all attractions as scheduled or to visit wherever they want to?

        ▪ Where did they obtain the information about tourist attractions in the northern region?

- Selected the sample of senior tourists who traveled in Chiang Mai between January – April 2014. Questionnaires were used as the primary research tool for this sample, and aimed to gather information pertaining to the behaviors and needs of senior tourists.

74

- The questionnaires were written in Thai language (Appendix A) and then translated into English (Appendix B), Japanese (Appendix C), and German (Appendix D). They were approved by experts in the field and tested with 5 Thai and 5 international senior tourists prior to the survey. The information gained from the questionnaires was subsequently analyzed and synthesized.

- Collected data at popular tourist destinations in Chiang Mai, Thailand such as Chiang Mai International Airport, Phra Sing temple, Chedi Luang Temple, and etc.

Step 3 *Capture potential and problem of tourism enterprise cluster*

In this study, tourism enterprise is synonymous with creative cluster. This step involved capturing the potential and gap of the tourism enterprise cluster. Tools of this step were ontological with a semi-structured interview. The questions focused on kind of services, service potential, problems and difficulties of senior tourism management.

- Set Agenda

An interview script was used as the primary research tool, with the objectives of understanding both the potential and gaps of the tourism enterprises. The script was designed to explore factors related to senior tourism, including economic, social, political, and technological factors, as well as the process, services, and readiness of the organization and staff of the sample. The interview script was approved by an expert in the tourism field prior to conducting in-depth interviews with all sample cases.

- Find gap between senior tourist needs and services provided by tourism enterprises

The methodology of this step was related to the conceptual framework depicted in Figure 3.2, which separates the demand side (senior tourists) and the supply side (tourism enterprises). Specific processes related to each side are as in Figure 3.1.

Twenty samples of the manager and owner of tourism enterprises were selected from the supply side. The sample participants were all owners or managers of tourism enterprises related to transportation, accommodations, tour operations, or the medical sector. An interview script was used as the primary research tool, with the objectives of understanding both the potential and gaps of the tourism enterprise. The script was designed to explore factors related to senior tourism, including economic, social, political, and technological factors, as well as the process, services, and readiness of the organization and staff of the sample. The interview script was approved by an expert in the field prior to conducting in-depth interviews with all sample cases.
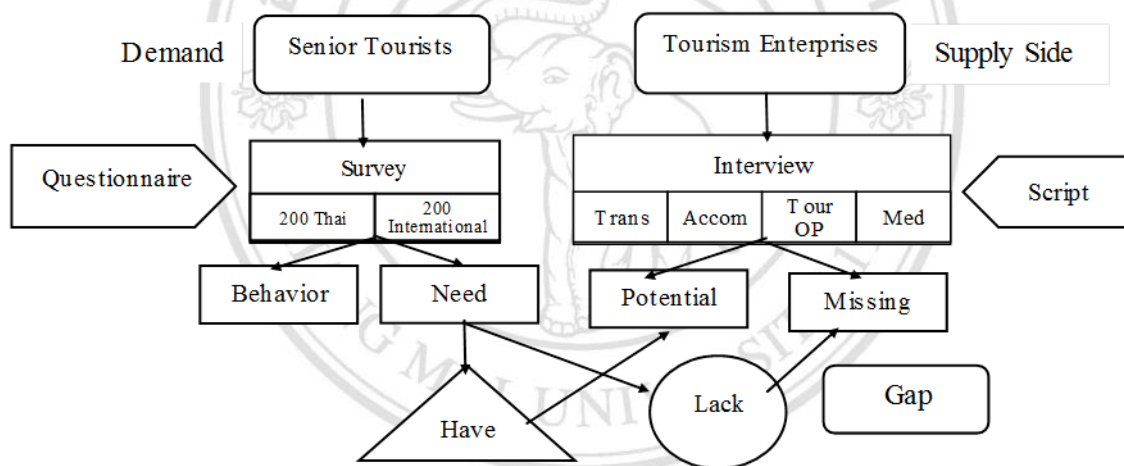

Figure 3.2 Conceptual Framework of Gap Analysis

Following the collection of data from both sides, the results were analyzed using gap analysis to understand the difference between the demands of senior tourists and the supply provided by tourism enterprises.

Step 4 *Evaluate tourist destinations which are appropriate for senior Tourists in Chiang Mai (Supply Side)*

This step involved a literature review of tourist destinations in Chiang Mai. A criteria based research tool was designed to select the attractions that are senior tourist-friendly in Chiang Mai. This includes taking into account senior tourists' traveling behaviors, physical factors, and social factors, and are related to 4 enabling factors; accessibility, amenities, attractions, and support facilities in neighboring areas. Data was then collected from various tourist attractions in Chiang Mai.

Following the data collection, the 5 A Criteria research tool was designed, which focuses on the following issues:

1) Accessibility: ease of traveling time and conditions. Seniors may be averse to long periods of traveling, many transfers, rough and extremely adventurous routes, and uncomfortable and crowded vehicles,

2) Amenities: availability of parking lots, roads, footpaths, activity areas, signs, rest areas, restrooms, first-aid rooms, etc,

3) Advisory: senior tourists need more advisement than other tourists in each step of their travels, such as between travels, before meals, and before going to bed,

4) Atmosphere; the quality of the landscape, climate, activities, nature, historical attractions, and arts and culture,

5) Activities; promoting leisure or special interest such as traditional folk activities, health activities, drawing, pottery, and religious activities.

The senior tourist criteria were then rechecked with specialists from the Tourism Authority of Thailand, academics from institutes which offer courses in tourism research, delegates from tourism enterprises and service providers, local administration organizations, communities with attraction sites, and senior tourists in order to collectively deliberate and improve the criteria and prepare to evaluate.
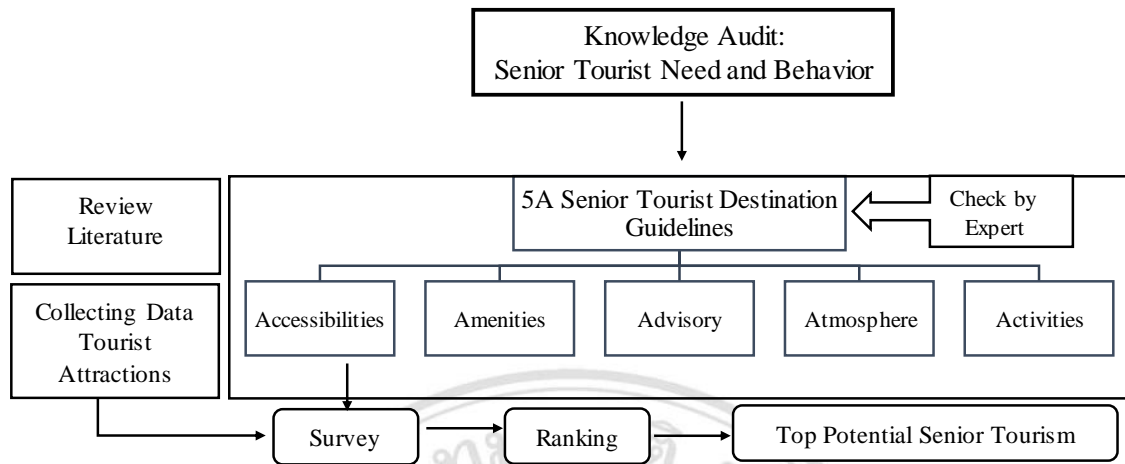
77

Figure 3.3 Conceptual Framework of 5A Criteria

Field trips were taken to evaluate the potential of senior tourism attraction sites screened using the above guidelines. Using this methodology consequently found high-potential senior tourism attractions in each city.

The senior tourist attraction criteria form was then used as a research tool to collect data and evaluate each tourist attraction's potential. Each factor was rated using a score range of 0-5 according to the appropriateness for senior tourists.

Step 5 Creative Class Analysis

This step involved setting an agenda for in depth interviews, knowledge elicitation, transcription, and Annotation Ontology (AO) as follows:

1)   Set Agenda

The set agenda included in-depth interviews with creative class sample cases. The interviews utilized open-ended questions with a semi-structured format to collect personal data. The questions followed the local integration knowledge model as shown in Figure 3.4
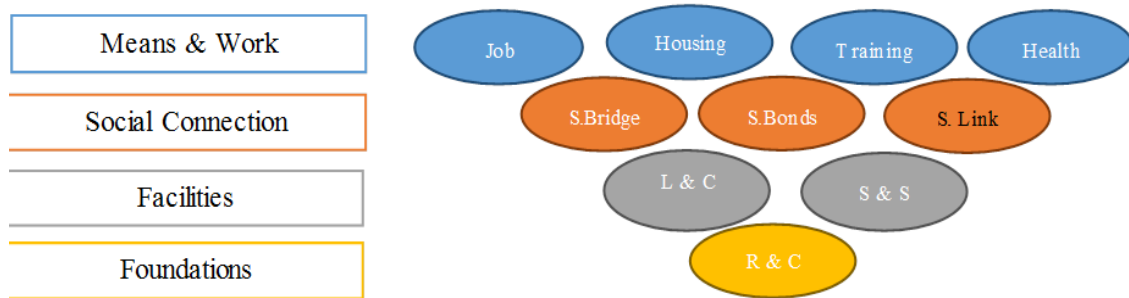
78

Figure 3.4 Local Integration Ontology Model

A brief description of each framework is as follows:

- Means and Work: There are four domains within the framework under 'Means and Work.' The first is "Job," and specifically pertains to an occupation related to Lan Na. The second domain is "Housing," which details the location of housing, how the location was selected, as well as how the sample became part of the local culture. The next domain is "Training," which focuses on Lan Na knowledge, and Lan Na training. The final domain is "Health," which covers both adaptability in a Lan Na environment, and holistic health in the Lan Na style.

- Social Connections: These are the most important factors for local integration, as most approaches to integration understand a sense of belonging to a particular group or community is crucial. There are three domains within the framework under 'Social Connections.' "Social Bridge" is related with work, national, ethnic or religious groupings, while "Social Bonds" are related to family matters. "Social Link" pertains to engagement with local government and non-governmental services, civic duties, and the political process.

- Facilities: There are two domains within the framework under 'Facilities' - "Language and Cultural Knowledge," which relates to

79

local dress, lifestyle, and food, and "Safety and Stability," which focuses on personal security.

- Foundations: There is only one domain in the foundations framework - "Rights and Citizenship," which pertains to voting and also identification with the Lan Na way of life.

2) Knowledge Elicitation

In this step, in-depth interviewing was used as a method of gathering data from sample cases. In-depth interviewing is suited for eliciting descriptions of processes and outcomes from the samples. The goal of in-depth interviews is to deeply explore the respondent's point of view, feelings, and perspectives, and these can be used to obtain preliminary information that is necessary to develop more concrete quantitative surveys.

The researcher made an appointment with each creative class sample case before interviewing the sample case by case. During the interviews, the researcher recorded data and observed the sample cases.

3) Transcribe

Following the in-depth interviews with the creative class sample cases, all results were transcribed using a **concept map**. A concept map represents relationships between ideas and images, and develops logical thinking. Concept maps are constructed to reflect the organization of the declarative memory system, and facilitate sense-making and meaningful learning on the part of individuals.

4) Annotation Ontology (AO)

In this study, Annotation Ontology (AO) used local integration ontology for identifying the local integration strategy of the creative class migrants. The researchers designed this to extensively reuse existing domain ontologies and to provide several other kinds of annotations such as comments, textual annotation, notes, and examples on potentially any kind of document. The

80

researchers analyzed the annotation ontology from the results script following the local integration model (Figure 3.4).
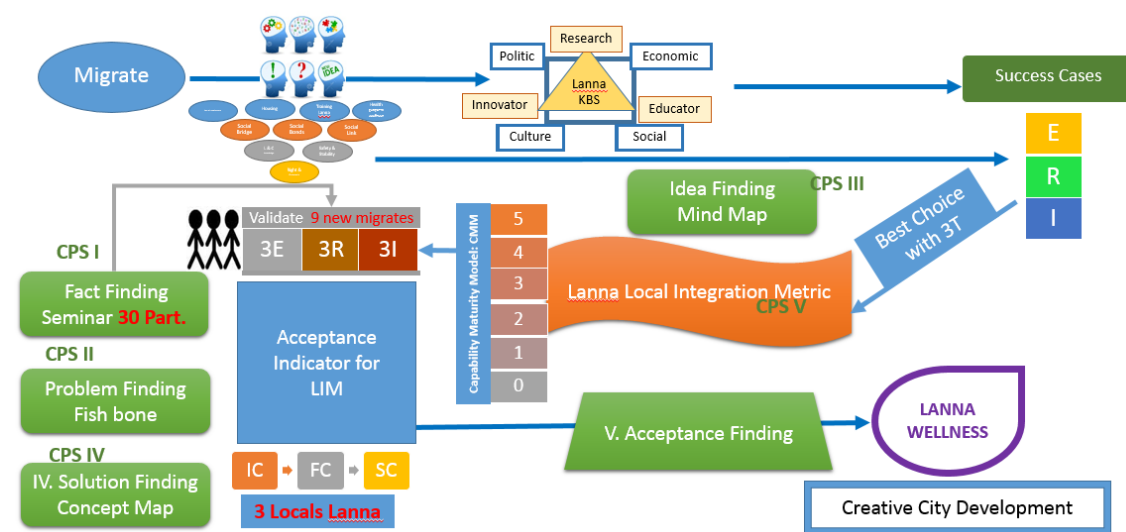

Figure 3.5 Concept of creative problem solving and capability maturity model

Step 6 Creative Problem Solving

From Figure 3.5, this step involved setting up a seminar, analyzing by using a fishbone diagram, and analyzing by using a mind map, concept map and validation following the creative problem solving process as follows:

Fact-finding: Set up seminar on "Create Lan Na to Lan Na Creative" (การสัมมนา เรื่องสรรค์สร้างล้านนา สู่ล้านนาสร้างสรรค์); the agenda and pictures of this seminar are shown in Appendix 5. The seminar was separated into 3 parts,

- First part: Introduction about Create Lan Na to Lan Na Creative (Appendix E). Provision of explicit knowledge on creative economy, creative city and Creative Lan Na to the delegates.
- Second part: Invited 3 well-known creative class members who migrated to Chiang Mai to be guest speakers. They lectured on their experiences while they are in Chiang Mai, including on how to survive in Chiang Mai.

81

- Third part: Focus group on factors of local integration to Lan Na. The knowledge that was gathered from the focus group was used for problem finding.

Problem finding: This process used the "fishbone" model for collecting detailed information from the focus group, and analyzed this information using that model.

Idea finding: Used "mind map" to classify the ideas from the fishbone model and focus group.

Solution Finding: Used "concept map" with the data from the mind map and fishbone model.

Acceptance Finding: After analysis using the fishbone model, mind map, and concept map, a form was developed for validating new migrants with the creative problem-solving concept (Appendix F). 3 local Lan Na experts were asked to validate 9 new migrants with this form and assign ranking.

Step 7 Capability Maturity Model

In this step, a capability maturity model was developed to compare the score with the results of the creative problem solving process. In addition, this was analyzed by the sector to understand more about how local Lan Na people will accept new migrants to their community. The model describes a five-level evolutionary path of increasingly organized and systematically more mature processes. The CMM form separated the levels using a score of $0 - 5$ and defines the details in each level (shown in Appendix G).

Step 8 Closed Loop tourism supply chain

Thus, the suggested model for the closed loop tourism supply chain for creative city development is illustrated in Figure 3.6. In this model, the tourism supply chain consists of 5 tiers, first; direct supplier 1, second; supplier 2, third; tour operator, fourth; customer (in this case the customers are senior tourists and also members of the creative class), and fifth tier; community (in this study are

82

residents of Chiang Mai city). The SCOR model helps to describe the basic processes of the tourism supply chain along those 5 tiers. The framework requires the criteria tools of 5 A, knowledge mapping and evaluation techniques to distribute from knowledge in step 3 into direct supplier, supplier through a tour operator onward.
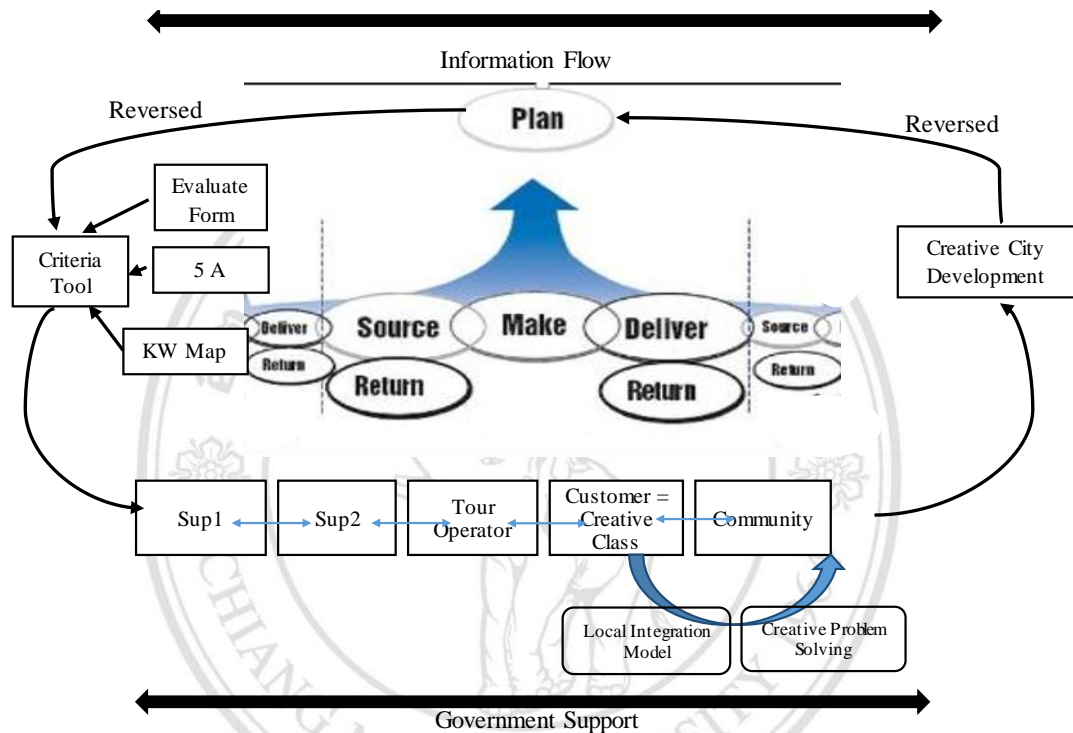

Figure 3.6 Closed Loop Tourism Supply Chain for Creative City Development

Customers or senior tourists who migrate to Chiang Mai city were assessed using the local integration model, which showed that they can live in the city and be recognized by local tourism enterprises and local people. The implementation of the creative problem solving process with the community will feed into creative city development. In creative problem solving, customers feed their knowledge and requirements back into the tourism supply chain within a closed loop system.

Thus, this step aims to study 2 main points of knowledge transfer within a sustainable tourism closed loop by using 2 techniques: 1) Evaluation technique of 5 A analysis and 2) Creative problem solving for creative city. The research employs a mixed research design, and includes an evaluation form that uses the 5

A Criteria for evaluating the potential of tourist destinations for meeting the specific needs of senior tourists, and a knowledge map as the criteria tool for senior tourism management. For developing a creative city, a migrant creative class is necessary, and their adaptation into the local society and culture is described using the local integration model. They may use creative problem solving as a tool for eliciting knowledge regarding senior tourism, thereby developing a creative city. The tourism supply chain acts as a mechanism by which knowledge may be returned to tour operators and the tourism industry via actions by former senior tourists who are now part of the city's migrant creative class. This reversal of knowledge back into the chain creates a closed loop system, and aids creative city development.

3.3 Sample Selection

3.3.1 Senior tourists

200 Thai and 200 international senior tourist respondents were selected as the sample from the larger senior tourist population who visited Chiang Mai between January – April 2014. Questionnaires were collected from popular tourist destinations in Chiang Mai such as Chiang Mai International Airport, Phra Sing Temple, and Chedi Luang Temple.

3.3.2 Tourism Enterprises

Twenty owners, managers, and staff of tourism enterprises in Chiang Mai made up the tourism enterprise sample. Their businesses were related to transportation, such as the ground airline, car rental business, accommodations including three and four star hotels, resorts, and boutique hotels, tour operations that provide services for senior tourists, and the wellness sector such as massage centers or hospitals.

3.3.3 Tourist Destinations

Chiang Mai has many kinds of tourist destinations; natural, cultural, historical, religious, and community sites, but not all destinations are appropriate for senior tourists.

In this study, 168 tourist destinations that were appropriate for senior tourists in Chiang Mai were selected. Most of these included religious sites, such as temples around Chiang Mai.

3.3.4 Migrant Creative Class

The research on knowledge management area study the 5% of experts in each sector. This study selected twelve creative class sample cases from migrants coming from areas outside of Chiang Mai who migrated more than five years ago. All sample cases are professional, expert, and well-known individuals in Chiang Mai who are recognized as part of the city's creative class.
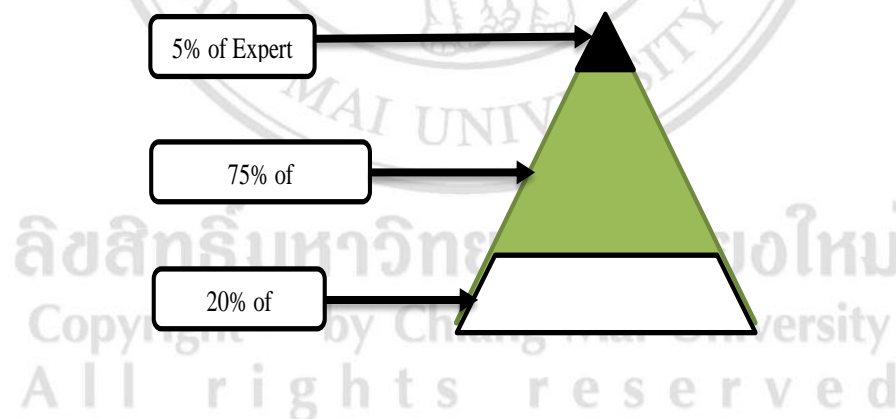

Figure 3.7 Number of Experts in each sector

The creative class sample cases included a doctor in Maharaj Hospital, lecturers in Chiang Mai University and other universities, university researchers, a director of the Lan Na wisdom school, an architect, a businesswoman, and an editor of a magazine in Chiang Mai.

85

The sample cases are separated into three groups following the roles identified in the knowledge-based society triangle; namely, educator, researcher, and innovator. Some of them can be classified as both educator and researcher, or educator and innovator, and researcher and innovator.

3.3.5 New Migrants

The new migrants sample was selected from the population who migrated from areas outside of Chiang Mai one to two years ago. Some came to Chiang Mai for the purpose of studying in university, or working in the area. It was necessary for the sample to be interested in Lan Na culture and to want to work and do business in Chiang Mai.

These sample cases were used twice in Step 5:

First procedure: Invited 30 migrant sample cases coming from areas outside of Chiang Mai who migrated not more than 2 years ago, and who were interested in Lan Na, to participate in the seminar and focus group,

Second procedure: selected only 9 sample cases who were related with Lan Na health and wellness from 3 groups of knowledge based society; educator, researcher, and innovator. They included lecturers and researchers in universities, master's degree students, and new businessmen who have invested in resorts and spas in Chiang Mai. Then, 3 local Lan Na experts were asked to validate and accept all new migrants with the creative problem solving validation form for new migrants.