THE UNIVERSITY of EDINBURGH

The Contribution of University-Industry Linkages (UILs) to Tourism Clusters: Multiple-Case Studies in Thailand

Siriluk Prasunpangsri

PhD

The University of Edinburgh

2013

DECLARATION

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ACKNOWLEDGEMENT

ABSTRACT

This research develops a theoretical framework explaining how University-Industry Linkages (UILs) affect the performance of tourism clusters in Thailand. Significant external and internal factors affecting Thai tourism industry are examined. The research questions are significant given the importance of successful tourism cluster through University-Industry Linkages (UIL). These questions recognized tourism clusters, the role of university, the linkages between university and industry, influential factors are contextual, and as a result, the author explores four tourism clusters in Thailand and using multiple case studies explains the nature and character of tourism cluster and University-Industry Linkages (UILs) between tourism cluster and its universities. The findings demonstrated that UILs, strategic entrepreneurship and leadership play key role to successful tourism cluster in developing countries.

Word Count: 82,288 words

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LIST OF ABBREVIATIONS

AEC   ASEAN Economic Community

ASEAN Association of Southeast Asian Nations

CDA   Cluster Development Agent

CMI   Cambridge-MIT Institute

CMRU Chiang Mai Rajabhat University

CM-TBA Chiang Mai-Tourism Business Association

CMU   Chiang Mai University

CMU-CAMT College of Arts, Media, and Technology, Chiang Mai University

CP   The Charoenpokphand Group

HRP   Human Resource Planning

ICT   Information and Communications of Technology

ISO   International Organisation for standardisation

JAA   JEAustin Association

KIAsia   Kenan Asia

KIC   Knowledge Integration Community

KSF   Key Success Factors

KU-CSC Kasetsart University Chlermphrakiat Sakon Nakhon Province Campus

KU-KPS Kasetsart University Kamphaeng Saen Campus

M-Industry Ministry of Industry

MNC   Multinational Corporation

LIFT   Leith Initiative for Tourism

MICE   Meetings, Incentives, Conferences, Exhibitions

MIT   Massachusetts Institute of Technology

MITI   Ministry of Internal Trade and Industry

MNC   Multi-national Corporation

MOE   Ministry of Education

MOI	Ministry of Interior
MOTS	Ministry of Tourism and Sports
MOU	Memorandum of Understanding
NESDB	National Economic and Social Development Board
NGOs	Non-Governmental Organisations
NIC	Newly Industrialized Country
NIS	National Innovation System
NSTA	National Science and Technology Development Agency
ONIE	Office Non-Formal and Informal Education
OSM Andaman	The Office of Strategy Management of Southern Province Cluster
OSMEP	Office of Small and Medium Enterprise Promotion
OTOP	One Tambon (subdistrict) One Product
PAO	Provincial Administrative Office
PKRU	Phuket Rajabhat University
PPEO	Provincial Primary Educational Office
PU	Payap University
QA	Quality Assurance
SASIN	Sasin Graduate Institute of Business Administration of Chulalongkorn University
SAO	Sub-district Administrative Office
SMEs	Small and Medium-sized Enterprises
SMTEs	Small and Medium-sized Tourist Enterprises
SN	Social Networks
SNRU	Sakon Nakhon Rajabhat University
SNUK	Sakon Nakhon, Nakonpanom,Mukdahan,Kalisin
SWOT	Strengths, Weaknesses, Opportunities, Threats
TAT	Tourism Authority of Thailand
TCI	Thailand Competitiveness Initiative

TDRI	Thailand Development Research Institute
TUT	Toyohashi University of Technology
U-I-G	University-Industry-Government
UILs	University Industry Linkages
UNIDO	United Nation Industrial Development Organisation
UNWTO	United Nation World Tourism Organisation
USAID	The United States Agency for International Development

CHAPTER ONE
INTRODUCTION

1.1 Introduction

This thesis is an exploratory research study that integrates three strands of literature: Cluster Theory, Triple Helix and Social Networks, in order to enhance understanding of tourism development in Thailand. Universities are increasingly important sources of knowledge. So this study investigates the relevance and the capacities of their linkages between tourism clusters and universities in Thailand. Within the University-Industry Linkages (UILs), there are several activities that range from training courses to innovation. This study will search for a balance between utilizing human resources and innovation in service industries, particularly Tourism clusters, in Thailand. A model will be produced to suit Thai society.

After the financial crisis in 1997, many businesses went bankrupt and so the Thaksin government employed a competitiveness policy to support and develop businesses. With the help of the United States Agency for International Development (USAID), the Thailand Competitiveness Initiatives (TCI) was established in 2001 in order to accelerate Thai economic recovery from the Asian Financial Crisis (USAID, n.d.). A competitiveness initiative was chosen because it promised to provide value to a large number of SMEs and other companies while putting Thailand on the way to a sustainable recovery based on the ability to compete effectively in world markets (USAID, n.d.).Since then the cluster has been used as one key mechanism of strategies in the hope of increasing national competitiveness and of pushing the country forward to compete in a rapidly changing world. Thus, the Thai government has established a business cluster development policy across the country for improving the competitiveness of the nation. In 2002, the Thai government invited Michael E. Porter to be a distinguished guest speaker to disuses the possible competitive advantage of his model in Thailand (Phinaitrup, 2012). The reason why the Thai government adopted the cluster initiative because this concept was used in many countries and was that clustering initiative project were successful in other countries (Porter 1990). In 2006, National Economic and Social Development Board

(NESDB) hired Kenan Asia (KIAsia) to undertake the Cluster Mapping Project. In comparing the 152 clusters identified and the 60 clusters selected for field survey it was found that of the initiate152 clusters, 53.3 per cent of 60 clusters selected from the group, were still at the formation stage. Of the 60 clusters selected from the field survey 20 cluster were selected for their potential as the pilot projects to promote successful cluster development (NESDB 2006). However, from 2006 onwards there has been little follow-up of the progress of these 152 clusters, and it is not known how they have progressed, or even whether they still exist. A deep understanding of these clusters is essential for enhancing Thai competitiveness.

Tourism is the lifeblood of Thailand and the tourism industry generates an important part of the country's income. The tourism industry has played an important role in the Thai economy by attracting foreign revenue: according to Ministry of Tourism and Sports figures, the earnings totalled 776 billion baht (US$25.45 billion) in 2011 (www.tat.or.th). Tourism is one of the sectors that bring in substantial foreign income, accounting for as much as 40 per cent of the service receipts in the current account and approximately six per cent of Thailand's GDP (www. bot.or.th). The industry also maintains extensive linkages with other sectors (www. bot.or.th). According to the Bank of Thailand (2010), one baht spent by foreign tourists translates on average into an increase in manufacturing production of 1.86 baht and an increase in national income by 0.8 baht. One explanation for these relatively large multipliers is the size of employment in the tourism sector. Directly linked to the tourism industry, hotels and restaurants alone employ 6.4 per cent of the country's labour force (www. bot.or.th). In addition, tourism-related employment extends to transportation, tour guiding, retail sales, souvenir production, and recreation (www. bot.or.th). In order to improve Thai tourism clusters' competitiveness, Thailand needs to move beyond reliance on its natural resources and cheap labor for upgrading the quality and variety of its services. As Tirasatayapitak (n.d.) stated in her study of the Thai strategy on a sustainable tourism industry, Thailand's potential has started to lessen.

According to Brimble and Doner, 2007 cited in Freeman's work (1987), University-Industry Linkages (UILs) are key components in the country's national innovation system (NIS); UILs can help Thai producers to initiate, import, modify and diffuse technology. In addition, UILs can provide support in other areas such as human resources and academic service. This can also be applied to service industries, especially the tourism industry. It is evident that the tourism industry is demand driven and that it needs an appropriate response strategy. It has been accepted that we are in a highly competitive world, and that the way to survive and grow is to learn how to compete by using advanced information technologies and creating unique opportunities. Thus, if the linkages between universities and tourism clusters are strong, they can improve the clusters' performance, efficiency and ability to innovate. They can do this by an increased transference of knowledge and skills. The support network work of Kenny (2008) shows that several companies have been directly affiliated with universities: Yahoo, Seagate, Google, 3Com, Sun Microsystems, Cadence. This is evidence that academic institutions can play a significant role in assisting clusters by creating increased information networks that can lead to innovation.

However, the study of UILs in the service industry is inadequate - in particular the tourism industry in Thailand. Thus, a deep understanding of UILs in tourism clusters is necessary for enhancing competitiveness. Developing the linkages between universities and clusters is very important. This study will investigate the linkages between universities and tourism clusters in Thailand and how these linkages enhance the competitiveness of Thai tourism clusters. The obstacles that need to be overcome for effective linkages will be also be investigated.

1.2 Background of Research

1.2.1. Context of Research: Why Thailand?

I. Tourism Overview

Over the past six decades, tourism has experienced continued expansion and diversification becoming one of the largest and fastest growing economic sectors in

the United Nation World Tourism Organization (UNWTO, 2011). Over time, an ever-increasing number of destinations have opened up and invested in tourism development, turning modern tourism into a key driver of socio-economic progress through the creation of jobs and enterprises, infrastructure development and the export revenues earned (UNWTO, 2011). The United Nation World Tourism Organisation (UNWTO) has displayed International Tourists Arrivals and forecast long-term tourism between the year 1950 - 2020 as illustrated in Figure 1.1.

UNWTO s Tourism 2020 Vision projects that international arrivals are expected to reach nearly 1.6 billion by the year 2020 (UNWTO, 2011).
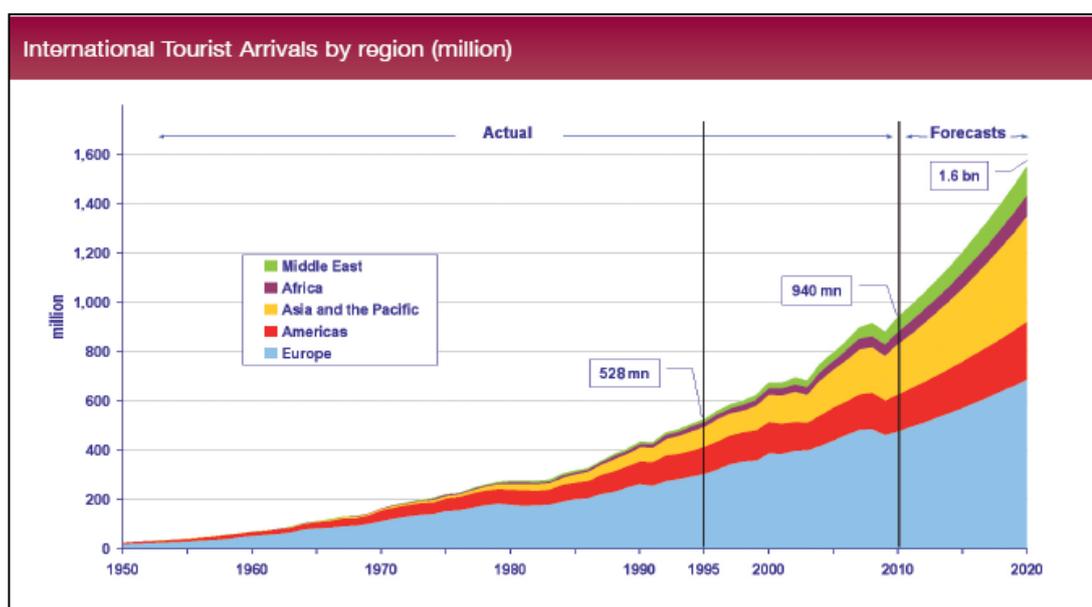
Figure 1.1: Forecast of International Tourist Arrivals: 1950-2020; Source: UNWTO (2011)

Table 1.1 shows the total tourist arrivals by region. By 2020, the top three receiving regions will be Europe (717 million tourists), East Asia (397 million) and the Americas (282 million), followed by Africa, the Middle East and South Asia (UNWTO, 2011).

International Tourist Arrivals by region (million)						
	Base year	Forecasts		Average annual growth rate (%)	Share (%)	
	1995	2010	2020	1995-2020	1995	2020
Total	565	1,006	1,561	4.1	100	100
Africa	20	47	77	5.5	3.6	5.0
Americas	109	190	282	3.9	19.3	18.1
East Asia/Pacific	81	195	397	6.5	14.4	25.4
Europe	338	527	717	3.0	59.8	45.9
Middle East	12	36	69	7.1	2.2	4.4
South Asia	4	11	19	6.2	0.7	1.2
Intraregional (a)	464	791	1,183	3.8	82.1	75.8
Long-haul (b)	101	216	378	5.4	17.9	24.2

Source: World Tourism Organization (UNWTO) ©
Notes: (a) Intraregional includes arrivals where country of origin is not specified.
(b) Long-haul is defined as everything except intraregional travel.

Table 1.1 International Tourist arrivals by region; Source: UNWTO (2011)

In addition, East Asia and the Pacific, South Asia, the Middle East and Africa are forecast to grow at over five per cent per year, compared to the world average of 4.1 per cent. More mature regions such as Europe and the Americas are anticipated to show lower-than-average growth rates. Europe will maintain the highest share of world arrivals, although this share will decline from 60 per cent in 1995 to 46 per cent in 2020 (UNWTO, 2011).

Tourism is one of the fastest growing worldwide industries and, at the same time, is the main source of income in foreign currency for developing countries. (Iordache *et al*, 2010) As growth has been particularly fast in the world's emerging regions, the share in international tourist arrivals received by emerging and developing economies has steadily risen from 31 per cent in 1990 to 47 per cent in 2010 (UNWTO, 2011). As a result, each country attempts to find ways of attract more tourists to come to their country and to spend more nights there. However, due to high competition in the global market the government in each country has launched intense projects to promote its country including the use of new advanced technologies as a means of improving access for tourists all around the world

During 1987, the "Year of the Tourist," Thailand hosted over three million visitors, principally from Europe, America, Japan, and other Asian nations. The average tourist spent $100 a day and stayed six days (Ketudat, 1990). Tourism has become the number one foreign exchange earner of the Thai economy ahead of garments, rice, gems and jewellery, tapioca, and rubber (Ketudat, 1990). Also, Ketudat (1990) argued that this is truly an historic phenomenon: no expert on the Thai economy would have projected, thirty years ago, that within a generation tourism would displace rice as the primary source of foreign exchange. Even though Thailand has several national plans, external factors such as the global recession, instability and political factors, have significantly affected the achievement of these national plans.

It can be seen from Figure 1.2 below that international arrival to Thailand from 1998 to 2011 show a significant rise from 1998 onwards. There are significant dips with the SARS epidemic, and after the tsunami of 2004. The global recession from the end of 2008, political disturbances in 2009 and 2010, and also the floods in 2011 had an effect on tourist arrivals (Thaiwebsites.com). Since somewhere in the middle of 2008 a severe worldwide recession dampened the desire to travel. Thailand furthermore suffered from political instability, starting with the closure of Suvarnabhumi Airport (26 November 2008, by the Yellow Shirts protesters). A Red Shirt mob invaded the East Asia Summit in Pattaya on 11 April 2009, leading to a cancellation of the summit, with world leaders scurrying away to safety. This was followed by violent riots the next day (during Songkhran) and the declaration of a state of emergency by PM Abhisit Vejjajiva (Thaiwebsites.com). Thailand's tourism industry makes up about six per cent of Thailand's GDP (www. bot.or.th).When seeing the number of tourists, and the number of tourist destinations and hotels, one would actually expect a more substantial portion of GDP. But Thailand's tourism industry, while very visible, brings in much less money than other service industries, and certainly less than its manufacturing industry (Thaiwebsites.com).
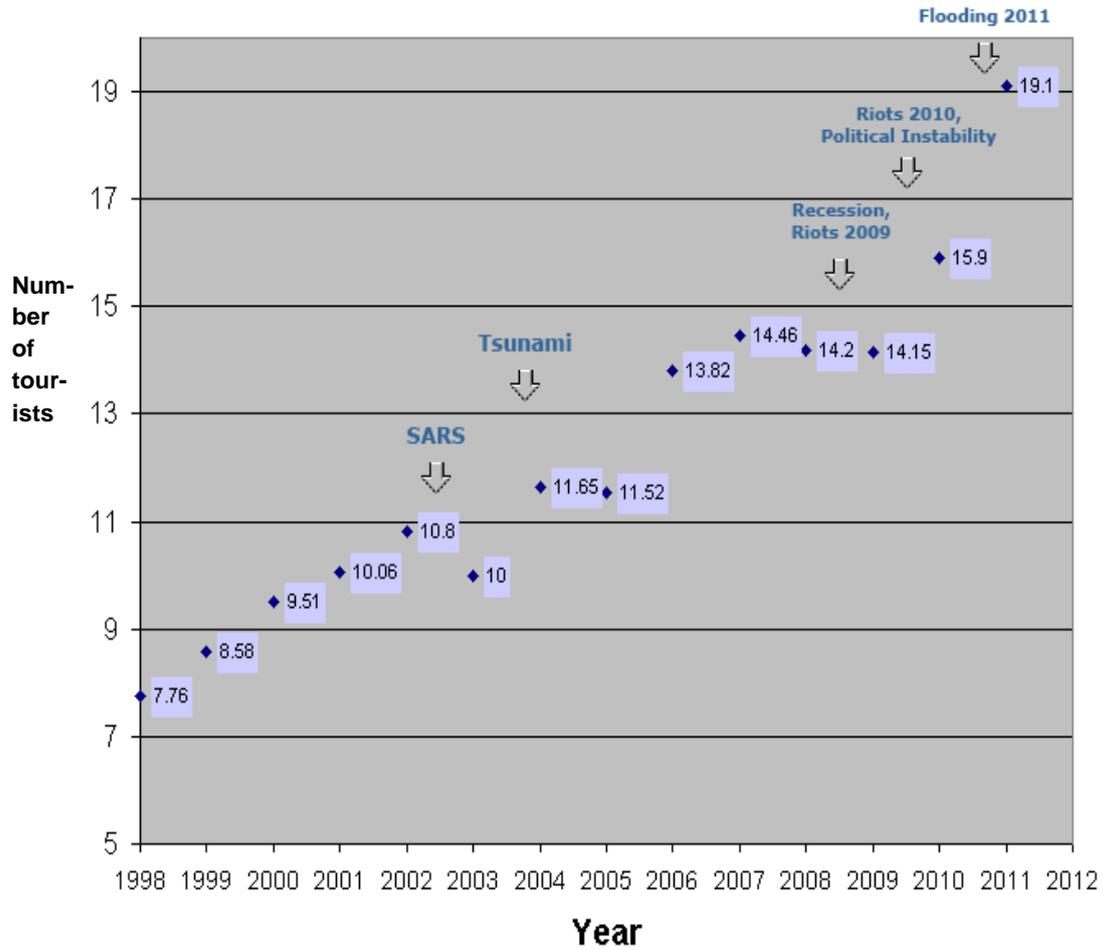
It can be seen from the Table 1.2 that from 1960 to 2006, the number of foreign tourists increased dramatically from 81,340 to 13,821,802. Also, the length of stay has increased from three days in 1960 to eight days in 2005.

Year	Number of Arrivals	Average Length of Stay (Days)
1960	81,340	3.00
1965	225,025	4.80
1970	628,671	4.80
1975	1,180,075	5.00
1980	1,858,801	4.90
1985	2,438,270	5.58
1990	5,298,860	7.06
1995	6,951,566	7.43
2000	9,508,623	7.77
2005	11,516,936	8.13
2006	13,821,802	not available

Table1.2 International Arrivals and Average Length of Stay; Source: Cohen (2008).

However, Figure 1.3, demonstrates that the revenue per tourist decreased dramatically even after the Thai government's currency depreciation in 1997.
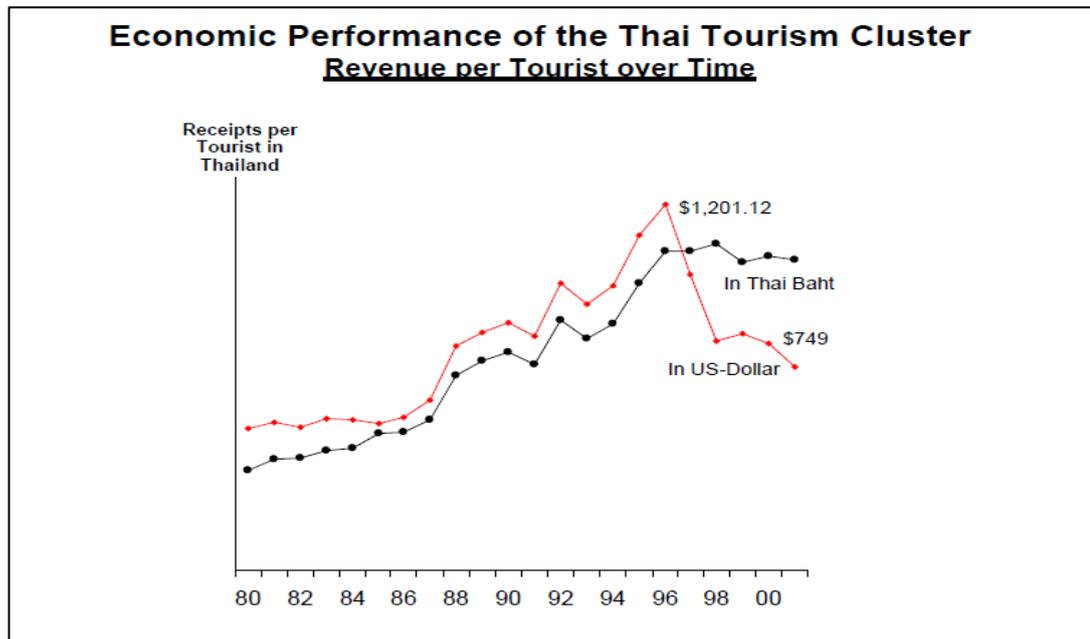
Figure 1.3 Revenue per Tourist from 1980-2000; Sources: Porter (2003)

Based on Porter's analysis of the tourism industry in Thailand, Thailand generates less revenue per tourist (see figure 1.4) Thailand has not been able to increase the revenue per tourists over time. Even after the 1997 devaluation, revenues in terms of the Thai Baht only remained stable, while tourists reduced their spending in terms of the US-Dollar (Porter, 2003).

Tourism Clusters in the World Economy
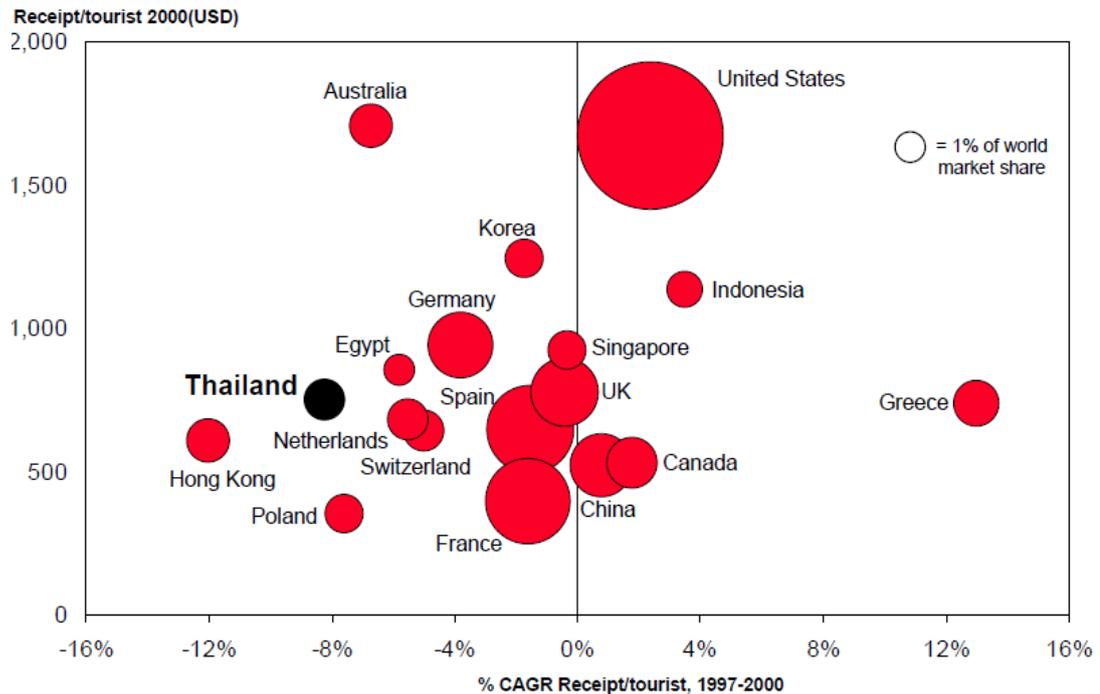
Figure 1.4 Tourism Clusters in the World Economy
Source: Porter (2003)

According to Porter's presentation in Thailand (Thailand's Competiveness: Creating the Foundations for Higher Productivity, 2003) there is no overarching strategy for the development of clusters, despite the existence of many industry associations for different parts of the cluster, and of many different strategic plans. Porter (2003) also stated that the absence of a clear strategy is a key factor in the inability of the cluster to capture greater value from tourists. In addition, Porter analysed Thailand's cluster vision as the world leader in niche markets such as tourism, food, automobile, fashion and software. In terms of the Thai tourism vision, 'Tourism Capital of Asia', Porter also stated that this was important with potential for significantly higher value creation but that lack of shared vision is a critical constraint (Porter, 2003).

In addition, Porter (2008) suggested that developing economies should upgrade their traditional clusters including agriculture, and never abandon them. Recruitment of foreign direct investment should focus on existing and emerging clusters, not generalized appeals. Incentives should be weighted toward training, infrastructure,

and other areas that upgrade the cluster, rather than providing general subsidies. In addition, Porter (2008) stated that existing Multinational Corporations (MNCs) could become nodes for cluster development and that the best way of retaining companies was to make them part of a cluster that supports higher local productivity.

II. National Tourism Development Plan Tourism Policy in Thailand

According to the Government Public Relations Department (2011), Thailand has a vision to become a quality tourism destination with tourism competitiveness at the international level, thus enabling the country to generate more income and distribute wealth on a sustainable basis. The vision is contained in the National Tourism Development Plan, 2012-2016, which won cabinet approval on 15 February 2011, when the National Tourism Policy Committee referred to the inclusion of tourism in the national agenda by the cabinet, during its meeting in April 2009.

The objective of the National Tourism Development Plan is to move Thailand's tourism competitiveness up at least 15 places, which would put it among the top five destinations in Asia. The plan also intends to increase tourism income by at least five per cent during the five-year period. In order to achieve this aim, five strategies have been set for implementation as quoted in (Government Public Relations Department, 2011) as follows:

i.   The first strategy seeks to develop infrastructure and logistics, linking with domestic and international tourism.

ii. The second strategy involves the development and rehabilitation of tourism sites and improvement of various rules and regulations to enhance the country's potential for accommodating more tourist arrivals. Standardize tourism products in order to attract quality tourists.

iii. In the third strategy, emphasis will be placed on the development of the creative economy (CE), which is the focus in the 11th National Economic and Social Development Plan, 2012-2016. New products and services will be

launched, while incentives for tourism trade and investment will be offered and human resource development (HRD) will be emphasised.

iv. The fourth strategy seeks to create confidence in Thailand's good image among visitors, so that the country will welcome a greater number of tourists who will spend more in Thailand.

v. The fifth strategy calls for the participation of the public sector, civil society, and local administrative organisations in tourism management.

However as Wirudchawong (2012) argued in relation to the role of government with tourism, the government tends to make flowery statements (policy statement of the council of ministers) that tourism generates huge revenues for the country, but in practice they are only interested in mega projects and overlook social and environment dimensions.

In addition, political instability can cause tourism arrivals and receipts to plummet (Richter, 1992). While recent unrest in both the capital of Thailand as well as the provinces has been brought under control, the events had a significant impact on the flow of tourists, a major source of jobs and export revenues for the country. Against this background, a special meeting of international solidarity with the Thai tourism industry was organized by UNWTO and the Pacific Asia Travel Association (PATA), in Bangkok in collaboration with the Ministry of Tourism and Sports of Thailand (PATA, 2010). UNWTO Secretary-General, Taleb Rifai, and PATA CEO, Gregory Duffell, stated:

> *Drawing on the experience gained from the UNWTO Tourism Resilience Committee, valuable lessons and strategies used by other Member States to confront similar crisis situations will be shared. This meeting also represents an expression of solidarity with Thailand from the international tourism community. Tourism plays a major role in the social and economic development of Thailand, contributing significantly to its GDP and job creation', he added. "With government support, collaboration between the public and private sector and the support of the international tourism community, the Thai tourism industry is sure to recuperate its losses and maintain its position as one of the major tourism destinations worldwide.'*
>
> (PATA, 2010)

In addition, Thailand recorded a 31per cent increase in tourism receipts in 2011 over 2010, according to Ministry of Tourism and Sports figures; the total earnings of 776 billion baht (US$25.45 billion) (www.tat.org.th).. Thailand recorded 19.23 million international visitors in 2011, up by 20.67 per cent over 2010. With an average length of stay of 9.64 days and an average daily spend of 4,187.12 baht (US$137) per person (www.tat.org.th).

In summary, whereas tourism continued to increase both globally, and in the Pacific region, the number of tourists in Thailand decreased dramatically after the political unrest of 2008 and flooding in 2011. However, in the wake of the government's tourism promotion campaign, tourists started to arrive in larger numbers but at the low end of the market in the big cities. In addition, Thailand was imaged as a cheap destination. As the saying goes "more for less".

1.3 Research Motivation

I have worked for Kasetsart University, Sakon Nakhon Campus, in Thailand for more than 10 years. I worked as the secretary of a Small and Medium Enterprises (SMEs) project established by SNUK (Sakon Nakhon, Nakon Panom, Mudahan. Kalisin). In the course of this work, I was able travel to many villages. In these villages nowadays there are only elderly people and children because the young people have to go to work in big cities, especially Bangkok. This experience led me to the belief that universities could help to remedy this situation through utilizing the intellectual capital especially the expertise of their professors and lecturers. The aim would be to use university resources to help communities in many practical ways and especially to create jobs for young people in terms of 'green' innovation. In addition, local universities could help preserve local knowledge and help local society to develop and prosper.

It is stated duty of universities to help society on the ground. As the president of Mahasarakham University, Thailand stated that the idea is that universities of today should play an important in helping society and that is, higher education institution should take on an anticipatory role - to serve as observatory and think tanks in order

to foresee and alert society to emerging trends and to help prevent major crises before they happen (QS Showcase Asia, 2013). We must, therefore, use our homegrown talents, natural resources, local knowledge, Buddhist beliefs and the local identity special to each area to assist the young to make good lives for themselves locally. It is my belief that by working together the local university, local businesses, and public sector officials in rural areas can bring this about.

1.4. Research Objectives and Research Questions

Objective I: To investigate the nature and character of the tourism clusters and the linkages between each tourism cluster and its universities

1.4.1. What is the current nature and character of tourism clusters and the linkages between tourism clusters and their universities?

a) What is the nature and character of the tourism clusters and linkages between tourism clusters and their universities?
b) What is the role of the university towards the tourism cluster?
c) What are the attitudes of participants in tourism clusters towards the linkages?

Objective II: To create a model applicable to improving University-Industry Linkages in Thailand in order to support successful tourism clustering

1.4.2. What are the influential factors affecting the Thai tourism clusters?

a) How have external factors, such as political and socio-technological factors, affected Thai tourism clusters?
b) How have internal factors, such as inherent strengths and weaknesses, affected Thai tourism clusters?

1.4.3. How might University-Industry Linkages assist the success of tourism clusters?

a) What are the barriers for UILs between Thai tourism clusters and universities?
b) How can the UILs between Thai tourism and universities be improved?

c) How can the competitiveness of tourism clusters be enhanced through UILs?

1.5 Significance of the study

This thesis presents a theoretical challenge through identifying the literature gap and in addressing it. It is also of practical significance through providing a greater understanding of the key influential relationships affecting tourism.

1.5.1. Theoretical Challenge

Thai UILs

According to the Commission on Higher Education of Thailand (2007) and Mongkhonvanit (2008), the Thai university's functions are as follows:

a) To produce graduates with a high-level professional skills and moral integrity to meet the need for human resources;

b) To generate new knowledge through research and scholarship to strengthen the regional and national economics of self-reliance and international competitiveness;

c) To provide academic and technical services to state and private enterprises through research training and consultancy activities in order to ensure an efficient, necessary and appropriate technology for social and economic development at regional and national levels;

d) To conserve and promote the traditional arts and culture of the region and the nation so that the university is perceived as a model center of community life worthy of emulation.

The role of the university in relation to tourism is primarily that of producing graduates to work in tourism related activities, alongside doing the research with both the public and private sectors to improve the performance of the organisations. Thereafter follows the academic services such as training course, consultancy and IT.

Several studies such as that of Porter (2003), suggested that developing economies should upgrade traditional clusters including agriculture, and never abandon them. In terms of company operations and strategy overview, Thailand's relative strengths and weaknesses, lie in competing in global commodity markets based on low costs of factor inputs. Its narrow presence in the value chain brings weaknesses in marketing, brand development, and the control of international distribution channels, plus low investment in human resources and innovation.

Intarakumnerd and Schiller (2008) emphasize that appropriate explanations of UILs in developing countries like Thailand are still weak. Similar to former studies on Thai UILs through both national and sectoral levels, Brimble and Doner (2007) examined four important sectors - automotive, textile-garments, agro-industry, and hard disk drives and found that Thai UILs are frail. In addition, Brimble and Doner (2007) state that Thai firms must meet increasingly tougher requirements from multinational firms. Competitive pressures for quality, price, and delivery have elevated the opportunities for local concentrations of value chains within countries, such as Thailand. But the ability to take advantage of these opportunities depends in no small part on the development of knowledge-centred capabilities that in turn can be enhanced through UILs. Thailand's record in this area is not impressive (Brimble and Doner, 2007). A recent World Bank analysis reported that nearly a quarter of Thai firms were operating below full capacity due to skill shortages; that firms must pay a significant wage premium for tertiary graduates; that Thailand is currently producing fewer secondary education graduates than countries at similar development and income levels; that the quality of Thai secondary graduates is lower than those of peer countries; and that almost half of firms surveyed assessed the IT skills of their production workers as ''very poor'' (Brimble and Doner, 2007, World Bank, 2005a:38).

In terms of UILs barriers, professors in Thai universities often mentioned industry-side limitations, e.g. industrial partners who are not willing to cooperate or are not available in the relevant research fields. This is a clear indication of a lack of coordination between the work of universities and companies, of a limited

knowledge about potential partners, and of a lack of trust and communication. However, it is not a clear indication that the universities do not have the capacity to be relevant in the development and improvement of clusters in Thailand.

Industries	Gaps	Academia
-Passive actors in initiating cooperative projects	-Lacking continuous cooperative projects or activities and motivation for collaboration	-Major activities are not two-way cooperation. Education institutes usually initiate and dominate the relationship
-No tangible/substantial activities that might lead to collaboration with education institutes	-Missing clear goals and objectives of the collaboration	- Linkages are more or less in terms of asking for help than achieving the project together for maximum benefit of both parties
	-Lacking assistants/coordinators who can understand both sides, coach, and foster the relationship -Lacking analysis of problem from the industry's perspective	-No substantial linkages in terms of R&D projects

Table 1.3 Gaps in industry-academic collaboration
Source: College of Management, Mahidol University (2003); Mongkhonvanit (2008).

Studies by Mongkhonvanit (2008), College of Management, Mahidol University (2003), showed the gap in industry-academic collaboration as illustrated in table 1.3.

To create a model applicable to improving University-Industry Linkages (UILs) in Thailand in order to enhance the competitiveness of tourism clustering then this research uses Cluster theory (Porter, 2008), the Triple Helix model (Etzkowitz, 2008), Social Networks (Castells, 2000) as the major framework for understanding and analyzing the relationship between Thai universities and tourism clusters in Thailand.

On Clustering theory, Porter (2008) places emphasis on innovation by using advance technology and economic growth but less emphasis on the social dimension. Whereas the Triple Helix model by Etzkowitz (2003) puts the emphasis on the entrepreneurial university as the key to knowledge transfer the incubation of new firms. However, in my opinion the university can support communities in terms of academic service. Social Networks theory by Castells (2000) is empowered by new information/communication technologies but it is informal and has no clear boundaries. Moreover, it depends on volunteers which indicate a lack of commitment. This model lacked the mechanisms, continuous assessment and commitment for both short and long term objectives among organisations.

1.5.2. Practical Significance

a) This research will provide a greater understanding of the key influential relationships affecting the effective Thai tourism clusters, which in turn will contribute to improving the performance of tourism clusters.

b) The results of this study will make known the current dynamics of the relationships between universities and Thai tourism clusters.

c) The results of this study may assist in strengthening linkages between the tourism industry and universities.

d) They may also help to develop economic growth through job creation and through the provision of skilled labor.

1.6 Overview of Research Process

The research is organized into six operational steps in the research process (see figure 1.5 below).
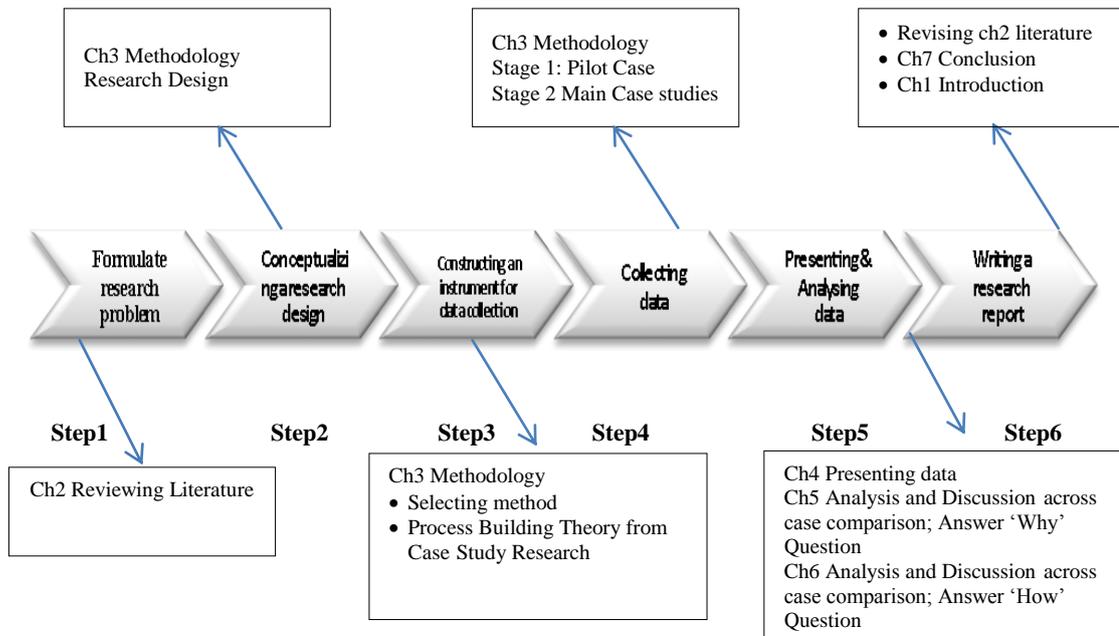
Figure 1.5 Research Process
Source: Adopted from Kumar (2005)

1.7 Thesis Structure

The research is divided into seven chapters as follows:

Chapter One: Introduction

This chapter presents an introduction to this study. The chapter is structured as follows. There is an introductory section that explains the background to the research that covers the context of the research such as - why Thailand and why tourism policy in Thailand and what is the research motivation? It then states the research objectives and research questions. An overview of the research process is also presented. This research is organized into the six operational steps in the research process 'formulating a research problem' was the first step in the research process.

Then, I reviewed literature to identify any gaps. The second to fourth step was 'conceptualising a research design', 'constructing an instrument for data collection' and 'collecting data', explaining why the methodology was used and how it was used. The fifth step was 'presenting data and analysing across case studies', which included chapter four presenting data and within case analysis and chapter five's analysis and discussion across case comparison, answering the 'why' question and chapter six's analysis and discussion across case comparison, answering the 'how' question. The sixth step was writing a dissertation (see Fig 1.4). Thereafter, I re-studied literature review following the discovery of the findings. I give a brief explanation of each chapter.

Chapter Two: Literature Review

The literature review provides an overview of existing research that bears upon the research questions. It covers clusters theory, tourism clusters, the Triple Helix Theory, University- Industry Linkages (UILs), and Social Networks. The literature review builds on these issues and has the following objectives: 1) To critically evaluate previously published literature that examines Clustering, Triple Helix, UILs, and Social Networking; 2) To identify any gaps in the reviewed literature that I would like to research and investigate further; 3) To propose a derived framework and model useful for understanding the development of Thai tourism clusters within the context of Thai society and culture.

The chapter is structured as follows: 2.1) overview; 2.2) Cluster Theory which covers significance, the role of clusters in fostering the economy, cluster formation, the nature and character of clusters, challenges that impact upon tourism clusters, cluster development, cluster decline, barriers, Key Success Factors (KSF); 2.3) Triple Helix Model, University-Industry-Linkages (UILs) and explores the role of universities as participants in the Thai tourism clusters; 2.4) Social Network trends impacting on tourism, effective tourism clusters; 2.5) Synthesis: 2.5.1) Synthesis of the Conceptual framework, 2.5.2) Synthesis of the Empirical framework; 2.6 Derived Conceptual Framework.

Chapter Three: Methodology.

This chapter explains why the methodology was used and how it was used. The chapter was organized into eleven parts: 3.1) introduction; 3.2) Research objective; 3.3) Philosophy of the research covering strengths and weaknesses of the positivism and the phenomenological approaches; 3.4) Research strategy; 3.5) Research design. In this section I describe choices that are particularly significant and give an overview of the methodological approach; 3.6) Methodological approach. I used case studies to understand and explain the nature and characteristics of University-Industry Linkages (UILs) between Thai tourism clusters and their universities. A theoretical framework was developed describing how UILs can enhance the competitiveness of tourism clusters. I used mixed methods to seek to develop a theory relating to case studies. There are two stages of data collection: a pilot case study and four main case studies; 3.7) Methods; 3.8) Discussion of data analysis methods; reliability, validity, and language issues; 3.9) Ethical issues.

Chapter Four: Presentation and Within Case Analysis

This Chapter provides the data presentation in the form of a within case study analysis. It presents the primary and secondary data findings of the research in two stages: the first stage covers cluster formation, the role of actors, and strategy and policy discussed and issued at the national level by governmental and non-governmental bodies. Also for sake of triangulation, a successful cluster is presented in order to give different views of how policies and strategies play an important role in enhancing business through the interaction of different connected bodies like universities and government offices. The second stage of the data presentation covers the primary and secondary data findings from the local level of different geographical clusters. Four case studies, based upon 66 interviews, Reports and documentation are presented so as to reveal the empirical data investigation.

This chapter explains what each case study reveals from the empirical data and presents the empirical data in the form of thematic analysis. The chapter is

structured as follows: 4.1) introduction; 4.2) presents the national level comprehensive illustration of all policies, strategies and role played by governmental and non-governmental bodies in strategy implementation. It also covers a case study that represents a successful cluster; 4.3) presents four Case Studies at the local level in three provinces in three regions: Northeast- Sakon Nakon - Indigo Textile Cluster South- Phuket Tourism Cluster North- Chiang Mai; Edutainment Cluster, and Hotel de Charm Cluster.

Data presentation and analyses are guided by the conceptual framework as explained in the methodology chapter. Data presentation and analysis of all case studies are carried out through different themes and are presented in a flowchart and a tabular format. The summary of Chapter four is presented in the last section, 4.4.

Chapters Five: Analysis and Discussion across case comparison: Answering the 'Why' Question

The purpose of this chapter is to analyse and discuss the empirical findings in order to achieve the first objective of this thesis: to investigate the nature and character of linkages between tourism clusters and universities. The analysis and discussion of data is done across case studies for the sake of comparison and triangulation with literature. The different themes are analysed and discussed across cases and are compared to the literature to confirm, extend or disagree with it. This chapter answers the thesis research question of *"Why do clusters decline or succeed?"* by addressing the theme of Characteristics, Challenges and Cluster Development across case studies. The thesis' research questions will be addressed through a cross case thematic analysis and discussion comprised of major categories of themes as identified during the research while adhering to the working conceptual framework. The thematic analyses are classified into three categories: 1) Characteristics: Current Situation and Strengths and Weaknesses; 2) Challenges: external and internal factors; 3) Cluster Development: Cluster Development: Why was the cluster unsuccessful? What are the Barriers and Key Success factors?

This chapter is structured as follows: Section 5.2 discusses the characteristic of the linkages towards tourism clusters. Section 5.3 discusses the challenges from the general environment that affect tourism clusters through analysing both influential external and internal factors. Section 5.4 examines the cluster development across all case studies and identifies the pattern of the reasons for failure. This section also examines the key success factors indicating the role of universities towards tourism clusters. The different themes are analysed and discussed across cases and are compared to the literature to confirm, extend or disagree with the literature. This chapter concludes with section 5.5 as a summary to all relevant themes analysed and discussed.

Chapter Six: Analysis and Discussion across case comparison: Answering the 'How' Question

The purpose of this chapter is to continue to analyse and discuss the empirical findings in order to achieve the second objective of this thesis: to examine the possible model applicable to improving University – Industry Linkages in Thailand in order to support successful tourism clustering. As in chapter six, the analysis and discussion of data is done across case studies for the sake of comparison and triangulation with the literature. The different themes are analysed and discussed across cases and are compared to the literature to confirm, extend or disagree with it.

This chapter answers the thesis research question of *"How to improve the University-Industry-Linkages and How to enhance the competitiveness of tourism clusters through UILs"* by addressing the themes of Strategic Formation, Strategic Implementation, Triple Helix effects across case studies. The empirical research revealed some important emergent themes, which are analysed and discussed across the case companies as well. These emergent themes are: Leadership and Strategic Entrepreneurship.

The thesis' research questions will be addressed through a cross case thematic analysis and discussion comprised of major categories of themes as identified during the research while adhering to the working conceptual framework. This

chapter is classified into four themes: Theme One: Strategic Formation; Theme Two: Strategic Implementation; Theme Three: Social Networks; Theme Four: Triple Helix effects, Emergent Themes:

This chapter is structured as follows: Section 6.1) introduction; section 6.2) discusses the Strategic Formation of tourism clusters; Section 6.3) examines the Strategic Implementation of tourism clusters; Section 6.4) investigates the Social Network of tourism clusters in relation to the University, Private and Public Sectors; 6.5) investigates the Triple Helix effect of tourism clusters and the Interaction of University, Private and Public Sectors. The emergent themes are analysed and discussed in Section 6.6. Finally Section 6.7 sums up the analysis and discussion and presents the modified conceptual model that explains the effect of the new emergent themes on the initial model.

Chapter Seven: Conclusion

This chapter presents conclusions both referring to theoretical and empirical contributions, including recommendations for the public and private sectors and the university. This chapter is structured as follows: - 7.1) theoretical contribution; derived from the integrated framework that has four components covering Cluster Theory, Triple Helix, Social Networks, Strategic Entrepreneurship towards Tourism Clusters; 7.2) empirical contribution; 7.3) recommendations for the private and public sector and university; 7.4) evaluation of the study and future research derived from this study of the relationship between universities and industry featuring the case study of Thailand's tourism clusters and its limitations, concluding with 7.5 suggestions for future research.

CHAPTER TWO
LITERATURE REVIEW OF ANALYTICAL FRAMEWORK AND THEIR APPLICATIONS

2.1. Overview

The literature review provides an overview of existing research that has a bearing on the research questions. It covers clusters theory, effective clusters, tourism cluster, Triple Helix, University-Industry Linkages (UILs).

The literature review builds on the issue above and has the following objectives:

1. To critically evaluate previously published literature that examines clustering, Triple Helix, UILs, and Social Networking;

2. To identify a gap in the reviewed literature that I would like to research and investigate further;

3. To propose a derived framework and model useful for understanding the development of Thai tourism clusters within the context of Thai society and culture.

The purpose of the literature review is to examine the current theory of clustering and characterize the dynamic of tourism clustering in Thailand and current research on UILs. The concept of Thai tourism clusters with UILs, competence and technology and the view of the innovative tourism cluster as a learning social network. Organisations within clusters gather and exploit knowledge using processes of transfer, accumulation, generation, and socialization.

The first section of the literature review examines the current theory of clustering, cluster formation, cluster decline, and challenges that impact on tourism clusters and the Key Success Factor (KSF) strategy. The second section examines the Triple Helix Model, University-Industry-Linkages (UILs) and explores the role of universities as participants in Thai tourism clusters. The third section considers how social networks trends impact on tourism, effective tourism clusters, and viable strategy including current research on tourism clusters. Then the conceptual framework was constructed; these three framework were selected because of their strengths (see table 2.5)

2.2. Theories on Clustering

2.2.1. Significance and Issue

Clustering as a business cluster development policy, was made fashionable by Porter (1990, 2008) following his works on "Competitive Advantage of Nation" and "On Competition". Porter places much emphasis on innovation and economic growth but less on the social dimension, especially the loose linkages within a cluster that he did not analyze. As Porter (2008: 225) states:-

> *The productivity and prosperity of a location rest not on the industries in which its firms compete, but on how they compete. Firms can be more productive in any industry - shoes, agriculture, or semi-conductors - if they employ sophisticated methods, use advanced technology, and offer unique products and services.*

> *Porter (2008; 225)*

Porter (2008) mentioned, clusters in developing economies tend to be shallow and to rely primarily on foreign components, services, and technology to create innovation so that developing countries need FDI. Porter emphasizes creating unique innovative products by using advanced technology; as a result, he overlooks creative innovation to produce unique products and services by local raw material in emerging economy. This does not always use advance technology as in the US. Chittithaworn *et al* (2011) stated that In Thailand, SMEs account for a large proportion of the total establishments in the various sectors. In the manufacturing sector, for instance, SMEs comprise 93.8 per cent of all establishments. Moreover, of the total number of SMEs, small enterprises comprise 76.0 per cent, while medium companies account for 17.8 per cent of all manufacturing establishments. Meanwhile, it is estimated that 90 per cent of all manufacturing establishments were SMEs, employing some 868,000 workers or 38.9 per cent of the total. Previous studies dealing with the conditions of successful business have focused on large companies rather than SMEs.

SMEs are important in creating economic development within a country (Chittithaworn *et al*, 2011 and Mazzarol, Volery, Doss, and Thein, 1999). One of the important roles of SMEs in this context includes poverty alleviation through job creation. Thai SMEs are increasingly seen as creator of new jobs and Vietnamese SMEs employ 64 per cent of industrial workforce (Swierczek and Ha, 2003). SMEs in Thailand play an important role in the country's economic development. According to statistics provided by NSO (2007), SMEs accounted for 76.1 per cent of all establishments in the manufacturing sector in the year 2007. The largest concentration, by number, of SMEs in Thailand is in the food and beverage sector, textiles, wearing apparel, and wood and wood products (NSO, 2007).SMEs lack of resources such as capital so they cannot hire high skilled employees or professional. Also they do not have budget to invest in IT to make their firms' performance better. However, the public and private sectors and universities at local level can utilise their resources to support them to grow in a sustainable way by helping them to produce unique products and services. The university in particular can help to create innovation that adds value to products and services fostering economic activity and preserving local knowledge that will make local SMEs proud of themselves.

The following sections will examine different cluster definitions, and critically evaluate the role of clusters in fostering economic growth, the nature and character of clusters, cluster formation, cluster development, Why did the clusters decline?, challenges both in external internal Environment and Key Success Factors (KSF).

2.2.2. Definition of cluster

According to Porter (2008: 213-214) clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (for example, universities, standards agencies, and trade associations) in particular fields that compete but also cooperate. Also, he mentioned that the geographic scope of a cluster can range from a single city or state to a country or even a network of neighbouring countries. The terms 'cluster' refers to a local or regional concentration of industrial firms and their support infrastructure that are closely interrelated through traded and non-trading

interdependencies (Bathelt, 2005, 2008). Cristina *et al* (2010) concluding that clusters are important for competition since they increase productivity; they direct the path of innovation and stimulate the formation of new businesses. In addition, the geographical concentrations allow companies to operate with greater productivity in the search for inputs such as specialized labour and specialized machinery and component suppliers, aside from facilitating access to information and technology. An innovative cluster is defined as a large number of inter-related industries with a high degree of collaboration that operate in the same market with the same characteristics (Simmie J. and Sennett J, 1999). Lynch and Morrison (2007) claimed works' Rosenfeld (2001) and Nordin (2003), the distinguish networks from clusters (see table 2.1).

From the perspective of inter-firm networking, Hakansson's (1982) work on the importance of networking supply relations and Lamming (1993) on supply chains as conduits of value, are significant contributions to understanding supply relations (Kinder, 2003). In Callon (1980), Bijker and Law (1992), and Molina's (1993) approach to network analysis each stress the importance of networks for promoting innovation. So in this context, the terms 'cluster' refers to a local interconnected group and its supportive institutions such as the university and public sector in a local environment, where the interaction within a cluster contributed to enhanced levels of local specialization. Nevertheless, in order to respond to the unique demand of sophisticated tourists, and to create unique value, the focus should move from a broad to a niche market. In addition, Porter's (2003) work on Comparative Economic Performance: Selected Middle-and Lower-Income Economies shows that economic performance of Thailand is low (see figure 2.1).
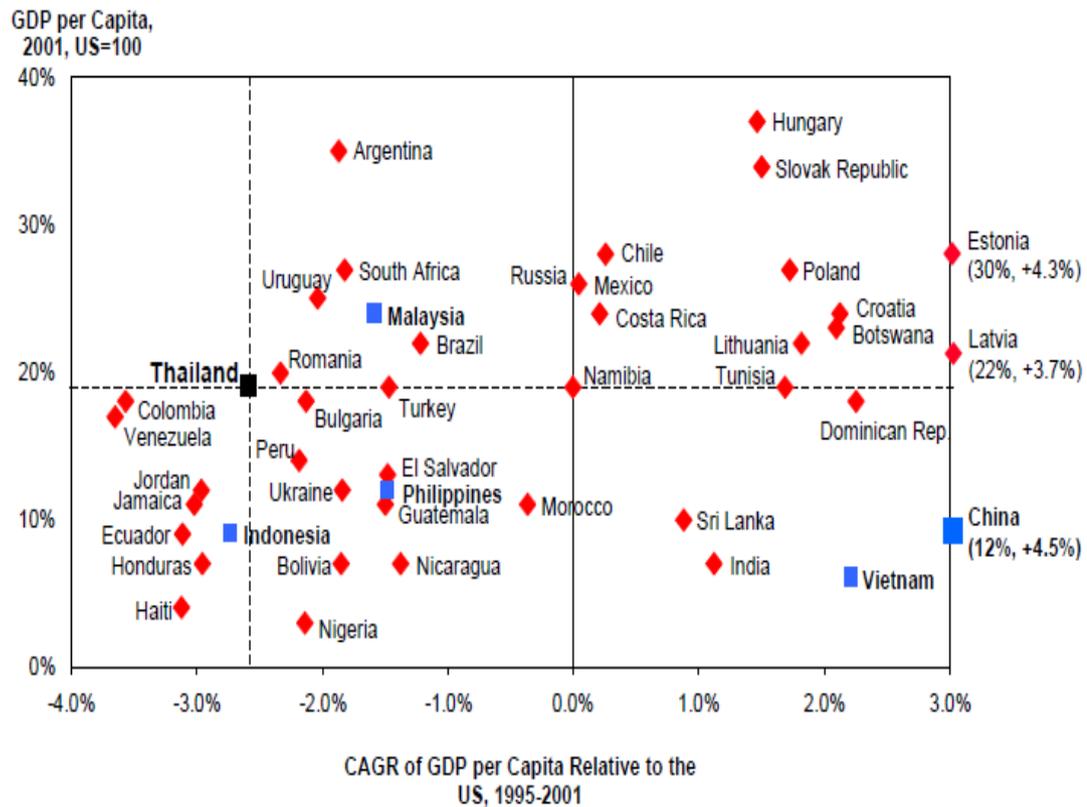
Figure 2.1 Comparative Economic Performance: Selected Middle-and Lower-Income
Economies
Source: World Development Indicator (2002), Porter (2003)

As Brimble and Doner (2007) state, competition from countries with lower wages
and/or stronger technological skills has been intensified by trade liberalization, such
as newly created FTAs and the January 2005 expiration of the Agreement on Textiles
and Clothing. They also mention that Thai firms must meet increasingly tougher
requirements from multinational firms. Competitive pressures for quality, price, and
delivery have elevated the opportunities for local concentrations of value chains
within countries, such as Thailand but the ability to take advantage of these
opportunities depends in no small part on the development of knowledge - centred
capabilities that in turn can be enhanced through UILs (Brimble and Doner (2007).

Feature	Cluster	Network	Lynch and Morrison' Commentary	Siriluk's Commentary
Specialized	Attract needed specialized services to a region	Allow firm to access specialized services at lower cost	Agree	Specialised products and services
Membership	open	Restricted	The reality of clusters is that there is no membership in a strict sense as it is an artificial construction open to all interested	Restricted
Cohesion	Based on social values that foster trust and encourage reciprocity	Based on Contractual agreement	Network descriptive feature ignores informal social networks. Cluster descriptive feature could equally be applied to successful networks	Based on leader, trust and mutual benefits
Function	Generate demand for more firms with similar values and related capabilities	Make it easier for firms to engage in complex production	Agree	Each function emphasised on quality
Cooperation/ Competition	Require both *Competition* cooperation and competition	Based on cooperation	Broadly agree	Based on cooperation
Aims	Have collective visions	Have common business goals	Networks require collective visions as well as goals. Difficult to see how a cluster can really have a collective vision given it is an artificial construction	Have common business goals

Table 2.1 Rosenfield's distinctions between a cluster and a network
Source: Adjusted from Rosenfeld (2001) and Lynch and Morrison (2007)

The cluster definition adopted for this paper is a geographical group of interconnected companies and associated institutions that link their flow of value e.g. knowledge transfer between university and industry.

Cunha and Cunha (2005) define a tourism cluster as a group of companies and institutions bound up to a tourism product or group of products. Such companies and institutions are spatially concentrated and have vertical (within the tourism productive chain) and horizontal relationships (involving factor, jurisdiction and information exchange between similar agents dealing with a tourism product offer). The relations between enterprises and institutions and a tourism cluster can be understood in two ways (Cunha & Cunha, 2005; Rosenfeld, 2001) as follow:

The first way is through horizontal relations. This is done through the creation of strategic alliances, where agreements can be of two kinds: on one side, the agreements between enterprises that have the same principal activity, i.e. among enterprises that deal with lodging, entertainment, transport and catering. On the other side, the agreements between enterprises working with the same group of customer satisfaction, but offering different product components to the customers (tourism service).

The second way is through vertical relations. This is done by the creation of strategic nets, where there is the establishment of a unilateral supplier customer relation among the partners in such a way that the object activities of the agreement are fulfilled by one of the parts, which gives its *output* to the other in exchange for a payment.

 A recent study by Malakauskaite and Navickas (2010) defined a tourism sector cluster that can be described as a geographical concentration of tourism related companies, coordinating institutions, associated tourism organisations, and specialized providers of complementary services. A tourism cluster might embrace city, region, province, country or even a group of countries (macro-region).

So in this study, the term of 'tourism cluster' joins the concept of cluster by Porter (2008), Cunha and Cunha (2005), and Rosenfeld (2001). From Table 2.1 shows

Rosenfield's distinctions between a cluster and a network, In terms of cooperation and competition, he mentioned that cluster requires both cooperation and competition. However, in my point of view, the cluster require cooperation and they do not need to compete to each other, for example, the Pork Cluster in Nakon Ratchasema, entrepreneurs joined together to do many things such as when they join together as the cluster, this help the m to have more power to negotiate with suppliers so they buy raw material at low price. In addition, as a cluster, the public sectors and universities recognize them more and give more support, as a result, they produced differentiated pork products so they did not compete each other. The Pork Cluster in Nakon Ratchasema, is one of few successful clusters in Thailand. Therefore, I defined a 'tourism cluster' as a geographically interconnected group related to tourism activity and their supportive institutions such as the university and public sector in a local environment, where the interaction within cluster contributes to an enhanced level of local specialization including creating strategic alliances and controlling upstream and downstream.

2.2.3. Role of Clusters in Fostering Economic Development

Arguably, there are several sources of evidence that show clusters foster economic development. Starting from Porter (1998) who suggested that while it is essential that clusters form, where they form also matters. In developing economies, a large proportion of economic activity tends to concentrate around capital cities such as Bangkok and Bogota. That is usually because outlying areas lack infrastructure, institutions, and suppliers. The building of tourism clusters in developing economies can be a positive force in improving the outlying infrastructure and in dispersing economic activity. Whilst in the UK, the Department of DTI (1998) and Brown (2000) note that clusters are seen as an effective way of promoting regional local and national economic competitiveness across the UK. The work of Lade (2006) reveals that clusters have been used as a method for shaping economic development in many states and regions of the United States as well as in regions worldwide. Cunha and Cunha (2005) claimed in UNWTO (2004) that tourism is a sector that favours local

development because it generates jobs, increases the income of workers and stimulates capital investments through new business opportunities, which results in the establishment of new organisations, including SMEs, among other advantages.

From the perspective of tourism cluster development, clustering might be at its most effective in non-metropolitan environments when the activities of the co-located industries are based on visitation, in that an increase in the demand for travel enhances the need for the complementary growth of support industries that deliver visitors, and services as studied by Michael (2007b). In addition, he states that the result of the tourism-based cluster formations might add to the multipliers and externality effects, and serve to accelerate the opportunities for new forms of economic wealth by creating a demand for a host of complementary activities which in turn generate their own effect.

As in the case of the tourism community network in Sweden studied by Gibson and Lynch (2007), up until 2003, around €3.8 million had been invested in the different attractions to make them suitable as tourist facilities; e.g., converting old mines to visitors' centers and the provision of exhibition space.

The tenets of successful clustering, which seems to drive competitive advantage based on the co-operative and mutually supportive linkages among the cluster's industries, have only been tested in areas which are already regionally successful, such as Silicon Valley and Boston Massachusetts (Michael, 2008; Porter, 1998). Also, research conducted by Kenny (2008) mentions that in Silicon Valley, clusters have benefited from the dot-com boom, communication equipment and that employment grew from approximately 20,000 in the 1980s to more than 50,000 in the late 1990s. He also states that in 2000 the total valuation of about 370 Internet-related firms had reached US$1.5 trillion.

For many years, the tourism sector regretted that the government and population in general, systematically ignored its economic and social importance. However, in recent years, these "complaints" have been corrected and governments have increasingly recognized the economic importance of tourism " (Cristina, *et al*., 2010;

Crouch & Farrell, 2004). Today, tourism has proven to be a prodigious source of value creation and employment. Studies by Fernando and Long (2012), and Nordin (2003), state that tourism and travel, are important parts of the service economy and, according to United Nation World Tourism Organisation (UNWTO), are the world's largest industry. Moreover, it is predicted to be one of the few industries that will continue to generate job opportunities in future. However, tourism clustering particularly is under researched. The boundaries of the tourism and travel industry are fairly difficult to discern and therefore its extent is hard to measure - diversifying into many sectors such as restaurants, hotels, airlines, travel agents, shopping complexes etc.

Even so, it has attracted only little scholarly attention in the past towards a model for evaluating the impacts of tourism for local development (Cunha and Cunha, 2005). Fernando and Long (2012), and Ferreira and Estevao (2009), expressed the view that tourism is a powerful instrument at national and regional level, but discussions exploring tourism clustering are still in an embryonic phase.

As Michael and Hall (2007) argue, while the large-scale project may well be a grand gesture that politicians and lobbyists support by virtue that 'they are seen to be doing something' in a time of increasing competition between places (Malecki, 2004), it is more likely that unspectacular gradual change will be more economically and socially sustainable (Hall, 2007). They also stated that the micro-clusters model has applications beyond the broader clusters approach proposed by Porter (1990), which has proved useful in the analysis of the benefits from co-location in large-scale regions, but which has less relevance to the circumstances that apply in micro or local environments.

The evidence showed that clusters can foster the economy of the country as they generate huge revenue and jobs opportunities. However, if the cluster is the tool for increasing the competitiveness of the nation, the government should pay attention beyond the national level and big cities. Evidently, clusters are aggregated in the big cities and most are on a large scale. So the public sector ignores the local level such as villages because the public sector wants to see big impact as their achievement

rather than micro clusters at the local level of the small town or villages with the result that they don't see the significance to economic development and so do not pay attention to this local level. So if the cluster fosters economic development to what extent should the government be involved in clusters?

2.2.4. Role of government

There are several studies showing that the government can play an important and positive role in relation to clusters. For example, the SRC/ERC, RRC, Industrial Technology Foundation Building project, TIC, Technopark and Industry-Academia Cooperation Agency of Universities has encouraged the Kyungpook National University to play an active role in the development of its city's economy. Porter (2008) stated that basic role of the government in relation to clusters is to facilitate cluster development and upgrading. Iordache *et al* (2010) argued that macroeconomic policy needs to focus on tourism development actions initiated by government, but also on cooperation between regions or countries which include tourism among their economic priorities in order to achieve common goals by focusing their efforts and resources. They also stated that interest or lack of interest shown by public authorities to sustainable economic growth can be revealed to a certain extent by its tourism policy and its effects in the short-term on the contribution to the economic development of the country or region, or in the long-term − on strengthening the economy before economic crisis and in the more competitive global market economy and improving the country's image in the international community. However as Wirudchawong (2012) has argued in connection with the philosophy of Community-Based Tourism, which is under the main traditional tourism industry, we cannot expect much by way of financial support. Community-Based tourism needs a strong commitment from the government sector and recognition that it can be a tool for improving human resources, quality of life, conserving culture and the environment.

Previous studies above showed the role of the government in relation to clusters. However, in case of Thai clusters, problems were identified and strategic plans were formulated, the solutions are elusive. Cluster initiatives are one mechanism that

many governments want to use to increase competitiveness of the country. USAID and the Thai government established Thailand Competitiveness Initiative (TCI) in order to recover from the Asian Financial Crisis.

2.2.5. Cluster formation

Clusters can arise in many ways from government policy or from the private sector. As Porter (2008) mentioned, one prominent motivation for the formation of early companies is the availability of pools of factors, such as specialized skills, university research expertise, an efficient physical location, or particularly good or appropriate infrastructure. He also mentioned that clusters may also arise from unusual, sophisticated, or stringent local demand such as in Israel and Finland. In addition, high-tech cluster formation has been associated with Stanford, the universities in North Carolina, in Boston and in Cambridge, United Kingdom, following heavy investment in science park facilities by the university, private developers and local governments. However, in all these instances, several other factors contributed to the growth of the cluster: large Multinational Corporation (MNC), defense spending, academic entrepreneurs, urban developers, financiers, and others (Hershberg *et al*.,2007). Thus the birth of clusters can be top-down or bottom-up, leading to different characters of clusters such as natural, cultural or IT clusters.

2.2.6 The Nature and Character of Clusters

Tourism research is multidisciplinary dealing with the production of its related services, the location of its places, the psychology and choices of its consumers, the marketing of its products, the management and administration of its businesses, the planning for its infrastructure, and in terms of the policy implications that tourism creates for the communities and regions where it occurs (Michael, 2008). Michael also states that one of the problems confronting the tourism researcher is how to constitute tourism as a separable form of human behaviour; this has proved difficult to contain and define. As Kinder and Molina (2003) point out a cluster is a synthetic concept requiring wider dimensions, that is, analysis from various dimensions (spatiality, relationship, knowledge, and network).

This study argues that a cluster has several dimensions. In order to define the notion of cluster, economic and social terms have been used. The clusters may take the form of industrial parks, small towns or major cities. Most countries generally exhibit a size and activity distribution of cities (Gabaix, 1999a, 1999b), with different ranges of activities taking place in different centres (McCann, 2008). On the other hand, the cluster can be a small group in a village linking with the public sector and university.

The clusters based on Porter's approach, are broad and inclusive without emphasizing any particular industries or areas. For example, he states:

> *While we can identify national characteristics that apply to many industries, my experience has been that these are overshadowed in actual competition by particular and often industry-specific circumstances, choices, and outcomes.*
>
> (Porter, 1990)

In terms of Thailand's competitiveness, Porter's (2003) analysis is that growth after the Asian crisis was driven by devaluation. Even though Thailand has not been able to increase the revenue per tourist since tourists reduced their spending in terms of the US-dollar, he argues that Thailand's labour productivity is far behind leading Asian economies and productivity growth is lagging badly (Porter, 2003). As Porter explained in figure 2.2 Thailand's advantages derive from beautiful natural resources, but the country is disadvantaged by its low skill labour. If the private and public sectors in relation to tourism activities and the university work closely to identify gaps and formulate short and long term plans in tourism human resources planning, this weakness should be improved and be better prepared for influential external factors such as Socio-technological factor and ASEAN Economic Community (AEC). Therefore, Thailand cannot rely solely on natural resources anymore and must prepare for the challenges ahead. Thailand cannot compete with mass products and with cheap labour. A small developing country like Thailand must bring local knowledge with help from universities to develop unique products and services through innovation. An added-value is that each area has its own unique charming stories

National Business Environment

Overview Thailand's Relative Strengths and Weaknesses

Firm Strategy, Structure and Rivalry	

+Inward foreign investment has raised the level of competition–Most companies compete on low input costs and invest little in creating capabilities

–Complex, high tariffs and weak anti-trust laws impede competition

–Government bureaucracy and corruption create significant costs

Factor (Input) Condition

Demand Condition

Related and Supporting Industries

Factor (Input)
+Thailand has a rich wildlife, beautiful location, and some natural resources
+ Infrastructure in Bangkok is overtaxed
–The general skill level of the Thai labour force is low, and educational programs do not match company needs
–Communication networks are expensive and weak outside of Bangkok
–Inadequate development of financial markets

-Most Thai clusters are focused on a few labors
-intensive stages of their industries' value chain
–Cluster organisations exist, but tend to be focused solely on lobbying+

–Local Thai demand tends to be unsophisticated and does not generally lead international trends
+In pick-up trucks, however, Thailand is one of the most developed markets

Figure 2.2 Diamond model
Source: Porter, 2003

2.2.7 Challenges

The challenges referred to in this study come from the external environments that make organisations related to tourism adjust their own organisation to be able compete.

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2.2.7.1 External Environment

There are several external environments that have affected tourism such as socio-technology, the world economic crisis, global tourism trends such as going green, wellbeing and oriental food, the world economic crisis, natural disasters, ASEAN Economic Community (AEC).

a) Socio-technological factor

Over the last few decades, Information Communication Technologies (ICTs) have dramatically changed people's everyday life such as the way people work, live or connect to society. The Computer Industry Almanac estimates that nearly 625 million people or 6.7 per cent of the global population had Internet access worldwide in June 2001 (Buhalis, 2003). The question might be raised as to what is the relationship between the percentage of internet users and the number of tourists. It is evident from the work of Buhalis (2003) that most (86 per cent) on-line adults claimed to be travellers and most on-line leisure travel planners claim that they plan their trips on the Internet. In addition, PricewaterhouseCoopers (2009) state that the number of internet users in Asia increased by 14 per cent from 2007 to 2008, representing the largest increase of any region in the world. Within the region, India has highest rate of adoption, where the growth was 27 per cent. Interestingly, the number has been increasing significantly in developing countries, especially new destinations such as China which United Nation World Tourism Organization (UNWTO) forecast will be the top destination in 2020 (Dwyer *et al.,* 2008).

In terms of the impact of ICT on the tourism industry, there are several forces that drive the tourism industry using ICTs: the first one is the external environment e.g. globalisation which drives competition. In order to survive and grow, an entrepreneur has to find ways of managing its organisation effectively and efficiently. To do so, it needs new advanced technology instead of using the traditional ways of dealing with environmental change. Importantly, new advanced technology can assist entrepreneurs make better decisions since they have to face difficulties in environmental uncertainty. Next is the sophisticated customer. Since tourists

nowadays are young and well educated, they have special needs to which entrepreneurs have to respond quickly and individually. Then, to deal with competitors, ICTs can assist an organisation to improve productivity and reduce costs. For example, using the Internet instead of traditional ways such as telephone calls to connect with customers can help organisations respond to customers immediately when customers have problems. Since ICTs respond to both customers and entrepreneurs effectively, this has resulted in dramatically increased supply and demand.

b) Demand-driven Tourism

The number of people travelling across the world has increased dramatically, due to reasons such as work affluence, personal lifestyle, and low cost airlines. These tourists may be well educated and familiar with technologies; they have diverse lifestyles and different needs. Thus, wherever they travel they need to connect to their social networks via the Internet. These Internet users enjoy their lifestyles and do many things via the Internet such as buying books, music, making reservations, renting cars online, and buying air tickets.

It was predicted that European on-line shopping will grow by 2742.5 per cent from 678 million Euros in 1998 to 18.6 billion Euros in 2003 (Buhalis, 2003: 118). In addition, the OECD's 2008 statistics (Seoul Finance Internet News, 2009), Korea was ranked number one in terms of the percentage of homes with Internet access, at 80.6 per cent of the total population (Kim et al, 2011). The survey also reported that two-thirds of Koreans with access to the Internet at home are online shoppers (Kim et al, 2011). Many tourism companies now actively use Internet sites as a key marketing and sales vehicle for their products and services. To be successful, tourism e-commerce services must be trustworthy (Kim et al, 2011). Increasingly, Internet users who shop online are likely to travel; they have high expectations from entrepreneurs to respond to their specific needs. If entrepreneurs fail to meet the specific needs of their customers, ultimately, they will lose those customers and have to close their businesses. In addition, entrepreneurs cannot deceive sophisticated customers since customers always check the information before make a decision. For

instance, if a hotel owner shows hotel pictures that differ from the real one, when customers find out, they will post this information on the Internet. Word of mouth in social networking on the Internet is very powerful. As a result, entrepreneurs cannot afford to deceive. The only way forward for them is to upgrade to meet the needs of customers who now have very different requirements. Tourists in the digital generation are not only interested in sand sea and sun, as in the past, but are also interested in learning about local culture and taking care of the environment. Since tourists have different needs, entrepreneurs need to adjust by responding to specific needs so as to generate a niche quality market. In short, in a knowledge-based society, the Internet empowers its users to become sophisticated tourists who are affecting the ways entrepreneurs have done business for decades. Thus, if entrepreneurs have a vision and realize these opportunities, they will achieve their goals.

The question is how to create the unique products or services that meet the unique customers (niche market) Segmentation is the important thing that tourism clusters should target who are their real customers? How can Thai tourism clusters respond to customers' needs? Do they have the capacity to do so? Do the government or universities support tourism clusters attempting to reach their target groups or goals with limited resources? Importantly, entrepreneurs should be aware of high competitiveness and must adjust themselves.

c) Supply-driven Tourism

Due to globalisation, highly increased competition, and responding to sophisticated customers, entrepreneurs need to use ICTs for many purposes. Then they must manage all the functions of their organisation effectively and efficiently; improve the quality of their products/services; create new products and services, and communicate with stakeholders effectively. To meet these demands, large firms can invest in new technologies since they have sound finance. On the other hand, Small and Medium Tourism Enterprises (SMTEs) are reluctant to adopt new advanced technologies since they lack resources such as money and technical expertise. Nevertheless, ICTs can be both opportunities and threats to SMTEs. There are a

number of SMTEs that adopt new advanced technologies and improve their competitiveness. It is estimated that more than 90 per cent of hotels are Small Medium Tourism Enterprises (SMTEs) and are family-managed (Buhalis, 2003; Di Gregorio and Shane, 2003; Shaw and Williams, 1990; Sheldon, 1993).

Braun and Hollick's work (2006) in the sharingof tourism knowledge online shows that the project can raise industry standards and move away from ineffective silo approaches to industry training and capacity. One example is the Ayrshire network studied by Lynch and Morison (2007) which shows that the success of its network comes from several factors such as the e-business portal and the Scottish Enterprise Tourism Innovation Toolkit. However these two enterprises could not have become successful without support at the local and national level.

In short, due to strong competition within the tourism industry, ICTs have increasingly played an important part in the strategic management of organisations. Inevitably, to compete globally, entrepreneurs ought to take advantage of the new advanced technologies; but entrepreneurs alone cannot achieve their goals due to a lack of resources. Thus, networks or clusters with support at the local/ regional and national levels should be one of the possible alternatives for an entrepreneur. How can challenges affect the performance of the cluster? Porter (2008) emphasised that the limited explanatory role of chance raises serious doubts about whether clusters can be seeded in locations where no important advantages already exist. How about small groups in villages and whether they can develop into a cluster and grow even though they do not have any important advantages. Can the university and public sector support them to grow sustainably as they are the grassroots of the country?

2.2.8 Cluster development

There is no guarantee that the cluster will develop; once the process gets started it is like a chain reaction in which the lines of causality quickly become blurred. (Porter, 2008: 256). He also emphasized that the process depends heavily on the efficacy of the 'Diamond's' arrows or feedback loops, on how well, for example, local educational, regulatory, and other institutions respond to the cluster's needs, or how rapidly capable suppliers respond to the cluster opportunity. Furthermore, he

highlighted that three particular areas deserve special attention: intensity of local competition, the location's overall environment for new business formation, and the efficacy of formal and informal mechanisms for bringing cluster participants together (Porter, 2008: 256). This is not always the case in terms of intensity of local competition if the cluster has unique products and services that differentiate it from others which cannot find substitute products or services. Still the clusters need other institutions to support them.

Competitive advantage in tourism is no longer from natural resources, but is increasingly man-made, driven by information technology and innovation. As such it is not simply the stock of natural resources that will determine its share in the tourism market, but how the resources are managed and integrated with other competencies to create the competitive advantage for that destination. Hence it is worth questioning "why are many destinations in developing countries that are characterized by an abundance of resources and cost advantages, are not able to create wealth and prosperity in tourism?" (Fernando and Long, 2012).

In a national or global economy, cluster development can be greatly accelerated by attracting cluster participants from other states or nations. A growing cluster begins to attract in-bound foreign direct investment (FDI) in the form of manufacturing or service operations and supplier facilities (Porter, 2008). However, to gain real competitive advantage, the cluster should develop reliance internally and not from FDI. Evidently when the financial crisis happened, foreign investment flowed out of the country – this means that any tourism cluster should pay close attention to building its own competency to survive and grow in a sustainable way Otherwise when foreign investment flows out, the cluster will decline.

2.2.9 Why did the cluster decline?

The causes of cluster atrophy and decline can also be found in the elements of the 'Diamond'. They can be grouped into two broad categories: endogenous, or deriving from the location itself, and exogenous, or due to developments or discontinuities in the external environment (Porter, 2008: 259). He points out, based on numerous studies, that internal sources of decline stem from internal rigidities that diminish

productivity and innovation. It appears that clusters require a decade or more to develop depth and to gain real competitive advantage - one reason why government attempts to create clusters normally fail.

External threats to cluster success arise in several areas. Technological discontinuities are perhaps the most significant because they neutralize many cluster advantages simultaneously. Market information, employee skills, scientific and technical expertise, and supplier bases may be rendered inappropriate. Unless the requisite new technologies and skills are available from other local institutions or can be rapidly developed, competitive advantage will shift to another location (Porter, 2008: 260). Boja (2011) mentioned that decline and possible dissolution of clusters is generated by relocating to better cost-effective regions of large companies representing the cluster core, by technology changes or by economic events that have major effects such wars or crises.

Technology may be important but it is not the most significant in terms of tourism. Technology can help entrepreneurs within clusters do their business efficiently and link participants within and outside clusters. However, if technology is good but with poor service, the cluster definitely cannot survive.

A shift in buyer needs, creating a divergence between local needs and needs elsewhere, constitutes another external threat to cluster productivity and innovation (Porter, 2008: 260). Why do some clusters arise and grow whilst others decline? What are the key significant factors that make clusters a success?

2.2.10 Key Success Factors (KSF)

There are three critical success factors (see Fig. 2.3) that underpin cluster success: networks and partnerships, strong skills base and innovation and R&D capacity (DTI, n.d.). Gibson and Lynch (2007) claim that significant factors such as benefits, communication, leadership that have been attributed to the success of tourism networks have been identified by Morrison, Lynch, and John (2004), drawing on the work of Augustyn and Knowles (2000), Littlejohn, Foley, and Lennon (1996) and

Morrison (1994, 1996). Also, the study emphasizes that trust is very important in all the networks and clusters (Liyanage, 1995). As Porter (2008: 215) states, clusters are the driving force in increasing exports and magnets for attracting foreign investment. A study by Mongkhonvanit (2008) shows that to maintain their exploitation of resources and low skilled/low-cost labour, multinational corporations do not transfer technology and skill to their host countries. Thus, it is impossible for underdeveloped and developing countries to be equal partners and to become competitively developed.

Figure 2.3 Critical success factor indentified within global literature search
Source: DTI, n.d.

It can be argued that slower, organic growth by indigenous clusters is preferable at this stage in Thailand's development, since foreign capital has proven fickle and volatile: in Thailand's case foreign investors too readily withdraw for short-term reasons which interrupt the learning and development processes in tourism clusters.

2.3 Triple Helix Model

This section analyzes the framework of the Triple Helix, in order to explain the significance of UILs. It covers the Triple helix model in various countries, University-Industry Linkages (UILs), the role of the university in a Knowledge-based Economy, the role of the university in developed countries, the role of university in developing countries, UILs in developed countries, UILs in developing countries, UILs in Thailand, barriers to UILs and Thai tourism clusters and effective UILs and Thai tourism.

2.3.1 Triple Helix model

According on Brennan, 2004, a combination of economic and political liberalisation has served to induce changes in the higher education landscape worldwide. The global context is dominated by free market ideas and international trends towards privatisation, reinforced by the influential advisory role of the World Bank and the International Monetary Fund (Brennan, 2004). Transformation processes are everywhere taking place against this backdrop. South Africa, for instance, embarked on an economic strategy in 1996 (labelled "Growth, Employment and Redistribution") widely seen as:

> *"A shift away from the Keynesian/welfarist emphasis .... to a neo-liberal strategy of privatisation, ending government subsidies and a reduction in the fiscal deficits through cuts in public spending, including increased introduction of user fees to subsidise public provision". (Harber, 2003: 13)*

One fundamental characteristic of the liberalisation of higher education is the diversification that resulted from the decentralisation of public institutions and the emergence of private providers. In most countries, traditional public universities failed to meet the new demands that resulted from universal primary and secondary education schemes and from the restructuring of the economy (Brennan, 2004). Diversification through the development of post-secondary vocational institutes was therefore seen by governments as a way of increasing access to higher education without compromising the standards of major state universities. Diversification

through the encouragement of a growing private sector of higher education was meant to shift the burden of educational costs from the state to the private sector and the families of students (Brennan, 2004).

The triple helix becomes manifest in the establishment of technology transfer departments at universities, the creation of incubators for technology-based enterprises, and the establishment of science parks. Etzkowitz (2003) argues that innovation is increasingly based upon a "Triple Helix" of university-industry-government interactions. The increased importance of knowledge and the role of the university in the incubation of technology-based firms have given it a more prominent place in the institutional firmament. The entrepreneurial university takes a proactive stance in putting knowledge to use and in broadening the input into the creation of academic knowledge. Thus it operates according to an interactive rather than a linear model of innovation. As firms raise their technological level, they move closer to an academic model, engaging in higher levels of training and in sharing of knowledge. Government acts as a public entrepreneur and venture capitalist in addition to its traditional regulatory role in setting the rules of the game. Moving beyond product development, innovation then becomes an endogenous process of "taking the role of the other", encouraging hybridization among the institutional spheres.

Figure 2.4 From triple helix model etalistic
Source: Etzkowitz (2002).

According to the Triple Helix framework, increased interactions are associated with transformation within the internal culture and norms of universities (Edqvist, 1997; Etzkowitz and Leydesdorff, 2000; Leydesdorff, 1997; Lundvall, 1988; Mongkonvanit, 2008; Mowery and Sampat, 2004; Nelson, 1993; Nowotny, 2001)

In the third model in Figure 2.4 labelled as Etatistic model, the nation state encompasses academia and industry, for example, the former Soviet Union, and some European and Latin American countries, in a previous era when state-owned industries were predominant.

The second model in Figure 2.4 labelled as Laissez-faire model. Etzkowitz (2000) argues that in a knowledge-based economy, the university becomes a key element of the innovation system both as human capital provider and seedbed for new firms. There is a similar transformation in the mission of economic and social development. Instead of a focus on an individual patent or technology transfer, there is a concern with the university playing a broader role in its region. Sometimes, as in Portugal, where regional political entities are weak, the university plays the role of regional innovation organizer (RIO) bringing together local businesses and municipalities to develop an innovation strategy.

The first model in Figure 2.4 labelled as Triple helix model is the creation of trilateral linkages, networks, and organisations among the three helices, serving to institutionalize and reproduce interface as well as stimulate organisational creativity and regional cohesiveness. For example, groups such as the Knowledge Circle in Amsterdam, the New York Academy of Sciences and Joint Venture Silicon Valley encourage interaction among members of the three spheres, leading to new ideas and joint projects that might not otherwise have emerged from interaction within a single sphere or from bilateral relations (Etzkowitz, et al., 2000).

For Thailand, the public universities are under the government whereas industry is independent from the government. The government allocates budgets through the

Budget Department. In 2002 the announcement of the Minister of University Affairs on System, Criteria, and Internal Quality Assurance System in Higher Education Institutions, 2002 was issued to serve as the operational guideline (SEAMED RIHED & OHEC, 2010).

In addition, in terms of the mission statement of universities in Thailand, it is stated policy both in private and public universities that besides producing graduates and doing research, the universities have to provide academic services to communities. Even Etzkowitz realizes the increasing importance of the university, but as an entrepreneurial university not in terms of academic service: he overlooks the mission of universities in countries such as Thailand. In summary, my argument is that local universities under the government were assigned in Quality Assurance (QA) to support local communities by helping tourism clusters at local levels to grow in a sustainable way. However if the universities turn into entrepreneurial universities as in the US, they will be eager to meet only big companies who can provide funds to the university. Consequently it is the academic service function, especially for developing countries, that is missed by this model. In addition Etzkowitz mentioned only science and technology policy. Actually, besides technology, universities can help in other areas such as innovation by creating new products and services for a niche market.

2.3.2 Triple helix model in various countries

Etzkowitz (2002) analyses the university business incubator in the context of a triple helix of university-industry-government. He concludes that incubation is an exemplar of the triple helix model of university–industry–government relations. From divergent starting points in different parts of the world, there is a movement towards university–industry–government networks aimed at the incubation of new enterprises. This model, (which had at its core the university as a source of new technologies and firms), had its origins at MIT (Massachusetts Institute of Technology) and Stanford at the early 20th century.

Since the introduction of the incubator concept in the mid-1980s, incubators have developed rapidly in Brazil, gaining support from universities, government at

federal, state and local levels and industry associations. In order to create jobs, the Graduate School of Engineering of the Federal University of Rio de Janeiro formed people's cooperatives. The university invited low-income people from the slums for training, shaping them into a group cooperative to perform services and then sending them out into the world as an organisation. These popular cooperative incubators were seen as successful and were extended through a national program to other parts of Brazil.

The extra-networked incubator, typified in the University of Albany model brings together heterogeneous elements from various sources to create new hybrid organisations. The University at Albany in the US lacked a sufficient research base to systematically develop new technology firms, the traditional incubator function. To generate critical mass, the university invited local high-tech start-ups, R&D units of larger firms, laboratories from the state government and research groups from the university into the incubator. The objective was to attract funds from the state and federal governments to develop new research centres.

Etzkowitz (2002) concludes that as the academic entrepreneurial paradigm takes hold, interface capabilities spread throughout the university. Within academic departments and centres, faculty members and other technical personnel may be assigned special responsibility to assess the commercial salience of research findings and encourage interaction with external partners. For example, a faculty member in the Columbia University Medical School divides her time between traditional academic and technology transfer responsibilities. The success of incubation will ultimately be seen in the disappearance of the incubator as a separate entity in a remote or off-campus site. The university will play a more prominent role in society, through exchanging functions with industry and government, and by creating the pre-conditions for regional economic and social development. The structure of the triple helix depicts the university as a regional innovation organizer.

Other studies by Leydesdorff and Meyer (2003) focused on interconnections between the university, industry and government, whereby industries have to assess in what way and to what extent they decide to internalize R&D functions.

Universities position themselves in markets, both regionally and globally. Governments make informed trade-offs between investments in industrial policies, S&T policies, and/or delicate and balanced interventions at the structural level. They conclude that such policies can be expected to be successful insofar as one can anticipate and/or follow trends. Etzkowitz (2008) argues that cooperation between government, industrial, and academic actors can extend innovation into a new mode of production within a region, across a national innovation system. For example, Italy's industrial districts of low-tech firms are increasingly outmoded. They need closer ties to knowledge producing organisations to innovate, and its mid-tech firms are in decline. Under these conditions, the university's potential as an engine of renewal for existing firms, and a source of new knowledge-based firms, moves onto the global economic, academic, and innovation agenda.

Leydesdorff and Meyer (2003) reflected interaction among three entities very broadly and only in the R&D function. They addressed policy but as discuss earlier, policy alone cannot succeed without action/implementation. In addition, in terms of the university, there are varieties of universities. For example, in Thailand public universities depend on government policy and the university plan must be consistent with the national plan otherwise they will not obtain the budget. Whereas private universities have more choices and can adjust themselves to suit the circumstance so they can position themselves more easily to meet the market. Therefore the question arises as to how the universities position themselves in the market and, in the future, what is the most important role of the universities if they turn into entrepreneurial universities? Additionally, should all public universities become entrepreneurial as in the US and Singapore?

Overall, most previous theories addressed particular aspects of entrepreneurial universities. However, if the university shifts to being an entrepreneurial university, some academics feel uncomfortable because they fear interference in their teaching and research roles. So the university has to find a balance within its own mission. In addition, the university plays a socio-economic role as part of social development and serving society.

2.3.3 University-Industry Linkages (UILs)

University-Industry Linkages (UILs) in this study refer to the relationship between the university and industry with the aim of increasing performance and effectiveness of tourism clusters.

2.3.3.1 Role of Universities

This section provides a picture of the different roles of universities between developed and developing countries and what these factors mean to the nation. In the knowledge-based economy, knowledge has become the most important asset of an organisation. At the same time, globalisation has affected organisations all around the world. Consequently, organisations must find new ways, such as new products or innovation, to survive and prosper. Whereas the university is the source of knowledge, it can respond to the needs of the organisations to assist them to survive by utilizing university knowledge. In the past this function was not as important as its core function. However, recently, the knowledge exploitation mission has been increasing dramatically.

Resulting from the work of Molas-Gallart (2002), many governments around the world now feel that the role of universities in the emerging knowledge economy is of growing significance. The triple helix model suggests that universities perform a driving role in identifying strengths and weaknesses in a regional innovation environment and leading, or co-leading, the development of innovation strategies based on knowledge capitalization and other capital formation projects (Etzkowitz, 2002, 2002b; Wever and Stam, 1999)

In recent years there has been discussion about whether universities can encompass a third mission of economic development, in addition to research and teaching (Etzkowitz and Leydesdorff, 2000; Leydesdorff and Meyer, 2003; Piergiovanni and Santarelli, 2001). They defined the third stream as activities mainly concerned with the generation, use, application and exploitation of knowledge and other university capabilities outside academic environments. Gunasekara (2006) explores the role of universities regarding regional innovation systems. My argument is that political

and economic conditions in a region influence the role that a university performs in regional agglomeration. For example, buoyant economic conditions prevailing in a region influence the demand for university-industry linkages because these conditions tend to attract industry partners that are exploring new ventures (Piergiovanni and Santarelli, 2001; Wever and Stam, 1999). My perspective is therefore one of bottom-up development that recognises the situated role of universities in developing economies.

2.3.3.2 Role of the university in developed countries

The formation of industrial consulting and scientific instrumentation firms by scientists also took place in the late nineteenth century at Harvard and MIT but were anomalies at the time (Etzkowitz, 1998). In the study of the dynamic and growing cluster of ICT firms in Waterloo, Canada, the University of Waterloo clearly emerge as a strong example of an entrepreneurial research university which plays a key role in the local economy. In the USA, universities are gradually extending their activities deeper into the technology transfer process (Etzkowitz, *et al.*, 2000). Furthermore, his study of MIT highlights the importance of the science-based research strengths of that university as a key explanation of its role in the development of the regional system (Etzkowitz, 2002).

Several studies highlight the role of universities in developed countries. For example, Jacob *et al.* (2003) focused on universities in developed countries as knowledge producers and transfer agents that play a larger role in industrial innovation as providers of human capital and as the seed from which new firms grow. According by Mowery and Sampat (2005), in many countries, national governments have provided support for technology transfer initiatives via legislation to facilitate technological diffusion from universities to firms (e.g., the Bayh-Dole Act of 1980 and collaborative research e.g., the National Cooperative Research Act of 1984); have provided subsidies for research joint ventures involving universities and firms (e.g. the European Union's Framework Programs and the U.S. Commerce Department's Advanced Technology Program and have shared use of expertise and laboratory facilities. Mowery *et al.* (2004); Siegel (2006); Rothaermel *et al* (2007)

reflected that in many developed countries, universities have become increasing entrepreneurial, whereas in the UK, central government has reduced university research funding and demanded that universities seek alternative sources of funding; as a result, the universities have had to undertake activities that attract industrial funding or find innovative ways to generate income (Virasa, 2011).

In addition, in Continental Europe and Latin America, where many universities are state-controlled, there has been a gradual shift towards an increased autonomy of the university from the state and closer engagement with industry (Virasa, 2011).

Since the governments in developed countries have reduced grant research funding for universities they have consequently had to work closely with the private sector, especially big companies. This circumstance also tends to occur in developing countries.

2.3.3.3 Role of the University in Developing Countries

According Liefner and Schiller (2008), education is the most basic requirement of any technological upgrading (see also Hobday, 2000:156; Lall, 2000:41–46). Tertiary education, in contrast to primary and secondary education, becomes important as soon as firms move beyond the stage of carrying out low-wage production functions and start producing more sophisticated products or using technology-intensive processes. Especially, this is so, as Lall (2000:27) and Wong (1997:201) argue, when firms start setting up in-house R&D they need university-trained employees. The study by Brimble and Doner (2007), universities in Thailand are shifting towards an increased autonomy from the government and a closer engagement with industry. In a developing country like Thailand which still relies on natural resources and low labour, entrepreneurs need to move beyond these points to create their own unique products or services in order to survive. However entrepreneurs in Thailand have not paid attention to innovation. They are likely to concentrate on how to minimize cost even when the labour cost increases; obviously from the textile-garment industry, entrepreneurs tend to hire immigrants from neighbouring countries such as Laos, Vietnam, and Burma. However, this option can

no longer compete with a country like China. The only way for a firm to compete is to upgrade its level by joining a cluster, since an entrepreneur realizes how risky its business is due to limited resources. Even the cluster still has limited capabilities. That is where the universities come to play an important role for clusters in helping them to improve productivity and create unique products or services. Bell and Pavitt (1997:116), though focusing upon technology accumulation, see universities only as part of the infrastructure surrounding companies, contributing primarily to the factor personnel qualifications (see also Gereffi, 1995:82). This may have something to do with severe shortcomings that usually hinder universities in developing countries from fulfilling their functions successfully (see below; Liu and Jiang, 2001:182). Recently, however, both political and academic interest in the role of universities in developing countries has risen. The World Bank devoted its 1998/1999 report to knowledge development, and the main topic of the 2005 UNIDO Industrial Development Report is the role of knowledge systems for *capability building for catching-up*, which further emphasises the extension of the role of universities in technological upgrading of developing countries.

2.3.3.4. University-Industry Linkages in Developed Countries

Many countries are seeking to strengthen global economic competitiveness by building knowledge economy capability. A popular approach is supporting university–industry knowledge exchange linkages. Acworth's (2008) paper examines the formation of the Knowledge Integration Community (KIC) model at the Cambridge-MIT Institute. The paper shows how a model developed by the Cambridge-MIT Institute (CMI) for the UK offers a more effective approach to knowledge sharing and presents the results from one of the first projects launched by CMI. He then looked at the background literature and relevant government policy, benchmarked peer grant-making organisations, studied the Massachusetts Institute of Technology and Cambridge University institutions, and organized expert consultation through a strategic planning process which included 27 stakeholder groups. The paper by Acworth (2008) shows how a model developed by the Cambridge-MIT Institute (CMI) for the UK offers a more effective approach to knowledge sharing, and presents the results from the Silent Aircraft KIC

(Knowledge Integration Community), the case study of the first projects launched by CMI. While there are a number of factors influencing the success of technology transfer from universities, intermediary functions are cited as having an important role - in particular the role of intermediaries in facilitating links between universities and the potential users of knowledge, notably, commercial firms (Howells, 2006).

In the CMI-KIC case, Acworth (2008) identifies the key intermediary elements as follows: 1) scale; the larger and more established the university in terms of experience, staff, finances and research funding, the greater the likely number of spin-outs (O'Shea, 2005). Other studies add venture capital (Di Gregorio & Shane, 2003; Wright, Lockett, Clarysse, and Binks, 2006); 2) and the social factors – non-hierarchical social structures, breakaway teams - as well as financial frameworks-patent-management strategies, financing, stock option ownership (Lecuyer, 2006); 3) and the innovation partnerships that can boost research collaboration between universities and businesses (Roberts, 2002).

In the context of developed countries, the UILs activities are practical for example at the Toyohashi University of Technology (TUT) sponsored by the Minister of Education, Sports, Culture, Science and Technology (MEXT) program of International Cooperation Initiative in Education. The Tokai area where TUT is located has a variety of industries dominated by automobile industries and TUT has good experiences of joint research activities with these industries (Homma *et al*, 2008). Whilst, as Olds (2007) argues, the 1997-98 Asian economic crisis, and the rise of China as a manufacturing powerhouse, has unsettled Singapore and forced the country's politicians and officials to think more creatively about ensuring Singapore adapts to and benefit from an evolving global knowledge-based economy (KBE). In this context a shift from low value added manufacturing-based export platform status to high value added manufacturing/global city status is occurring.

In summary, from the previous cases even both KIC and TUT are situated in developed countries, they performed well because they had a great deal on support from their governments. Thus interaction among government and non-government bodies is one of the important factors that make projects successful or fail. Similarly,

this interaction should be applied in developing countries and in all areas not only in technology and science.

2.3.3.5 University-Industry Linkages in Developing Countries

Several studies show the interaction among the private and public sector and universities. For example, the supply of skills has supported regional and urban economic growth (Gaspar and Glaeser, 1998; Kim, 2000). D'Costa (2006) argues that in Bangalore, the UILs are still weak, as are innovation generating capabilities of research entities. The broad mass of SMEs is extremely limited, and inter-firm collaboration among firms in Bangalore is minimal, although contact with foreign clients is frequent and relatively close. In the context of China's national system of innovation, each region has a different role for UILs. Chen and Kenney (2005) describe Bejing and Zhenzhen as having a core of high technology firms and their regions exhibit cluster-like features. In the case of Beijing, UILs are a critical source of knowledge, and entrepreneurs have fuelled the creation of an IT and media based cluster.

The paper by Basant and Chandra (2007) assesses UILs in the context of India's national systems of innovation and concludes that several of the academic institutions of Pune and Bangalore interact with the city's industrial firms and service providers in a variety of ways. Many universities are gearing themselves up to participate in a more systematic manner, however, only a few have any knowledge of networking activities with the various businesses taking root in these urban centres.

Wu (2007) examines the economic contribution made by two universities in Shanghai (Fudan and Jiaotong) and found that although these two universities have been successful in commercializing their research findings, streamlining such UILs in China still faces two institutional shortcomings; one is the weak legal system in terms of well-defined property rights and in contract enforcement, and the other is a shortage of venture capitalists.

The paper by Matthews and Hu (2007) concludes that Taiwan has already demonstrated how Newly Industrialized Country (NIC) can build an export-oriented manufacturing system driven by catch-up strategies linked to knowledge leverage via public institutions. In the 1990s, Taiwan moved toward building its innovative capacity, and in the 2000s it is dramatically upgrading the role of universities in providing fundamental R&D, in acting as incubators of new, knowledge-based firms, and in building the country's innovative potential through IP protection and commercializing activities. They examine how these new approaches are being implemented in three universities, in National Chiao Tung University, National Tsing Huua University-both located in the Taipei metropolitan area, as well as in the industrial Technology Research Institute which has been the engine that drives Taiwan's technological updating, and continues its role through new emphases on patenting and entrepreneurial technology transfer.

Thus it is not only the innovation factor alone that drives the organisation successfully but other factors such as social factors. Kodama and Suzuki (2007 demonstrate that UILs in Japan are based not so much on direct technology transfer, as seen in the United States, and grounded in formal/legal arrangements, but rather on the transfer of knowledge through indirect channels, which can accommodate better the existing informal relationships between universities and industry in Japan.

The faculties of engineering of the University of Moratuwa and University of Peradeniya in Sri Lanka employ several mechanisms for the purpose of executing activities related to UILs. These mechanisms are undergraduate projects with some industry component, consultancy tasks by the faculty members at the request of industry, and other outreach activities such as seminars, workshops, testing etc. The Engineering Design Centre of the Faculty of engineering and the University Industry Interaction Cell were both established with the assistance of the Asian Development Bank assistance (Homma *et al*, 2008).

From previous studies both in developed and developing countries, university-industry linkages (UILs) are an important means for transferring knowledge to support the private sector. However how the university utilizes the intellectual

capital need not only be in engineering and technology. Etzkowitz focuses on the entrepreneurial university and technology to create innovation. Thus UILs both in developed and developing countries focus on economic development but not on social development. However, previous studies in developing countries have shown the links to be weak. They try to develop in the manner of the developed countries especially in technology. We cannot deny that technology has huge benefits but the developing countries do not have to do everything to look modern as the developed countries. Each has its own identity. Therefore, UILs in this study identify the gap that Etzkowitz's model lacks in terms of academic service. In addition, there are few studies in Triple Helix in tourism, for example, studied by Dahle (2007) in innovative mountain tourism in Norway that focuses on developing mountain tourism into profit. However, tourism has generated huge revenues for Thailand since the 1950's but the country still relies on selling beautiful natural resources without real development. So how does the current situation of UILs in Thailand stand? What does the role of UILs play in tourism?

2.3.3.6 University-Industry Linkages (UILs) in Thailand

There are some Thai UILs studies. For example, Mongkhonvanit (2008) mentioned in Thailand's Eighth (1997-2001), Ninth (2002-2006), and Tenth (2007-2011) Economic and Social Development Plans, there has been an assignment for universities to support the industrial sector through research, innovation production and the generation of individuals with science- and technology-relevant industrial needs. Furthermore, he stated that the Thai government also supports firms and SMEs in the automotive and other sectors through science and technology related institutes/agencies, and government-sponsored organisations. Another study by Intarakumnerd and Schiller (2008) emphasised that appropriate explanations of UILs in developing countries are still lacking and UILs in Thailand are still weak. Mongkhonvanit (2008) examines the linkages and factors influencing relationships between universities and companies in Thailand's automotive cluster. Findings from his research show universities, as important players in the knowledge-based cluster, through three major schemes; the first one is to produce graduates highly relevant to the needs of related sectors; the second is to conduct basic and applied research; and

the last is to collaborate with organisation/institute and industry to create new technology/innovations. He found that there are several challenges: 1) universities do not produce highly qualified and industrially relevant graduates, 2) universities do not understand the nature of industry, 3) universities do not have sufficient resources, 4) universities are not recognized as a critical player in the economy, and 5) universities do not seriously cooperate among themselves and with other related sectors.

From previous study and because of the Thaksin government's policy to shape Thailand as the 'Detroit of Asia', all public and private sector and universities focused on the government policy. Nevertheless, they overlooked the tourism industry even when every government said tourism is important. As long as the country still can sell beautiful natural resources, the government will never take this seriously and prepare for the future as if saying ' the thing isn't broken, don't fix it.' Problems such as the environment and low skilled manpower have emerged but no government has taken serious action.

The study by Brimble (2007) explained that Thai firms are generally not strong on UILs, on protection and low levels of competitive threats, on informal connections, on low levels of cohesion within and among sectors/associations; on a focus on lobbying; and have an inability to reconcile the interests of members. Bureaucratic fragmentation is a key supply-side issue combined with weak SME policies and lack of support for UIL initiatives. Successes tend to be in cases where larger firms have faced serious pressures: such as the shrimp industry – its vulnerability, foreign exchange earning potential, CP leverage, etc. This paper explores university–industry linkages (UILs)—or more specifically, linkages between industry and advanced educational institutions—in Thailand. Because they are key components in the country's national innovation system (NIS), UILs can help Thai producers to ''initiate, import, modify and diffuse technology'' (Freeman, 1987). As such, their importance has grown: Thailand's needs for technological competences have become more pressing as the country loses its cheap labour advantage and confronts new competitive pressures. He also recommended that universities could be improved by establishing a track record, culture, and strategic plans, to enhance trust

and mutual recognition that could lead to collaboration and eventually transform the automotive cluster into a knowledge-based and competitive cluster (Hershberg, et al., 2007).
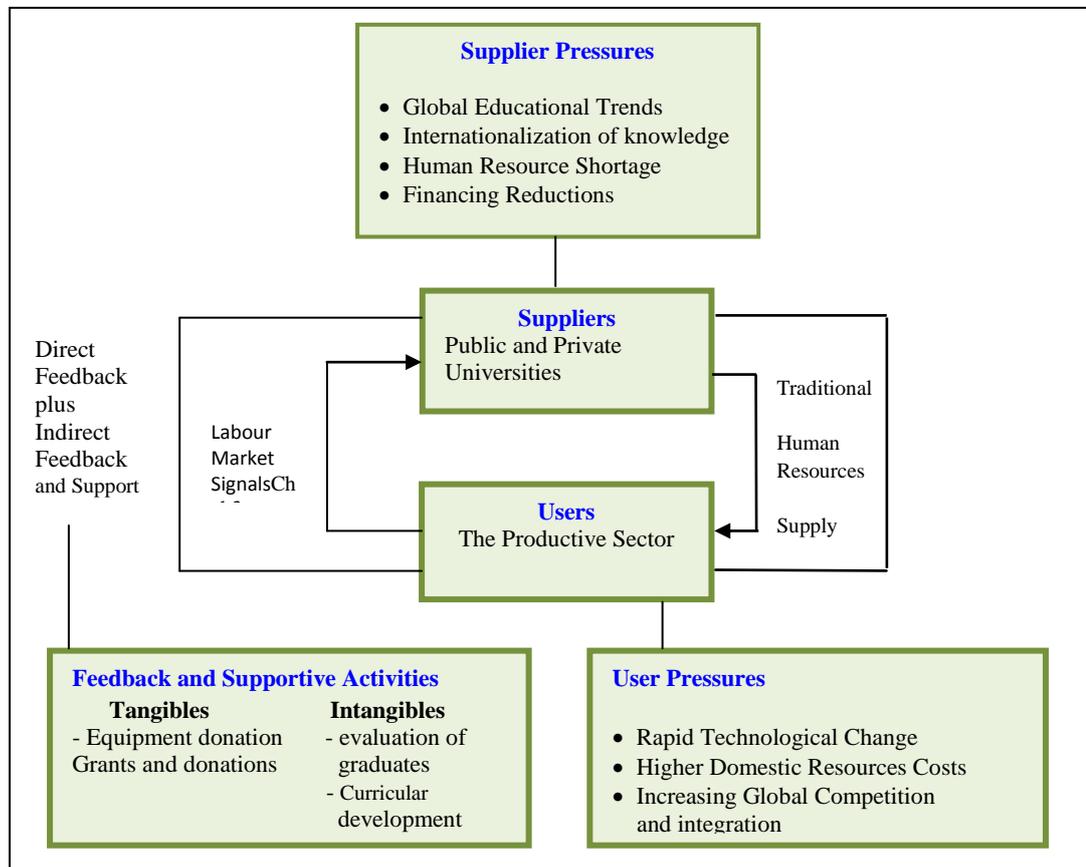
Figure 2.5 University-Industry Linkages: A Macroeconomic Perspective

Source: Adjust from Brimble (2007)

Universities can also play a key role in helping both in term of technology and developing the identity in each local area to make it aware and outstanding in customer's eyes. In addition, Brimble and Doner (2007) claimed in work by Baba (1988) in terms of type of linkage activities as illustrated in Table 2.2below.

_____

Modality group	Type of linkage activity
Training/education Industrial training Entrepreneurship Visiting lectureship	- Cooperative education
Service/consulting Technology brokerage/licensing Business consulting/services Direct or indirect investments Coordination of technology-related issues	- industrial extension service
Research Joint or cooperative research projects Partnership contact Personnel interchange or industrial fellowships Shared equipment or facilities	- Research consulting

_____

Table 2.2 Models of University-Industry Linkages in Thailand
Source; Adapted from Baba (1985, 1988); Brimble and Doner (2007)

In short, it can be said that globalisation has had a dramatic influence on Thai universities. For example in terms of the tourism industry, sophisticated tourists use the Internet, and so to deal with them effectively the university needs to provide some updating courses such as e-business for hotel and tourism management students who will work in the tourism industry, or even aim to be entrepreneurs. Also, in terms of innovation, the university can cooperate with entrepreneurs and create tools that work well. However, there are several significant obstacles that prevent UILs work effectively.

2.3.4 Barriers to UILs

Various bodies of literature in relation to barriers of UILs such as the study by Salter *et al* (2009), Dasgupta and David (1996) have focused on the core of the obstacles to U–I collaborations, namely the different institutional norms governing public and private knowledge. Although within these practical-oriented areas of research the norms of science still operate, they do so somewhat differently from the Mertonian ideal of science. Researchers in these areas are more likely to be engaged on real world problems and interacting with industry and their status is likely to be co-

determined by their reputation among their peers and their standing in industry. This is especially true in the case of engineering (Mowery and Sampat, 2004). In contrast to the relatively open nature of the science system, the process of knowledge creation in the private sector is dominated by attempts to appropriate the economic value of what firms know in order to gain competitive advantage (Lundvall, 1988). They may also participate in open source software projects to help lower the costs of their own development activities (Nelson, 1993).

Much of the research supported by government is applied, or practically oriented, and focused on solving general social, technical or economic problems using the capabilities of science (Edqvist, 1997). Similarly, the policy of Thai government such as financial support through universities has significantly influenced industry indirectly or indirectly. The role of the university as an educator of professionals – doctors, engineers, accountants, lawyers, etc. – means that a large proportion of their staff are focused on fields of research that engage with practical problems. For the researchers working in such areas, practical problems provide a powerful stimulus to the development of new ideas (Gibbons et al., 1994).

Despite these examples of openness, the primary motivation of firms' knowledge creation activities is the appropriation of knowledge for private gain, and openness to external actors is used as a strategic mechanism to gain advantage over competitors (Nowotny, et al., 2001). The increase in university patenting has been accompanied by a slowdown in joint research collaborations (Etzkowitz & Leydesdorff, 1997) and in the pace of private knowledge exploitation across a number of technological areas (Leydesdorff, 1997). It is also clear that in some cases, attempts by universities to capture the commercial benefits from research have led to significant distributional conflicts between universities and their industrial partners (Morrison, et al., 2002; SEAMED RIHED & OHEC, 2010). These distributional conflicts are often accentuated by the unrealistic expectations held by universities about the commercial potential of university research (Molas-Gallart, 2002), which can result in their overvaluing IP. These types of conflicts with

TTOs and university administrations may put a significant strain on collaborations, eventually deterring firms from collaborating with universities.

2.3.4.1 Barriers to UILs and Thai tourism clusters

In the meantime a cluster has its own characteristics and its own strategies so it has different kinds of problem. Thus there are several significant external and internal barriers such as the attitude of participants and the strategy and the policy of the government that prevent tourism clusters from achieving their goals. Tourism is fundamentally different from most other foreign trade in that it has a high culture change potential and because it involves large numbers of people in direct person-to-person contact (Ketudat, 1990). The further question, given that tourism is a service industry, is how the university assists the tourism cluster to create value-added. There is little study in this area. As tourism is an integrated activity, the multilateral meetings which include government organisations, local people and the private sector, especially business investors, should be regularly organized to establish a network of tourism, training institutes and organisations in rural areas (Rattanawongchai, 1998).

The role of responsible authorities in both the private and public sectors has to be clearly defined. Strong cooperation between the public and private sectors can create more competitive rural tourism. Education and training in management and finance for small businesses is a crucial factor. Groups of experts should be available to provide advisory services to rural communities engaged in tourism development. In addition, there should be continuous research on how to maximize the economic benefits from tourism in a sustainable way (Rattanawongchai, 1998). However, tourism destination competitiveness, in particular, is becoming an area of growing interest among tourism researchers (Dahle, 2007; Gaspar and Glaeser, 1998; Jacob, *et al*., 2003; Molas-Gallart, *et al*., 2002; Rothaermel, *et al*., 2007; Siegel, 2006). Virasa (2011) considers that

> *"At a time when tourism worldwide is becoming increasingly competitive . . .*
> *all insights into the development, strengths, and weaknesses of competing*
> *destinations will become even more crucial."*

Peacock and Ladkin (2002) explore the relationships between a university and its local tourism industry. Although there has been much research on the interface between education and industry, few empirical studies exist that test the extent and nature of these relationships. This paper reviews the industry–education interface both in broad terms and specifically in relation to tourism education. Key areas of interaction are identified, and, using an empirical case study, various types of industry–education links are investigated, including: recruitment, employers' preferences in graduate skills, work experience and placements, industry involvement in course design, training for the tourism industry, the use by industry of university products and services, and industry's views on forging links with education.

The work of Braun (2002, 2004, 2005) shows that embracing ICT and technology is still a complex and phase-based process for SMEs; the top-down and technology-driven initiative undertaken on behalf of this tourism network left local operators with no sense of belonging and no perceived sense of value in virtual clustering. In addition, the National Economic and Social Development Board (NESDB) (1994) did an in-depth study of the labour force situation among middle-and high-level personnel within the tourism industry and indicated that the quantity of graduates from the educational institutions was sufficient to serve the demands of the industry (Littlejohn, *et al*., 1996). However, there were problems in terms of quality since the graduates' qualifications were not up to the standards required by the employers.

Enright and Newton (2005) provide strong empirical support for the inclusion of both industry-level and destination attributes in studies of tourism competitiveness and found that the relative importance of attributes is common across locations depending on product mix and target market segments, especially in complex, multifaceted industries such as tourism. Chaisawat (1996) indicated that the unsolved problems and constraints in running hospitality and tourism programs in universities/institutes still existed.

Previous studies concentrated on several significant barriers that affected tourism clusters such as lack of clarity in the roles of actors; and universities do not have

enough qualified staff in the tourism industry. However if the university top management understands that the interaction within tourism clusters will create benefits for all entities, then the universities themselves will gain deep understanding from the real situation that tourism is dynamic and so can adjust their own curriculum. At the same time, the private sector gains benefits as well: for example, it gets graduates who can work as they want, which is better than having to train them which is costly. How does the role of UILs play out in tourism?

2.3.5 Effective UILs and Thai tourism clusters

Globalisation has had a dramatic effect on the way people live and do business. In terms of the tourism industry social factors impinge, such as the life style of sophisticated tourists normally searching for information before traveling and doing transactions via the Internet. So the organisations related to tourism need to adjust themselves in response to these unique tourists. However, it is not only technology that needs to be utilized but human skills also need to be developed.

The case studies analysis of successful cluster formations by Michael (2007b) concludes that co-location by itself does not lead to integration with other aspects of tourism, nor to synergies with other parts of the market; rather, that effective clustering is a deliberate business development strategy based on co-operative practices, not just between firms within a market segment but across a broader industry.

In the study by Baum and Sziva (2000), it is widely argued that people are vital for the successful delivery of tourism services and, as a consequence, those who work in tourism are widely portrayed as a critical dimension in the successful operation of business within the sector.

> *"The story of successful of businesses is one that is largely about people-how they are recruited; how they are managed; how they are trained and educated; how they are valued and rewarded; and how they are supported through a process of continuous learning and career development.*

In order to create effective UILs to support clusters, it must have a synergy between supporting industries such as the university and the cluster.

As UNWTO mentions, given the huge number of tourists traveling, there is a requirement for skills such as language, how to communicate, and how to deal with problems and so on to satisfy niche markets. All these things need to be born in mind by those in tourism related sectors in government since tourism generates significant revenue for the country and for universities since they produce graduates for this industry. None of this happens by accident (Baum, 2008).

In sum, the role of the university is significant in producing qualified graduates to deal with a dynamic changing world. Consequently, universities should adjust their curriculum to meet the customers' wants, such as providing a range of language courses so that students can communicate with tourists. In addition, students should learn to use technology to make their performance efficient and effective. Thus how to utilize technology and human skills to increase the competitiveness of the cluster is a 'must' that universities need to provide to students for the benefit all parties.

2.4 Social Network

Social (including knowledge) networking, at a strategic level, is said to sustain industrial district flexible specialization (Piore and Sabel, 1984) since the information networks are the organisational form of dominant activities (Castells, 2000). Castells also emphasised that from the social view, the real power is the power of instrumental flows and cultural codes embedded in networks, and pointed out that social network theory is still in its exploratory stage and open to rectification by empirical research.

The following sections examined social flows, physical flows, knowledge flows and value flows (see figure 2.6). Clusters, especially localised clusters, such as tourism in Thailand, are bound together by *social glue*. At the local level people know and learn to trust one another – these are the social flows that according to Hall *et al* (2007) sustain micro-clustering by creating a shared knowledge base aligned with shared goals related to what will make the cluster successful. A great deal of research supports the view that social flows are of paramount importance to localised clustering, including Middleto, 2001; Hall, 2005; Hall and Rusher, 2005; Cioccio and Michael, 2006; Hall et al 2007). The goals (often implicitly) agreed in

social flows are both economic and social. For example, Jackson's (2006) research income inequalities in China, reveals that within localised (inland) tourism clusters, a shared goal is to reduce inequality gaps between themselves and the coastal areas, by adopting closer coordination and networking. One reason why insufficient attention is paid to *social flows* as a key element in cluster building, is that Porter's work (1995 and 1998) identifies markets as the only drivers of clustering: this is clearly at odds with the powerful body of evidence cited above, which acknowledges social (in addition to market) forces as a key element in clustering, especially localised clustering.

My study argued that a closer analysis of the value flow in Thai tourism clusters reveals them to be important conduits of knowledge and therefore a significant component in a closer relationship between innovation and knowledge especially the link between the Thai tourism cluster and its universities. The contribution of this study is to increase understanding of content and flows to assist clusters and to provide theoretically robust tools for policy makers and practitioners within Thai tourism clusters.
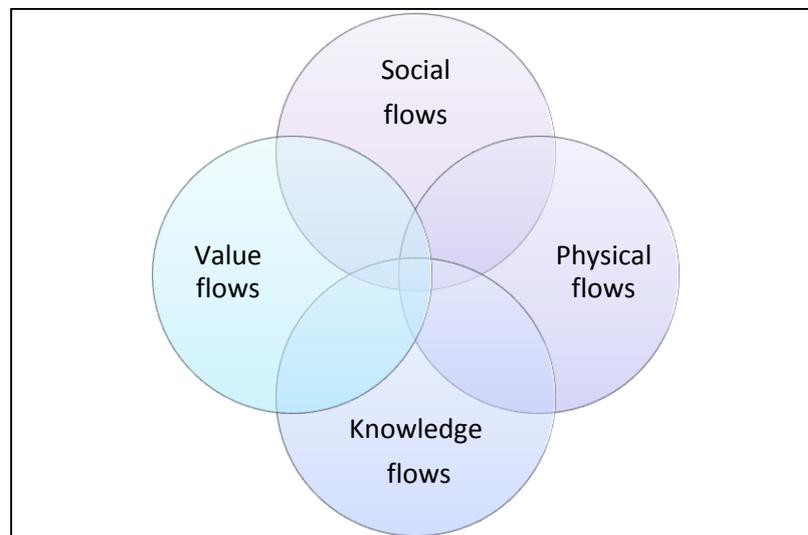
Figure 2.6 Model of flows
Source: Adjusted from Kinder (2003)

Gibson and Lynch (2007) point out that tourism is connected to geographical places or communities with a social and cultural history. This research merges with the

work on political, economic and social dimensions that contribute to rural tourism areas (see, e.g.,Elbe, 2002; Hall, 2000; Karlsson, 1994; Muller, 1999). The benefits of clustering are available to all the cluster's members driven by the economic dynamics of the context of regional and local development (Michael, 2007a). Kinder (2003) stated that recent studies have focused on the dynamic efficiencies that emanate from learning at the cluster level which emphasise the importance of knowledge flows to firms, social and relational capital, and the capabilities of firms as critical factors necessary for the continued success and growth of industrial clusters. Each case study will have the same analytical structure based on the model of flows (see table 2.3) adapted from Kinder (2003), "Flows in Business Supply Networks."

	Flows in networked business Supply relationships	**Characteristics of flows in supply networks**	**Siriluk's Commentary**
Social Flows	Interaction between people or collections of people	Appropriate governances and types of power in use is a function of the quality relationships in the network.	In terms of tourism cluster, interaction among three entities use both formal and informal ways and inside and outside cluster
Physical Flows	Changes in tangible shape and or material location	The creation, manipulation and location of materials, commodities, parts and subassemblies and proprietary goods or services.	Changes in tangible assets including the budget allocation to support the cluster.
Quality Flows (value)	Value flows dictate where in a supply stream value is added and how it is then distributed	Technological production influences who creates and who accrues value. Value may take non-monetary forms.	In terms of tourism industry, personalization can be response to unique needs of sophisticated tourists. In addition, well trained workers will be needed in service industry. Also, each destination should present its own identity.
knowledge Flows	Knowledge generation, transfer, socialization or accumulation from the viewpoint of knowledge management or of learning	Power within networks may dictate how the benefits of knowledge are distributed.	Intellectual capital collectively helps to increase the competitive advantage of the cluster.

Table 2.3 The flows model in business supply networks

Source: Adjusted from Kinder (2003).

2.4.1 Social Flows

There is an approach that identifies a number of key factors that contribute to the way in which a complex set of institutions and actors, comprising the innovation system or the cluster respectively, contribute to the process of innovation and economic growth (Porter, 1998, 1999, 2000, 2008; Nordicity Group, 1996; Boston Consulting Group, 2000; Wolfe, 2000). Recent work by Wolfe (1997, 2000), Amin and Thrif (1995), Saxenian (1994), and Storper (1997) found that innovation is fundamentally a geographical process: facilitated, though not necessarily contained, by spatial clustering of the involved parties within the same region.

In studies conducted by Lynch and Gison (2007), the tourism network called Guldriket was established (1993) to protect the cultural and historical heritage of Vasterbotten, given the extent of its mining and geological history. Also, in other studies by the same authors in 2001 and 2004, the 'Leith Initiatives for Tourism' (LIFT) was created in 1999 to focus on networking or social activities as well as marketing actions, such as: 'familiarisation trips', a 'waterfront festival' and various 'social drinks and networking events'.

2.4.2 Physical Flows

Cooke (1992) argues that the proactive use of economic regulatory mechanisms creates differential incentives and opportunities. Additionally, Castells (2000, p. 199) writes as follows:

> *"In Japan, government backed its guidance with powerful financial and fiscal measures, as well as with selective support for strategic R&D programs. At the core of government industrial policy was the activity of the Ministry of International Trade and Industry (MITI), which periodically elaborated vision for Japan's development trajectory. The MITI targeted specific industries for their competitive potential, and provided a number of incentives, such as tax breaks, subsidies, market and technology information, and support for R&D and personnel training."*
>
> *(Castells, 2000: p.199).*

To analyze the value flow approach, this network will be informed by actual structures that depend on governances agreed as suitable for the goals participants

set for the network (Kinder, 2003). Access to capital, human resources, marketing and commercial infrastructure are constrained by the physical difficulties of a locality's distance and relative isolation from the main centres of economic activity, serving to increase cost structures even if there exists an attractive tourism activity at that particular locality (Michael, 2007). This is true in small tourism communities in Thailand.

2.4.3 Knowledge Flows

In terms of learning and exchange in a comparison of the Guldriket and Leith studies, Gibson and Lynch (2007) explain that in the Guldriket case there was increased communication between the operators of attractions across local municipality borders, helped by the website and an Internet. They also state that the network has contributed to the development of new cultural values, including an enhanced appreciation of the region's industrial heritage. While in Leith, there is evidence of knowledge transfer through visits to LIFT members' businesses and through participation in a tourism education process through e-commerce seminars and the like. Political and social institutions, along with various policies, can play a crucial role in supporting the emergence and development of partnering activities among firms and stimulating the transformation of such networks into broader systems of innovation and production (Basant, 2008). In fact, in most of the European success stories of networking in industrial clusters, regional and local governments played a crucial role as for instance Knowledge-Integration Community (KIC) projects.

2.4.4 Value Flows

Networks and clusters can help in the innovation process of tourism SMEs (Ahuja, 2000; Fukugawa, 2006; Haga, 2005; Holbrook and Wolfe, 2005; Liyanage, 1995; Mtteo, Aste, and Gallegati, 2005; Perryman and Combs, 2005). There is a correlation between competitiveness produced by clusters and the ability of members to improve their services and products through inter-firm linkages and

innovative business approaches (Enright & Newton, 2005). In terms of value-added matters, Michael (2007a) mentions in the study of Brandenburger and Nalebuff (1997:14-15):

> *Thinking complements is a different way of thinking about business. It is about finding ways to make the pie bigger rather than fighting with competitors over a fixed pie. To benefit from this insight, think about how to expand the pie by developing new complements or making existing complements more affordable.*

> *(Brandenburger and Nalebuff, 1997)*

Carlisle *et al's* (2013) study of innovation and entrepreneurship provides concludes that value-flows are essential in advancing the quality of the international tourism industry. For Less Economically Developed Countries (LEDCs) tourism innovation is an opportunity to differentiate the tourism product making it more competitive and increasing socio-economic gains at grassroots level counteracting foreign currency leakages from the destination. Drawing upon empirical research in Africa, Carlisle *et al* (2013) shows that for small indigenous businesses in LEDC destinations to flourish a supportive environment promoting innovation and entrepreneurship is required. The paper emphasises the importance of multi-stakeholder collaboration. Value-flows, seeks to increase the value flowing to local (as opposed to international) businesses and govern the distribution of value between local businesses demonstrating the importance of institutional support in stimulating networking, transfer of knowledge and best practice in LEDC destinations.

2.5 Synthesis

2.5.1 Synthesis of Conceptual framework

Model	Author	Strengths	Weakness	Argument
Clustering	Porter (2008)	-Entity Competitive Advantage	-Not clear boundary -Relation -Function is not clear -Lack of mechanics of control	-Discuss on national level not in local level and niche market - Not in social dimension - Not in relationship linkage within cluster -Discuss only innovation from advanced technology
Triple Helix	Etkowitz (2002)	-Interaction among parties -Incubation	-Entrepreneurial university	- Entrepreneurial university-funding/JV with big companies so less interested in rural development -Role of university-academic service
Social networking	Castells (2000)	-Social dimension	-Informal -not clear boundary -volunteer/lack of commitment -in its exploratory stage -inadequate study of UILS in service industry in particular the tourism industry, in Thailand.	-Commitment -Knowledge flows/ Value flows

Table 2.4 Synthesis of Conceptual Framework; Source: Author

Table 2.4 demonstrates the synthesis in my conceptual framework seeking to align the market (competitive advantage) elements found in Porter (2008), with the importance of university-industry-government interactions emphasised in Etozowitz's (2008) triple helix. The alignment of these market and non-market forces is governed by social networking (Castells 2000) requiring local actors to cooperate to create and distribute value flows, based around social networks that engender trust and shared destiny. My synthesis overcomes some of the weaknesses in Porter's (2008) model, principally an under-theorisation of the processes of cluster building; in particular, I call attention to the importance of cluster boundaries and causal relationships in localised clusters, a feature receiving no attention from Porter.

The significance of cluster theory by Porter (2008), there are strengths as the interconnected group in join to produce specialised products which lead to

competitive advantage of the group. However, there are several weaknesses of theory such as there is no clear function and boundary and lack of mechanics to control and lack of commitment. Next, a Triple Helix of university-industry-government interactions is the key to innovation in increasing knowledge-based societies (Etzowitz, 2008), however, he emphasised on entrepreneurial university but overlook on academic service. Whereas Social Networking has strength on social dimension but it is no clear boundary and lack of commitment and was studied on exploratory stage.

2.5.2 Synthesis of Studies of Tourism Clusters

Table 2.5 below demonstrates the value of my theoretical synthesis, by illustrating its application to empirical studies in various countries. For example, Acworth (2008) focus on Knowledge Ingration Community (KIC) Project in UK. The KIC model developed by the Cambridge-MIT Institute (CMI) for the UK offers a more effective approach to knowledge sharing, and presents the results from the Silent Aircraft KIC. While there are a number of factors influencing the success of technology transfer from universities, intermediary functions are cited as having an important role - in particular the role of intermediaries in facilitating links between universities and the potential users of knowledge. The KIC project seeks to integrate several organisations both government and non-government and universities to help communities, and has a huge budget from the government. CMI may have overstated its capacity to engage participation from all sizes and types of business from large corporations to small and medium enterprises (SMEs) and start-ups. Olds (2007) examined the Singapore case as a shift from low value added manufacturing-based export platform status to high value added manufacturing/global city status is occurring, as a result, Singapore's attempts to become the "Boston of the East", (a global knowledge-based hub associated with innovation, creativity, informed debates, and significant UILs. The National University of Singapore shifted from manpower provider and knowledge creator to taking on a knowledge commercialization and recruitment of foreign talent. As a result, the university pays no attention to academic service. Another study by Intarakumnerd and Schiller

(2008) emphasised that appropriate explanations of UILs in developing countries are still lacking and UILs in Thailand are still weak. Bringing together theory from clustering, triple helix and social network theory adds important analytical dimensions from which to understand the previous empirical research shown in Table 2.6.

UILs	Author	Characteristics	University	Strength	Weakness
UK	Acworth (2008)	Knowledge Integration Community (KIC)	Cambridge-MIT Institute	-Knowledge exchange -Government support - £85 million	-Claim to apply to all types of organisation -Several organisations with different objectives
China	Chen and Kenney (2005) and Wu (2007)	High technology/ Media based cluster	- Bejing –creation of IT and media based cluster - universities in Shanghai (Fudan and Jiaotong)	-Beijing, UILs are a critical source of knowledge - Fudan and Jiaotong- two universities success in commercializing	Two institutional shortcomings; weak legal system -property rights and in contract enforcement and shortage of venture capitalists
India	Basant & Chandra (2007)	NSI	Institutions of Pune and Bangalore interact with the city's industrial firms and services providers	-Many universities are gearing themselves up to participate in a more systematic manner.	-Few universities have knowledge of networking activities with the various businesses taking root in these urban centres.
Sing-apore	Olds (2007)	Entrepreneurial university	National university of Singapore	-Shift from manpower provider and knowledge creator to taking on a knowledge commercialization and recruitment of foreign talent. -Joint operation with foreign universities	- Overlook on academic service -Rely on famous foreign universities
Tai wan	Matthews and Hu (2007)	Innovative	Implemented in three universities, in National Chiao Tung University , National Tsing Hua University	Since 2000s - the role of universities act as incubators of new, knowledge-based in the Taipei metropolitan area, as well as in the industrial Technology Research Institute (ITRI) which has been the engine that has driven Taiwan's technological updating, and continues its role through new emphases on patenting and entrepreneur-ial technology transfer firms,	
Sri Lanka	(Homma et al, 2008).	Engineering Design Center of the Faculty of engineering and the University Industry Interaction Cell	Faculties of engineering of the University of Moratuwa and University of Peradeniya. with the assistance of the Asian Development Bank (ADB)	With the assistance of the Asian Development Bank (ADB)	

Table 2.5 Synthesis of Studies of Tourism Clusters; Source: Author

2.6 Derived Conceptual Framework

After critically evaluating and reviewing literature in previous sections, this study is proposing an initial theoretical framework. This use of literature to formulate the initial framework was warranted by (a) the exploratory nature of the study; and (b) the lack of prior knowledge about the contribution of university industry linkage to tourism clusters in Thailand. This conceptual framework has three components: cluster theory, Triple Helix Model, and Social Networks. All these components have strengths that each one singly lacks (see Table 2.4) and so, if all are integrated together, the model works better, thus, leading to better understanding of the research topic. The initial conceptual framework for this study (table 2.6) is based on concepts derived from the three components of cluster theory, Triple Helix Model, and Social Networks. The following sections explain how these concepts are integrated to guide the empirical fieldwork as well as the analysis and discussion of the thesis.
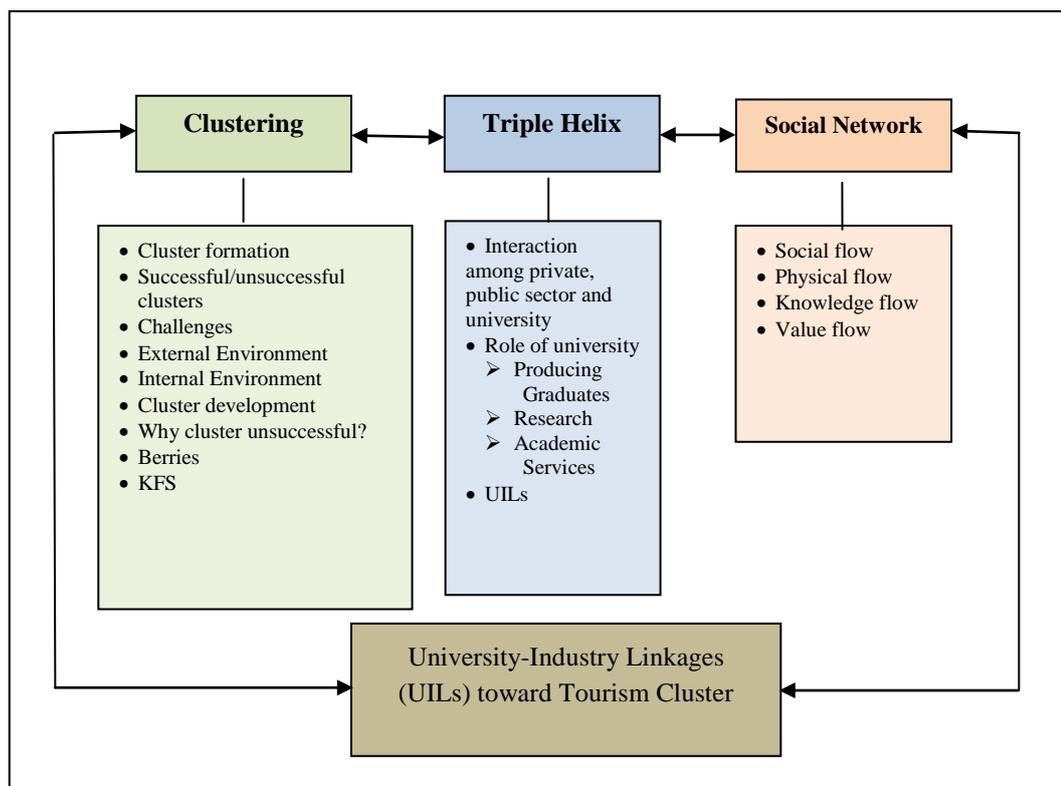
Table 2.6 Conceptual Framework; Source: Author

1. Clustering theory

This is a geographical group of interconnected companies and associated institutions that link their flow of value e.g. knowledge transfer between university and industry. The benefits of clustering are available to the entire cluster's member firms and spill over into its host community, driven by the economic dynamics of context of regional and local development (Michael, 2007a).

Globalisation has dramatically affected all organisations both public and private sectors, no matter how large or small. All need to adjust to survive or grow. However resources are limited so it is difficult for an organisation to remain alone. They need to work closely together to utilize the limited resources effectively and efficiently for mutual benefits. This is the reason why we need networks.

2. Triple helix model

This refers to the interconnection among government, university, and industry. The entrepreneurship university is playing an increasingly important role in society as industry become more knowledge-based. This research will use the triple helix model as the framework for understanding and analyzing the relationship among the three entities.

In terms of the triple helix, in Thailand, private universities are in the second model, and some public universities are in the triple helix. In each province there are committees comprised of universities, private sectors such as chamber of commerce, and Government which meet regularly depending on agreements within the group.

The conceptual framework in three case studies of relationships between the university-industry in the Thailand tourism clusters concentrates on the existing relationships and how to create innovation and add value to the service industry and identifying the appropriate model that suits and makes tourism clusters effective for Thai society.

The KIC model stimulates an effective transfer of knowledge by incorporating all the factors that have been mentioned earlier. Further, in order to facilitate the utilization of research outputs to promote economic growth and societal benefit, Cambridge – MIT – Institute (CMI) has chosen to focus on initiatives with "a consideration of use". Research with a "consideration of use" is application driven, but no less fundamental in its scholarly impact. It aims to develop important products and viable solutions that benefit society and contribute to the economy's competitiveness.

Not only infrastructures, but importantly, products and services must meet the customers' wants. Quality is an important consideration within niche markets. In the service industry especially the tourism industry at local level, each organisation must create unique products and services regarding skilled employees short term and long term. So the university is the key entity that produces graduates to support and also train employees in the long run. Feedback received can improve the curriculae and provide core courses to meet essential need.

3. Social Network

This refers to the information age that shifts power from the vertically integrated hierarchy to informal flexible networks. The advantage is no one can hide from the digital world. Since it is informal, no boundary, no identity, or social network can be controlled. Some may be unreal and cause harm. For this reason if the tourism network is connected by U-I-G, there is an elected group on which to base their knowledge who can take the lead. Entities in clusters can act to prevent damage to the image of the nation.

This study used cluster theory, Triple Helix Model and Social Network as the framework for understanding and analyzing how University-Industry Linkages (UILs) can support tourism clusters.

One prominent motivation for the formation of early companies is the availability of pools of factors, such as specialized skills, university research expertise, an efficient

physical location, or particularly good or appropriate infrastructure (Porter, 2008: 253).

In Thailand, cluster formation was established by the government for use as the mechanism for increasing the competitiveness of the nation. However, most of these clusters declined. So this model is used to explain and analyze what makes the cluster successful or unsuccessful? In terms of tourism, there are several influential factors that affect tourism clusters such as socio-technological, environmental, and how participants in the cluster prepare themselves to cope with these challenges to sophisticated tourists and meet their unique demand. In addition, there are several barriers to such interaction among the public and private sector and the university that obstruct the cluster's growth.

One of the significant key success factors (KSF) such as the niche markets that should be developed in a country like Thailand should receive considerable attention because this is how a small country like Thailand can compete with China in mass products. Unique and high quality products and service with innovation can be the alternative way forward. In terms of unique products and services, Porter (2008: 225) stated that:

> *The productivity and prosperity of a location rest not on the industries in which its firms compete, but on how they compete. Firms can be more productive in any industry - shoes, agriculture, or semi-conductors - if they employ sophisticated methods, use advanced technology, and offer unique products and services. All industries can employ high technology; all industries can be knowledge intensive. The term 'high tech normally used to refer fields such as information technology and biotechnology, thus has questionable relevance. A more descriptive term might be enabling technology, signifying fields providing tools that enhance technology in many industries.*
>
> *Porter (2008: 225)*

However, it is important to consider how Thai tourism clusters at the local level can enhance their performance and create unique products and services to meet customer's wants. Under the cluster strategy, the Triple Helix concept can be used to achieve this goal. The role of participants within the cluster is important.
As, Etzkowitz (2008, p.1) stated that:

> *The interaction among university, industry, and government is the key to innovation and growth in a knowledge based economy.*
>
> *Etzkowitz (2008, p.1)*

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The government can support in many ways such as regulation and budget. The associations in relation to tourism can help and guide the cluster. The university, besides teaching and doing research, should do more on its third mission; academic service. So the university must fulfil all missions to assist local communities such as tourism clusters at a local level to meet the requirements for a niche market. Whilst social network can help tourism share valuable information among participants and access to customers, this can help local community growth in the longer term. Then all entities can achieve mutual benefits and serve society as Staudhammer and Weller (2012) claimed in Whitehead (2004), 'If education is not useful, what is it?'

In summary, Lynch and Morrison's (2007) perspective from Table 2.1 differentiating networks from clusters heralds from a critical sociology viewpoint; my own viewpoint is more that of business and economic development. Hence, in table 2.1 I highlight the fact that business clusters are more open than business networks since stakeholders may 'accidentally' join the cluster (by virtue of location), whereas joining and maintaining network membership requires purposive intent. Lynch and Morrison's (2007) focus on peer-to-peer social interactions, trust and values as maintaining network integrity, arguing that these are less evidenced in a cluster. Whilst this may be the case, the cluster, since it has articulated business goals, requires leadership; this may be collective or individual, however, it provides cohesion to strategy making and service delivery a point Lynch and Morrison's (2007) sociological perspectives misses. Fundamentally, I differ from Lynch and Morrison's (2007) differentiation between network and cluster *aims* since they argue that it is difficult for clusters to articulate clear goals since they are social constructions. This misses the point that networks too are social constructions and that research on cluster outcomes (such as Castells and Hall 1994) illustrate many clusters that have successfully negotiated and delivered business goals. In summary, whilst the sociological perspective on networks and clusters provides insights, from a business and economic development perspective it hides more than it reveals: my research takes the business perspective.

CHAPTER THREE
RESEARCH METHODS

3.1 Introduction

This chapter explains why the methodology was used and how it was used. It is organized in eleven parts: 3.1) introduction; 3.2) Research objective; 3.3) Philosophy of research covering strengths and weaknesses of the positivist and the phenomenological approach; 3.4) Research strategy; 3.5) Research design. In this section I describes the choices that are of particular significance and overview of methodological approach; 3.6) Methodological approach. I have used case studies to understand and explain the nature and characteristics of University-Industry Linkages (UILs) between Thai tourism clustering and its universities. A theoretical framework was developed describing how UILs can enhance the competitiveness of the tourism cluster. I used mix methods to seek to develop a theory relating to the case studies. There are two stages of collecting data: the pilot study and four main case studies; 3.7) Strategy of Inquiry; 3.8) discussion of data analysis method; 3.9) Reliability, validity, and language issues; 3.10) Ethical issues; 3.11) Conclusion.

This research examined the University-Industry Linkages (UILs) involving Thai tourism clusters and its universities. It has been assumed that the university is the source of knowledge that can utilize its potential intellectual skills and technologies from the training courses to innovation in order to support successful tourism clustering. This suggests that each cluster will vary – geography / pattern of products and services / activities / cultures - as a result the activities and context in different clusters. Thus the study aims to develop an applied model in the context of Thai society and to understand the relationship of the UILs. The former attempt to answer what and the latter seeks to descriptions and explanation from participants within clusters.

3.2 Research Objectives

I used Blaikie (2008) to guide the research objectives as follows: firstly, Exploration. Exploratory research is necessary when very little is known about the topic being investigated, or about the context in which the research is to be conducted (Blaikie, 2000: 73). This study attempted to explore the attitudes of participants in tourism cluster; secondly, Description. Description research seeks to present an accurate of some phenomenon, distribution of characteristics in some population, the patterns of relationships in some social context, at a particular time, or the changes in those characteristics over the time (Blaikie cited in Bulmer 1986: 66). This study attempted to find what is role of university, the public and private sectors has played toward the cluster and how they interact to each other: thirdly, Explanation. Explanation research seeks to account for pattern in observed social phenomenal, attitudes, behavior, and social relationships, social processes or social structures (Bulmer 1986: 66-67). How have socio/economic/ technological factors affecting Thai tourism was explained; and fourthly, Understanding. While understanding associated with the meaning of an event or activity in a particular social content, either that given by social actors or the meaning that that researchers derive from social actors' accounts (Blaikie, 2000, p.75). Thus when explanations are produced, understanding is based on I grasped the subjective consciousness, the interpretations.

3.3 Philosophy of Research

There are at least three reasons why an understanding of philosophical issues is very useful. Firstly, it can help clarify research designs, and by 'research design' I mean more than simply the methods by which data is collected and analysed. It is the configuration of a piece of research: what kind of evidence is gathered from where and how such evidence is interpreted in order to provide good answers to the basic research question. Secondly, knowledge of philosophy can help the researcher to recognize which designs will work and which will not. It should enable the researcher to avoid going up too many blind alleys and indicate the limitations of particular approaches. Thirdly, a knowledge of philosophy can help the researcher identify, and even create, designs that may be outside his or her past experience. It

may also help the researcher to adapt research designs according to the constraints of different subject or knowledge structures (Easterby-Smith *et al*., 1996).

3.3.1 Philosophical Approaches

There is a long-standing debate in the social sciences about the most appropriate philosophical position from which methods should be derived; one is positivism and the other is phenomenology (Easterby-Smith *et al*., 1996).

Quantitative research lies within the research paradigm of positivism, referring to a research tradition derived from the natural sciences. The terms, positivism, was originated by August Comte (McKelvey 2003). The key idea of positivism is that the social world exists externally, and that its properties should be measured through objective methods, rather than being inferred subjectively through sensation, reflection or intuition (Easterby-Smith *et a*l., 1996).

In terms of positivism, Easterby-Smith *et al*. (1996) and Comte (1853), there are a number of implications as follows: independence; the observer is independent of what is being observed; value-freedom; the choice of what to study, and how to study it, can be determined by objective criteria rather than by human beliefs and interests; causality; the aim of social sciences should be to identify causal explanations and fundamental laws that explain regularities in human social behavior; hypothetic-deductive: science proceeds through a process of hypothesizing fundamental laws and then deducing what kinds of observations will demonstrate the truth or falsity of these hypotheses; operationalization: concepts need to be operationalized in a way which enables facts to be measured quantitatively; reductionism; problems as a whole are better understood if they are reduced into the simplest possible elements; generalization: in order to be able to generalize about regularities in human and social behavior it is necessary to select samples of sufficient size; and cross-sectional analysis: such regularities can most easily be identified by making comparisons of variations across samples. Within finance and accounting and operational research, it is inevitable that a lot of research will focus on measurable and quantifiable factors, and that the researcher remains as distanced as possible from data or problems being tackled. Thus researchers tend to use a positivism approach.

In contrast to the quantitative method, the early development of ideas now associated particularly with qualitative research can be linked to the writhing of Immanuel Kant who argued that there are ways of knowing about the world other than by direct observation and people use these all the time (Ritchie and Lewis, 2007).   Kant proposed as follows: perception relates not only to the senses but to human interpretations of what our senses tell us; our knowledge of the world is based on understanding which arises from thinking about what happens to us, not just simply from having had particular experiences; knowing and knowledge transcend basic empirical enquiry; and distinctions exist between scientific reason and practical reason.

	Positivist Paradigm	Phenomenological Paradigm
Basic beliefs:	The world is external and objective Objective is independent Science is value-free	The world is socially constructed and subjective Observer is part of what observed Science is driven by human interest
Researcher should:	Look for causality and fundamental laws Reduce phenomena to simplest elements Formulate hypotheses and then test	Focus on meanings Try to understand what is happening Look at the totality of each situation Develop ideas through induction from data
Preferred methods include:	Operationalizing concept so that they can be measured Taking large samples	Use multiple methods to establish different views of phenomena Taking small samples investigated in depth or over time

Table 3.1 Key feature of positivist and phenomenological paradigms
Source: Easterby-Smith *et al.* (1996).

Similarly, the new paradigm that has arisen during the last half century, largely in reaction to the application of positivism to the social sciences, stems from the view that the world and reality are not objective and exterior, but that they are socially constructed and given meaning by people (Easterby-Smith, *et al*., 1996; Husserl, 1946).

For the anti-positivists, the social world is essentially relativistic and can only be understood from the point of view of the individuals who are directly involved in the activities which are to be studied, (Easterby-Smith *et al*., 1996). They can understand human activities by participating or being an insider rather than outsider.

The strengths and weaknesses of the positivism and the phenomenological approach can be summarized as follows. In the case of the positivist paradigm, the main strengths are that: they can provide wide coverage of the range of situations; they can be fast and economical; and particularly when statistics are aggregated from large samples, they may be of considerable relevance to policy decisions (Easterby-Smith *et al*., 1996). This method tends to be rather inflexible and artificial; it is not very effective in understanding processes or the significance that people attach to actions; it is not very helpful in generating theories; and because it is focused on what is, or what has been recently, it is hard for policy makers to predict what changes and actions should take place in the future (Easterby-Smith *et al*., 1996).

I have argued above that synthesising cluster and triple helix theory with social networking theory aids understanding. Of course deep understanding requires a methodological approach uncovering rich, meaningful data. Having adopted a phenomenological approach, my interviews dug deeply into situated motivations, feelings and meanings, constructing believable narratives rooted in actual events and decisions (Easterby-Smith *et al*., 1996). This approach demanded a great deal of time, patience and resources. Qualitative studies often feel very untidy because it is harder to control their pace, progress and end-points (Easterby-Smith *et al.*, 1996). In addition, Dalton's (1964) work in pioneering studies of what managers do in practice, looking at only one organisation in depth could limit the general reliability of the conclusions so he supplemented his work with studies through other contacts with several other organisations in the same area.

On reflection, the reasons for adopting a phenomenological approach to data gathering are justified. The research context is my homeland Thailand thus it is socially constructed and I am rather subjective as I collect and present the data. I am

part of what I have been observing, as I cannot isolate myself from the context, nether can I be independent of the surrounding of the research context in the different parts of Thailand. This scientific study is driven by my human interest in getting better policy recommendations to make Thailand a better place to generate business activities and thus better standard of living. In my research I try to understand what is happening in the field of tourism and look at the totality of each situation that I investigated separately. I used multiple methods of data collection in order to establish different views of the phenomena under study, which is tourism cluster formation in Thailand. By taking small samples and investigating them in depth and over a period of six months of time, this research fulfils the choice of the phenomenological approach to be the optimal strategy for this study.

3.3.2 Philosophical approach adopted in this study

To understand meanings and the significance participants put upon their behavior, I prefer the phenomenological approach to the main research questions because this approach assists in answering the 'how' and 'why' questions. As Yin (2009) states the "how" and 'why' questions are more explanatory and likely to lead to the use of case studies, histories, and experiments as the preferred research method because such questions deal with operational links needing to be traced overtime, rather than mere frequencies or incidence.

The functions of qualitative research have been called descriptive or exploratory by other authors (Marshall and Rossman, 1999; Robson, 2002; Ritchie and Lewis, 2007) and indeed both are key features of context research. This study aims to explore and understand the UILs between the dynamic tourism cluster and its universities, since little is known about the relationship between Thai tourism and its universities. Thus I have explored and described participants' understanding, and interpreted the social phenomena. To explore, the questions such as why this phenomena (tourism clusters) in the study occur, the forces and influences that drive tourism clusters to be created were asked. In addition, the integration of different perspectives from participants within the Thai tourism cluster generated a detailed in-depth understanding. Therefore the understanding needs to be holistic, comprehensive and contextualized

where no single perspective can provide a full account or explanation of the research issue (Ritchie and Lewis, 2007).

In reality, the tourism industry is dynamic and complex as Michael (2008) emphasizes, and tourism research is multidisciplinary by necessity since it must deal with the production of its related services, the location of its places, the psychology, marketing, the management and administration, the planning , the policy , and economic growth. Thus I have tried to understand what was happening by looking at the totality of this particular situation to develop an applicable model that suits Thai society through inductive strategy from the data. One more reason for using qualitative approaches is because this method has the flexibility to investigate the dynamic of how tourism clusters operate. Importantly, this method assisted me to understand the outcomes by identifying the factors that contribute to success of the linkages between Thai tourism clusters and its universities that arise from the competitiveness policy.

I did not use a positivist approach since a tourism cluster shares commonality, economic, social and resource assets so participants are interconnected. Thus the tourism cluster is socially constructed and subjective, so when we study problems we cannot understand the phenomena if they are reduced to the simplest elements. In addition, a positivism approach has the ability to describe economically features of large numbers but it cannot explain the 'why' questions or provide insight understanding.

There are different ways to undertake research such as grounded theory/observation/ longitudinal approaches. But there are a number of reasons that I did not choose these ways. In terms of longitudinal research, even though it focuses on a small number of organisations it takes a long period of time to collect data. Since, I had a limited budget and little time, this approach was not appropriate to this study. I did not use experimental design because it is difficult to conduct in real life because the researcher cannot control the situation or participants within a tourism cluster.

3.4 Research Strategy

There are four strategies; the inductive, deductive, retroductive, and abductive, (Blaikie, 2008)

The inductive strategy starts with data collection, followed by data analysis, and then the development of generalizations that, with further testing, can become law-like propositions to be used to explain aspects of social life (Blaikie, 2008: 100). The deductive strategy begins with an observed regularity that needs to be explained; a tentative theory is required or constructed; then hypotheses are deduced and then tested by collecting appropriate data. The retroductive strategy also begins with an observed regularity, but this is followed by the construction of a hypothetical model of a possible structure or mechanism that could have produced this regularity. By observation and experiment, a search is then undertaken to establish whether the explanatory structure or mechanism exists. The abductive strategy begins by exploring through everyday language the knowledge that social actors use in the production, reproduction and interpretation of the phenomenon under investigation (Blaikie, 2008).

The major characteristics of the research strategies are as follows: the inductive strategy produces generalizations from data; the deductive strategy tests theories by testing hypotheses derived from them; the retroductive strategy proposes causal mechanisms or structures and tries to establish their existence; and the abductive strategy generates social scientific accounts from everyday accounts (Blaikie, 2008).

In this study, inductive strategy seems the most suitable strategy due to the context and accessibility of sources of data. Why I adopted this strategy, because: The research context is my homeland Thailand thus it is socially constructed and I am rather subjective as I collect and present the data. I am part of what I have been observing, as I cannot isolate myself from the context, nether can I be independent of the surrounding of the research context in the different parts of Thailand. This scientific study is driven by my human interest in getting better policy recommendations to make Thailand a better place to generate business activities and

thus better standard of living In my research I try to understand what is happening in the field of tourism and look at the totality of each situation that I investigated separately. I used multiple methods of data collection in order to establish different views of the phenomena under study which is tourism cluster formation in Thailand. By taking small samples and investigating them in depth and over a period of six months of time, this research fulfils the choice of the phenomenological approach to be the optimal strategy for this study

I adopted the inductive strategy as Blaikie (2008) explains that the inductive strategy starts with data collection, followed by data analysis, and then the development of generalizations that, with further testing, can become law-like propositions to be used to explain aspects of social life. I created a model applicable to improving University-Industry Linkages (UILs) in Thailand in order to support successful tourism clustering.

3.5 Research Design

In this section I describe choices that are particularly significant. Since I selected the phenomenological approach, it is not impossible for the researcher to remain independent from the phenomena being observed. In terms of theory and data, I looked at events or processes in the particular different four tourism clusters.

An overview of the ways in which research questions will be addressed is shown in the table 3.2 below:

Research Questions	Methods
1. What is the current nature and character of the tourism clusters and linkages between tourism clusters and their universities?	Interview academic (Dean/Head of tourism department, Chiang Mai University, Prince of Songkla University, Rajabat Sakon Nakhon University)
What is the nature and character of the tourism clusters and linkages between tourism clusters and their universities?	Interview practitioners, documentary and Archives: World Bank reports, TAT reports, NESDB reports, Cluster Mapping Project, universities' reports
What is the role of university toward the tourism cluster?	Interview academic (Dean/Head of tourism department, Chiang Mai University, Prince of Songkla University, Rajabat Sakon Nakhon University
What are the attitudes of participants in tourism clusters towards the linkages?	Interview academic (Dean/Head of tourism department, Chiang Mai University, Prince of Songkla University, Rajabat Sakon Nakhon University, private sector (3 provinces)
2. What are the influential factors affecting the Thai tourism clusters?	Interview Director Marketing Research Division of TAT; Senior Official of NESDB; Senior Official of KIAsia; private sector (3 provinces); documentary, Archives, newspaper's articles, Journal's articles, TAT reports, NESDB reports, website: www.unwto.org, and www.nesdb.go.th
How have external factors affected Thai tourism clusters?	Interview private sector (3 provinces), TAT Director; documentary, Archives, newspaper's articles, Journal's articles: TAT reports, NESDB reports; website: www.unwto.org, and www.nesdb.go.th
How have internal factors affected Thai tourism clusters?	Interview private sector (3 provinces)
3. How might University-Industry Linkages assist the success of tourism clusters?	Interview academic (Dean/Head of tourism department, Chiang Mai University, Prince of Songkla University, Rajabat Sakon Nakhon University,
What are the barriers of UILs between Thai tourism clusters and universities?	Interview private sector (3 provinces), academic(Dean/Head of tourism department, Chiang Mai University, Prince of Songkla University, Rajabat Sakon Nakhon University,
How to improve the UILs between Thai tourism and universities?	Interview academic (Dean/Head of tourism department, Chiang Mai University, Prince of Songkla University, Rajabat Sakon Nakhon University, Interview public and private sector (3 provinces),
How to enhance competitiveness of tourism cluster through UILs?	Interview academic (Dean/Head of tourism department, Chiang Mai University, Prince of Songkla University, Rajabat Sakon Nakhon University, TAT director, public and private sector (3 provinces)

Table 3.2 Overview of methodological approach; Source: Author

3.6 Methodological Approach

I use case studies to understand and explain the nature and characteristics of tourism clusters and University-Industry Linkages (UILs) between the Thai tourism cluster and its universities. A theoretical framework was developed describing how UILs can enhance the competitiveness of tourism clusters. I used mix methods to seek to develop a theory relating to the case studies.

As Michael (2008) emphasizes, tourism research is multidisciplinary by necessity since it must deal with the production of its related services, the location of its places, the psychology, marketing, the management and administration, the planning, the policy , and economic growth. I used case studies on the basis of their relevance to my research "how "and "why" questions. As Yin (2009) states "how" and 'why" questions are more explanatory and likely to lead to the use of case studies, histories, and experiments as the preferred research method because such questions deal with operational links needing to be traced over time, rather than mere frequencies or incidence. He also argues that case studies provide the focus on a contemporary phenomenon within a real-life context. Within the mix of approaches, purposive sampling referred to as theoretical sampling, refers to who is interviewed or otherwise studied, and how they are chosen to help the research formulate theory (Robson, 2002). Thus, this study employed the qualitative method approach with a combination of documentation, archival records, and in-depth interviews. However, I preferred the case study to histories because it is used in order to examine contemporary events and I interviewed persons who are involved in the event. Contrasting with the case study, the historical method deals with the dead past, that is, when no relevant persons are alive to report, even retrospectively, what occurred. The investigator must therefore rely on primary documents, secondary documents, and cultural and physical artifacts as the main sources of evidence (Yin, 2009). As Kumar (2005) states, the case study method is an approach to studying a social phenomenon through analysis of an individual case. In previous UILs studied by Intarakumnerd and Schiller (2008) they used a questionnaire survey and the same questionnaire was used for many countries even though each country has a different type of university and different factors affecting its economic growth. Therefore, I used the in-depth interview for the intensive analysis of specific details overlooked by the previous study.

In brief, the case study method allowed me to retain the holistic and meaningful characteristics of real-life events of tourism cluster participants both in governmental and non-governmental bodies.

3.6.1 Stages of collecting data

I decided to collect data in two stages: a pilot case study and main case studies as follows:

Stage I: A Pilot Case   Study: Ranong Health Tourism Cluster

I decided to conduct a pilot case study in the health tourism cluster at Ranong to help me plan main case studies, for several reasons. First of all, the pilot case study helped me refine the data collection plan for the main case studies. Secondly, I have contact networks that can assist in accessing participants from the Health Tourism Cluster. These participants would provide me with the feedback and advice to adjust my methods. Thirdly, I wanted to get a better understanding of the dynamic tourism industry.

A. Selection of the Pilot Case Study

Convenience and access were the main criteria for me to select the Ranong Health Tourism Cluster.

B. How to conduct the pilot case study

I was contacted by a long term friend who lives in Ranong Province. Her mother, Mrs. R, was the key gateway because she was local and an ancestor had lived there for a long time. I called to tell her when I would come. When it was the time, I took a bus ten hours to Bangkok and then took a bus for ten hours to Ranong.

C. Ranong Overview

Figure 3.1 Ranong map
Source: http://thai.monoplanet.com/hotel-photos/ranong/andaman-club-ranong/pic1-map.jpg

I learned from my interview with the Chairman of the Ranong Chamber of Commerce that in the past, Ranong had been a centre for tin mining. Besides, it was the first place in Thailand prior to Phuket that the Japanese selected for setting up a pearl farm. When the mines were closed, people set up a fishery, then forestry. In addition, its border is close to Burma so people trade with the Burmese. Even though Ranong is a small city, but most of people are relatively rich. Right now, people realize that all of their natural resources have reduced dramatically at the risk of their businesses. Thus they have started looking at tourism that once they used to ignore.

D. Ranong Health Tourism Cluster Formation

The National Economic and Social Development Board (NESDB) selected the Kenan Institute Asia, a Thai non-profit development organisation, to implement the NESDB's Cluster Mapping Project. As a result, the Ranong Health Tourism Cluster was established.

E. Current tourism situation

From the interview with the Secretary of Ranong Tourism Business Association, this year (2011) the number of tourists has increased by ten percent causing a rapid expansion of accommodation. The reason why tourists ignored Ranong in the past is the location. In addition, at that time, there was no flight from Bangkok to Ranong. From interviewing tourists, they said that time is important to them so that if they have to take too much time to travel to Ranong, they might change to another destination. Consequently, this makes Ranong tourism grow little by little. However, the trend of going back to nature and health caring made Ranong more interesting. Importantly, Ranong people would like to see their city grow in a sustainable way.

There is awareness of tourism from both public and private sectors. In addition there are several projects in this particular area such as the community of Suksamran that has never had a tourism plan and for the last ten years tourism activities in this area have been minimal. The SCL-USAID project recognized that with proper planning and management, tourism could be an important tool for poverty reduction and a better quality of life for the Suksamran community (The Asian Center for Tourism Planning and Poverty Reduction (ACTPPR, 2007).

F. Future of Ranong Tourism

The President of the Ranong Tourism Business Association stated that:

> *The future of Ranong tourism looks more prosperous than before because the government gives financial support such as infrastructure.*

G. The reason why the cluster has declined

The Former President of the Ranong Chamber of Commerce told me that the reason why the Ranong Health Tourism Cluster failed was due to the structure of the cluster. The structure of the cluster was wrong. The chairman of the tourism cluster should have been the president of the Tourism Business Association instead of the

president of the Chamber of Commerce. A meeting was called and the cluster was established that same day. The Chief of city clerk (Tourism) said:

> *It was expected that funds would come from municipal government thus I was as pointed as the cluster treasurer.*

In terms of cooperation, the Director of the Tourism Authority of Thailand (TAT): Region11 said:

> *The key success factor of cluster is cooperation, but it is very difficult to achieve. TAT's roles are to facilitate and promote tourism.*

The cluster lacked a person who coordinated all the parties. Entrepreneurs felt lonely and isolated from the government agent. They were very happy when I contacted them. They did not know how to start a relationship with the local university. They did not know the channel to contact. In Thailand, people in the countryside feel lecturers are a higher status so they respect them and are afraid to make contact with them. They do not know how to contact university staff.

In addition, in terms of shared value/commitment and trust, members did not have the feeling of belonging and did not have shared values. Besides, they did not trust each other. Also, the province lacked promotion from the public sector.

In terms of human resources, there is low cost labor available from Burma. As the President of Ranong Chamber Commerce put it:

> *Most of our Thai entrepreneurs hire Burmese labour because the cost of labour is cheap. However the problem is that Burmese labours change their jobs easily if new employers give more money. Thus entrepreneurs cannot plan their business well. Consequently, Ranong faces difficulty with skilled employees.*

In addition, the province lacked human resources planning in both the short and long term in all industries especially in the service industry. From the interview with the Secretary of Tourism Business Association, Ranong entrepreneurs made their wealth from tin mining and fisheries. When they started doing business in the service

industry, they did not have any service-minded experience, and did not know how to serve tourists.

Interviewees
Public sector: 3 Interviews 1.District Director of TAT:Region11 2. Tourist Information Center 3. Chief of City Clerk (Tourism) **Private sector: 8 Interviews** 4.Chairman of Health Tourism Cluster and Former Chairman of Ranong Chamber of Commerce 5.Chairman of Tourism Business Association 6. Secretary of Tourism Business Association 7.Chairman of Ranong Chamber of Commerce 8. Siam Hot Spa manager 9. Adventure-Khao Nabghong Resort and Spa 10.transportation/tour operator- Ponplace 11.Restaurant- J and K **Public sector: 3 Interviews** 12..Senior official at Ranong Hospital 13.Senior official of Health Department Educational Institute 14.Director of Community college **Tourists: 8 interviews**
Total 22

Table 3.3 List of participants at Ranong Province
Sources: Author

H. Problems that I experienced at Ranong

a) Some participants were not named on the list of the Health Tourism Cluster but they were committee members of the cluster and attended the cluster meeting and training.

b) The weather **-** Ranong is known for eight months of rain and four months of sunshine a year. Sometimes I drove motorbike through the rain arriving 20

minutes late to meet the Chairman of Ranongi Chamber of Commerce but luckily, they could reroute to interview at his home.

c) Time management- I took too much time for each person- initially two hours per interview.

d) I had to be flexible at all times. For example, taking advantage of a potential interviewee's private visit to an event, requesting a mutual professional acquaintance to negotiate access directly after this event, thus avoiding a six hours round trip on the bus. A lift was also provided and the driver waited for the researcher as it was not safe to collect data alone when not known to local people. Such considerations and accommodations have to be anticipated.

e) Interview guide. At first, because I wanted the interview to seem natural, I did not bring the interview guide. I let them talk and forgot some of the questions. From then on, I tried to use the interview guide during interviews. However, it was not easy because most of the interviewees wanted to express their opinions first which took at least 30 minutes.

The key gatekeeper knew the interviewees very well. The first day I was taken to meet the President of the Ranong Tourism Association but he had left the city; his wife gave me some general information about the city and her family, and fortunately cooked a local meal for me as all shops were closed due to a festival. On the second day, the niece who works at municipality took me to interview the head of tourism municipality.

I. What I learnt from the pilot case that helped me in collecting data for the main case studies

a) To observe different phenomena from many different angles (Yin, 2009)

b) To adjust time, I must be flexible. Let the interviewees expressed their feelings and then make them feel relaxed and free to answer questions. So I cannot be rushed and must be patient. It takes time to ask questions the right way.

c) I checked the place. Some places took more than one hour to reach. In addition, in terms of places to interview, I had limited choice. So in most places I interviewed where the interviewees worked.

d) I must be ready all the time. Also, my dress must suitable for the place and I must be prompt when meeting busy people such as the Director of the Tourism Authority of Thailand: Region 11 who had come to Ranong for eagle - watching and told me to meet him in the evening. Even though it was the evening, I must dress appropriately because in Thai culture, you must show respect to the person who has a high position in a Government body.

e) I must prepare several recorders in case I have to interview several interviewees.

f) Questions. It is difficult to ask all the questions I prepared.

g) The atmosphere can be annoying for the interview- noise from traffic and TVs left on.

h) The interviewees were afraid that researchers would disappear.

i) Content – understand the current phenomenon, cluster mapping, and what had happened, why the cluster had failed, who were the participants.

j) To adjust questions.

k) Besides the participants of the cluster, I interviewed both Thai and foreign tourists, I interviewed at Hot Springs and at the travel agent shop.

l) As Yin (2009) stated the pilot data provided considerable insight into the basic issues being studied. This information was used in parallel with my ongoing review of the relevant literature, so that the final research design was informed both by prevailing theories and by a fresh set of empirical observations. The dual sources of information help to ensure that the actual study reflected significant theoretical or policy issues as well as questions relevant to contemporary cases.

Stage II: Main Case Studies

Because little is known about the UILs between Thai tourism clusters universities and so an exploratory study is appropriate at the preliminary stage of this project. The method of in-depth interviewing was used. There are many objectives of an exploratory study; the first one is to explore the attitudes of participants in tourism clusters towards the UILs. Secondly, to unpack factors affecting Thai tourisms clusters. Thirdly, it is necessary to reveal the barriers of UILs between Thai tourism clusters and its universities.

Interviewees
Ministry of Tourism and Sports (MOTS) 1.Permanent Secretary **National Economic and Social Development Board (NESDB)** 2.Former Director of Strategy Formulation and coordination 3.Senior plan and policy Analyst **Kenan Asia (KIAsia)** 4.Manger, Business Advisory Services **Tourism Authority of Thailand (TAT)** 5.Director of Research and Marketing Division of TAT **Office of Small and Medium Enterprises Promotion (OSMEP)** 6. Senior Operational Officer, Level 2 Competitiveness Project Division, Project Administration and Coordination Bureau 7. Rachaburi Orchid Cluster President
Total = 7

Table 3.4 Interviews at National level
Source: Author

The map below (Fig 3.2) shows where the pilot case study and main case studies in Thailand are:

Figure 3.2 Main case studies
Source: http://aseancorner.blogspot.com/2012/05/thailand-and-its-neighbouring-countries.html

There are four main case studies as follow:

A. Chiang Mai Tourism Cluster

Thailand's second most important city, Chiang Mai (literally 'new city'), was chosen in 1292 by King Mengrai to replace Chiang Rai as the capital of his Lanna (Eyewitness Travel, 2008). For decades visitors have increasingly been attracted to Chiang Mai not only for its amazing temples but also for trekking in this beautiful landscape, fascinating hill-tribe village and plentiful cultural attractions (Eyewitness Travel, 2008).

Interviewees
Public Sector: 2 Interviews 1.Director of Tourism Authority of Thailand: Chiang Mai Office 2. Deputy Director of Chiang Mai Provincial Office of Tourism and Sports
Private Sector: 9 Interviews **Private Association** 1.Vice-President of Tourism Business Association 2. President of Hotel de Charm Cluster **Hotel de charm** 1.   Hotel- MD of Baan Num Ping-Nahathai Tangkittivutikul 2.   MD of Sukantara 3.   Spa-CEO of Chida Spa- 4.   Adventure- MD of Peak Adventure Tour 5.   Transportation/tour operator- Manger of Jatuporn Tour and Travel 6.   Restaurant-Assist restaurant Manager of Crystal Restaurant- **Edutainment Cluster** 1.   President of The Association of Northern Tourism Federation Chiang Mai (ANTFED.CM)
University: 7 Interviews **Payap University** 1. Assistant Dean of Business Administration, Payap University- **Chiang Mai University** 2. Chief of Tourism Department, Chiang Mai University 3. Assoc.Professor in tourism, Tourism Department, Chiang Mai University 4. Dean of College of Arts, Media and Technology (CAMT) 5. Director of knowledge and Innovation Center- Chiang Mai Rajabhat University 6. Head of Tourism and Hotel Department, Chiang Mai Rajabhat University **Rajamangala University of Technology Lanna** 7.Senior lecturer
Tourists 8 interviews
Total 26 Interviews

Table 3.5 List of participants at Chiang Mai; Source: Author

The cluster mapping project analyzed with Porter's diamond model by KIAsia (2006) found that the Chiang Mai tourism cluster is at the stage of seeking direction which means it has good opportunities for its products; however, it lacks knowledge in marketing and in managing its product effectively.

B. Phuket Tourism Cluster

Phuket is the primary beach tourism destination in Southeast Asia, having overtaken Bali, Indonesia, some years ago, attracting approximately three million tourists per year. Phuket province is increasingly built-up, nearing its carrying capacity for high quality amenity development (Webster, 2006).The outstanding natural beauty of the Andaman Coast is known the world over and the biggest draw in the region is Phuket, a resort island, which has superb beaches, excellent diving facilities, and the most developed tourist infrastructure in Southern Thailand (Eyewitness Travel, 2008).

Interviewees
University: 8 Interviews   **Prince Songkha University**   1. Dean of Hospitality and Tourism Faculty   2. Deputy Dean-Academic   3. Deputy Dean-Student Affairs   4. Tourism lecturer   5. Hotel lecturer   **Rajabhat Phuket University**   1. Dean of Management Faculty   2. Director of Research and Development Institute   3. Deputy of Research and Development Institute / tourism lecturer
Private sector: 7 Interviews   1. President of Tourist Association-   2. President of Thai Hotels Association Southern Chapter   3. On behalf of President of Phuket Chamber of Commerce-Tourism   4. Chairman of Phuket Taxi Cooperative   5. Tour Operator-MD of Exotic Sea Venture Tour   6. President of Phuket Spa Association   7. The Old Town Community Leader
Public Sector: 4 Interviews   1. Director of Tourism Authority of Thailand: Phuket office   2.   Director Phuket Provincial office of Tourism and Sports-   3. Senior Policy and Planning office/ Strategic Management for Southern Province Cluster (Andaman)   4. Phuket Mayor
Total = 19 Interviews

Table 3.6 List of participants at Phuket; Source: Author

According to Webster (2006), Phuket has poor co-ordination among key stakeholders in the tourist industry, and between government and the tourism sector, especially in Phuket province. The result is fragmented investment, a lack of catalytic projects, such as a major Convention Center, and the lack of a clear vision and strategy for Phuket's future development

From the same model, the Phuket cluster is at the stage of formation/initiation which means that across the cluster, members have loose linkages, but no obvious leadership and ill-defined customers and differentiation of products or services, so competition is largely based on price.

C. Sakon Nakhon Indigo Textile Cluster

The main attractions of this town are its peace and quiet and its location in a particularly lush part of Mekong River valley (Eyewitness Travel, 2008).

From the same model, Sakon Nakhon's cluster is at the stage of seeking direction which implies good market demand and market opportunity for its products and services. But this cluster has difficulty in accessing its market due to lack of knowledge in marketing or managing its products effectively.

Each place has its own identity that can develop to be tourism attraction. In Sakon Nakhon, an indigo clothes dyeing is the local knowledge pass from generation to generation. It presents the way of local farmers' life including ritual. Consequently, Sakon Nakhon Indigo Textile Cluster can develop to be the learning centre and tourism attraction.

Interviewees
Public sector: 7 Interviews 1. Vice Governor 2. President of Sakon Nakhon Province Administration Office 3. Director of Tourism and Sport 4. Director, office of Commercial Affair 5. Director of Tourism Authority of Thailand: Northeastern: Nakon Phanom 6. Director of Cooperative: Sakon Nakhon office 7. Senior Community Development official 8. Head of Industry Promotion Northeast region
Private sector: 6 Interviews 1. Former director of Sakon Nakhon Chamber Commerce 2. President of Indigo Cooperative Cluster 3. President of Garment Cluster 4. Cluster Development Agent (CDA) of Garment Cluster 5. Chairman of Panna Indigo group 6. Chairman of Tumtao Indigo group
University: 9 Interviews Kasetsart University 1.KU-CSC Assistant President 2.Director of Research Institute 3.Deputy Director of Research Institute 4.Chief of Marketing Department 5.Chef of Tourism Department 6.Dean of Liberal Arts and Management Science Sakon Nakhon Rajabhat University 1.Former Vice President 2.Former dean of Science & Technology Faculty Sakon Nakhon Rajamongkol University 1.Former President of Sakon Nakhon Rajamongkol University
Total=22

Table 3.7 List of participants at Sakon Nakon
Source: Author

3.7 Strategy of Inquiry

I used mixed methods: in-depth interviews and documents. There are good reasons for using several different methods in the same study (Easterby-Smith *et al.,* 1996). Furthermore, they claimed in Abrahamson's work (1983) that this approach prevents the research becoming method-bound: the strength of almost every measure is flawed in some way or other, and therefore research designs and strategies can be offset by counterbalancing strengths from one to another.

3.7.1 Case Studies

Case studies are suitable for single-person research on a limited budget, and the study of one case provides a manageable opportunity for a researcher to study one aspect of a problem in some depth within a limited time-scale (e.g.Bell, 1993; Blaikie 2008; Blaxter *et al*., 1996). In addition, I used case studies designed to understand and explain the nature and character of university-Industry Linkages (UILs) between Thai tourism clusters and its universities. A theoretical framework was developed with a mixed approach. A case study would have to cover both the phenomenon of interest and its context, yield a large number of potentially relevant variables, and in turn, this would require an impossibly large number of cases - too large to allow any statistical consideration of the relevant variables (Yin, 2009). Thus, I conducted this study by interviewing policy makers at national level and local levels, deans, and lecturers who were involved with clusters in universities, and participants in the private sector across tourism clusters in three regions in Thailand (see Tables 3.4; 3.5; 3.6; 3.7).

There are two reasons why I selected a multiple-case design rather than a single-case study. The first reason is that I wanted a high degree of certainty as Herriott and Firestone (1983), and Yin (2009:53) state the evidence from multiple cases is often considered more compelling, and the overall study is therefore regarded as being more robust. The other reason is the replication logic is analogous to that used in multiple experiments (Hersen and Barlow, 1976). Also, Yin (2009) emphasises that the logic underlying the use of multiple-case studies is the same; if the cases are some way contradictory, the initial proposition must be revised and retested with another set of cases. An important step in all of these replication procedures is the development of a rich, theoretical framework (Yin, 2009).

As all cases necessarily occur in a specific context, the common and unique feature of that context needs to be acknowledged, and thus, researchers need to give readers a sufficient account of the context to enable them to evaluate the conclusions.

Nevertheless, I used models of UILs (see Table 3.8) developed by Baba (1985) in this study.

Modality group	Type of linkage activity
- Training/education - Industrial training - Entrepreneurship - Visiting lectureship	- Cooperative education
- Service/consulting - Technology brokerage/licensing - Business consulting/services - Direct or indirect investments - Coordination of technology-related issues	- industrial extension service
- Research - Joint or cooperative research projects - Partnership contact - Personnel interchange or industrial fellowships - Shared equipment or facilities	- Research consulting

Table 3.8 Models of University-Industry Linkages in Thailand
Source; Adapted from Baba (1985, 1988); Brimble and Doner (2007).

3.7.2 Process Building Theory from Case Study Research

Guided by Eisenhardt (1989), Process Building Theory from Case Study Research as illustrated in Table 3.9, I adopted this technique in constructing my research development progression. This is explained in the forthcoming section following the steps of Eisenhardt (1989), and relating it to my research methodology.

A. Getting Started

According to an initial definition of the research question, in at least broad terms, is important in building theory from case studies. No matter how small our sample or what our interest, we have always tried to go into organisations with a well-defined focus—to collect specific kinds of data systematically. (Eisenhardt, 1989; Mintzberg, 1979) Such definition of a research question within a broad topic permitted these investigators to specify the kind of organisation to be approached, and, once there, the kind of data to be gathered (Eisenhardt, 1989).

I started with initial definition of a research question in terms of University-Industry Linkages (UILs) toward tourism clusters. Such definition of the research question permitted me to specify the kind of organisation to be approached: the public and private sector and university in relation to tourism clusters.

Step	Activity	Reason
A. Getting Started	Definition of research question Possibly a priori constructs	Provides better grounding of construct measures
B. Selecting Cases	Theoretical Sampling	Focuses efforts on theoretically useful cases—those that extend theory by filling conceptual categories
C. Creating Instrument and Protocols	Multiple Data Collecting Method	Strengthen grounding the theory by Triangulation of evidence
D. Entering the field	Overlap data collection and analysis, including field notes Flexible and opportunistic data collection Methods	Adjustments to data collection
E. Presenting Data	Iterative tabulation of evidence for each construct.	Gains familiarity with data and preliminary theory generation
F. Within case analysing	Within case analyzing Cross case pattern Logic across cases Search evidence for "why" behind the relationships	Sharpens construct definition, validity, and measurability Confirms, extends, and sharpens theory Builds internal validity
G. Cross case pattern	Logic across cases Comparison with conflict literature Comparison with similar literature	Builds internal validity, raises theoretical level, and sharpens construct definitions. Sharpens generalizability, improves construct definition, and raises theoretical level

Table 3.9 Process Building Theory from Case Studies Research
Source: adopted from Eisenhardt (1989)

A *priori* specification of constructs can also help to shape the initial design of theory building research. Although this type of specification is not common in theory-building studies to date, it is valuable because it permits researchers to measure constructs more accurately. If these constructs prove important as the study progresses, then researchers have a firmer empirical grounding for the emergent theory (Eisenhardt, 1989).

In this study, I identified several potentially important constructs from the literature such as cluster formation, strategy, vision, policy on clusters including interaction on the Triple Helix. These constructs were explicitly measured in the interview guide. When these constructs were developed relating to clusters and Triple Helix, there were triangulated measures to ground the emergent theory.

B. Sampling: Selecting cases

Selection of cases is an important aspect of building theory from case studies. As in hypothesis-testing research, the concept of a population is crucial, because the population defines the set of entities from which the research sample is to be drawn. Also, selection of an appropriate population controls extraneous variation and helps to define the limits for generalizing the findings. However, the sampling of cases from the chosen population is unusual when building theory from case studies. Such research relies on theoretical sampling (i.e., cases are chosen for theoretical, not statistical, reasons (Glaser and Strauss, 1967).

As Pettigrew (1988) notes, given the limited number of cases which can usually be studied, it makes sense to choose cases such as extreme situations and polar types in which the process of interest is "transparently observable." Thus, the goal of theoretical sampling is to choose cases that are likely to replicate or extend the emergent theory (Eisenhardt, 1989).

Several studies illustrate theoretical sampling. Harris and Sutton (1986), for example, were interested in the parting ceremonies of dying organisations. In order to build a model applicable across organisation types, these researchers purposefully selected diverse organisations from a population of dying organisations. They chose eight organisations, filling each of four categories: private, dependent; private, independent; public, dependent; and public, independent. The sample was not random, but reflected the selection of specific cases to extend the theory to a broad range of organisations. Multiple cases within each category allowed findings to be replicated within categories. Gersick (1988) followed a similar strategy of diverse sampling in order to enhance the generalisability of her model of group development.

In the Warwick study (Pettigrew, 1988), the investigators also followed a deliberate, theoretical sampling plan. Within each of four markets, they chose polar types: one case of clearly successful firm performance and one unsuccessful case. This sampling plan was designed to build theories of success and failure. Finally, the Eisenhardt and Bourgeois (1988) study of the politics of strategic decision making illustrates theoretical sampling during the course of research. A theory linking the centralization of power to the use of politics in top management teams was built and then extended to consider the effects of changing team composition by adding two cases, in which the executive teams changed, to the first six, in which there was no change. This tactic allowed the initial framework to be extended to include the dynamic effects of changing team composition.

How big should the sample be? There is no easy answer to this question, as many factors have to be considered (Blaikie, 2008: p.206). When a research project involves the use of time-intensive, in - depth methods, particularly when directed towards theory development, the issue of sample size takes on a very different complexion (Blaikie, 2008).

In this study, the cases were chosen from the polar types. The choice is limited since out of 152 clusters only 60 clusters had been selected because they have information. As Yin (2009) suggests, although all designs can lead to successful case studies, when you have the choice and resources, multiple-case designs may be preferred over single-case design, more important, the analytic benefits from having two (or more) cases may be substantial. Since I wanted a high degree of certainty, I selected each one tourism cluster in each region. Thus, I selected four clusters from three regions and one cluster from the Northeast that will develop into cultural tourism cluster. For the purposes of comparison between regions, I chose one from each region; one from the north-Chiang Mai; one from the south-Phuket; one from the north-east - Sakon Nakhon. To assist in identifying the sampling frame, the resource used to short list firms/organisations from clusters was selected from the Cluster Mapping Project by the Kenan Institute Asia (KIAsia) which was hired by the National Economic and Social Development Board (NESDB).

C. Creating Instrument and Protocols

A. Introduction to the Case Study
    ➢ Theoretical framework for the case study
B. Data Collection Procedures
    ➢ Name of site to be visited
    ➢ Data collection plan
    ➢ Expected preparation prior to site visits
C. Outline of Case Studies Report
D. Case Study Questions

Table 3.10 Contents of protocol for conducting case studies of UILs toward Thai tourism clusters; Source: Adjusted from Yin (2009)

Data Sources

This study combined multiple data collection methods: interviews, observations, and archives. The rationale is the same as in hypothesis-testing research (Eisenhardt 1989). That is, the triangulation made possible by multiple data collection methods provides stronger substantiation of constructs and hypotheses (Eisenhardt 1989).

a) Documentation

I used documents such as progress reports from a government agency called competitiveness center; documents from this center will be very helpful because they contain the list or name of clusters across country that I have to mention in the research. The website www.unwto.org, www.tourismthailand.org / and www.nesdb.go.th were used.

Sources	Author
TCI	USAID
Tourism development planning 2009-2012 Tourism development planning 2012-2016	MOTS
TAT Annual reports	TAT
The 11th National Plan/ NESDB reports	The National Economic and Social Development Board
Cluster mapping project/TCI	Kenan Institute Asia
Sakon Nakhon Provincial Pan 2009-2012	Sakon Nakhon Provincial Office
Andaman Cluster Plan	OSM Andaman

Table 3.11 Documented sources used; Sources: Author

In addition, archival records such as the cluster mapping project by KIAsia was used as it provided the findings from Thai cluster analysis using Porter's Diamond model for its analysis of the competitiveness of clusters in Thailand

b) In-depth Interviews

The main reason for conducting qualitative interviews was to understand how individuals construct the meaning and significance of their situations from the complex personal framework of beliefs and values, which they have developed over their lives in order to help explain and predict events in their world (Easterby-Smith *et al*, 1996). To achieve this goal, researchers need to be able to understand interviewees' view and must be capable of encouraging interviewees to explore their beliefs. It is time consuming so if researchers need simple answers, they should use questionnaires instead. But for interviewing, the questions make the interviewees think. Besides, researchers can observe non-verbal clues such as voices, facial expression, gesture, and clothes. These can assist researchers develop further questions. In terms of the degree of structure, to be successful in interviewing Easterby-Smith *et al* (1996) and Jones (1985) point out that there is no such thing as presupposition-less research. In preparing for interviews researchers will have, and should have, some broad questions in mind, and the more interviews they do, and the more patterns they see in the data, the more likely they are to use this 'grounded' understanding to want to explore in certain directions rather than others.

However it does not mean that researchers should let the interviewees talk freely without interruption because this can lead to no clear direction in the interviewees' mind. Consequently, it creates poor data that interviewers cannot interpret. Thus I prepared an interview guide generated from a framework that can be used as a structure of the research questions. Therefore it was important for me to have a framework at the beginning that lent clarity to the areas that I wanted to study.

The skills of interviewers are important, they should have the ability to realize what is relevant to the research questions and tape and transcribe it. In addition, they

should know about the non-verbal language such as gestures, eye contact, facial expressions and so on. These clues assist interviewers to understand situations. Importantly, they should summarize by checking that interviewers correctly interpret what the interviewees say.

I understood that building trust takes time. I could not push interviewees to answer all the questions in one interview. The way to overcome this problem was by doing a pilot case. In terms of social interaction, the way interviewers dress can make a difference because interviewees gain the first impression that can or cannot lead to trust and so provide the crucial data. Or the ways interviewees dress, and manner, the voice and language they use can create a biased attitude to interviewers. Richard recalls one interview when the union convenor wore a sports jacket, in complete contrast to the other men who wore overalls and boots; as a result, this raised questions about the convenor's relationship with the men and management (Easterby-Smith *et al*, 1996). I wore a proper dress to show respect to the interviewees and the place, for example, when I went to interview the mayor at her office even though it was in the evening.

In terms of trust: to obtain trust is very important in qualitative interviewing. If the interviewees do not trust the interviewer but cannot refuse, they will try to finish the interview as soon as possible and may not provide crucial datat. However, the reputation of the university I have worked for and the status of my experience as the assistant to the dean of Liberal Arts and Management Sciences for Kasetsart University helped me to build a high level of trust in the interviewees' minds. Most interviewees wanted to continue cooperation in future from connections and from the research.

Before I began to collect data, I looked at the available data on tourism clusters and contacted the gatekeeper. For the pilot case, I made a phone call to the gatekeeper, with the right contacts, so that I could gain access to key informants. For the main case studies, I sent letters and then followed up by a telephone call. In Thailand, the way to work with a government agency and with private organisations can be by both formal and informal contacts. It depends on the informants' styles. For example,

the NESDB senior official uses an informal style to contact governmental and non-governmental bodies. However, I used a formal letter from the university because this way created more credibility - especially given the letters are from a public university. Easterby-Smith *et al* (1996) suggests one strategy used by a colleague of ours, which worked to his advantage, which was to interview well away from the work place. The location of interviewing is one of the important factors. Some interviewees used a meeting room but some let me interview them at their workplace.

In terms of tape recording, at first I thought that Thai people might feel anxious about being recorded. But when I did the fieldwork, I found they were willing to be recorded.   In in-depth interviewing, I used open questions and probing questions to follow on. I used the basic probe to repeat the question if they were off the point, or I asked the question 'What did you mean by that?' if the answer was not complete. Or l used silent probes when interviewees were slow to answer.

Data was collected by in-depth interviews over a period of six months from October 2010 to April 2011. I interviewed three groups; 1) Public sector at national and local level 2) universities' participants 3) private sector participants. Each interview took about one-two hours and was tape-recorded.

In the interview stage, I used an interview guide (Figure 3.12) by introducing the brief in which I defined University-Industry Linkages and the competitiveness of tourism clusters and explained the purpose of my study and posed direct questions to interviewees. At the end of an interview, I asked participants for their comment or if they had some questions. The guide's topics are as follows;

c) **Interview guide**

Each interview was conducted face-to-face. Interviews with participants tended to be semi-structured, guided by a prepared list of issues in three groups.

Private Sector
1. In your opinion, what is the tourism cluster? When and why your firm participate the cluster?
2. Who made decisions to participate?
3. What factors affected decision?
4. In your opinion, what factors affect the tourism industry and your firm?
5. Do you have a firm's policy about cluster?
6. What are expectations do you have from cluster?
7. Which university that your firm collaborates with?
8. How far does your firm collaborate with university?

Universities
1. What is the policy about supporting tourism industry?
2. What kind of programme do the universities have to support the tourism cluster?
3. Does the university have any internship or cooperative programme to develop?
4. Does the university have consultancy to tourism cluster?
5. Does the university have incubation project to support tourism cluster?
6. How does the university cooperate with the tourism cluster?
7. In your opinion, how can the university support the cluster to be successful?

Public Sector
1. Please explain the reason why the government establishes the cluster?
2. What is the expectation that the government has?
3. Please explain the current situation of Thai tourism cluster?
4. How the government support Thai tourism cluster?
5. What are the barriers prevent the cluster to be successful?
6. How can the government overcome these problems?

Table 3.12 A template of issue; Source: Author

Before I conducted the interviews according to the above guide, I also collected data about the general characteristics of the different entities that were investigated. This is illustrated in the list shown below:

- Cluster coordinator
- Birth of this cluster-how/why? Who is the coordinator?
- Vision/ Mission/Goals/ Shared value/Policy
- Participants? Role? Expectations?
- Supportive institutes?
- Outcomes?
- Barriers? How to overcome problems?
- Universities
- The university's policy and infrastructure-ready to support?
- Who takes responsibility of dealing with cluster
- Attitudes towards the cluster

- ➢ How can a university support the clusters?
- ➢ Mechanics/ tools
- ➢ The university's functions
  - o Graduates
  - o Research
  - o Academic services
- ➢ The relationship with tourism firms
- ➢ How to follow up and evaluate performance/ coordination between UILs

- • Firms

- ➢ The firm's policy
- ➢ Development and innovation
- ➢ The relationship with universities

- • Government
- ➢ Policy
- ➢ Competitiveness
- ➢ Cluster Establishing
- ➢ Support
- ➢ Direct
- ➢ Indirect

Regarding the interview guide for the universities, I asked for advice from my supervisor and after that I carried out the pilot case study.

D. Entering the field

Because I have worked for a university in Thailand, I had an opportunity to visit and meet professors from other universities such as Prince of Songkla University. This connection facilitated access to some participants for this study.

a) Access to Case

A striking feature of research for building theory from case studies is the frequent overlap of data analysis with data collection. For example, Glaser and Strauss (1967) argue for joint collection, coding, and analysis of data. While many researchers do not achieve this degree of overlap, most maintain some overlap. Field notes, a running commentary to one self and/or research team, are an important means of accomplishing this overlap. As described by Van Maanen (1988), field notes are an on-going stream-of-consciousness commentary about what is happening in the research, involving both observation and analysis—preferably separated from one another. One key to useful field notes is to write down whatever impressions occur, that is, to react rather than to sift out what may seem important, because it is often difficult to know what will and will not be useful in the future. A second key to successful field notes is to push thinking in these notes by asking questions such as "What am I learning?" and "How does this case differ from the last?" For example, Burgelman (1983) kept extensive idea booklets to record his on-going thoughts in a study of internal corporate venturing. These ideas can be cross-case comparisons, hunches about relationships, anecdotes, and informal observations. Indeed, a key feature of theory-building case research is the freedom to make adjustments during the data collection process (Eisenhardt 1989).

These transition point behaviours had unexpectedly proved interesting, and Gersick (1988) added cases in order to focus more closely on the transition period. Additional adjustments can be made to data collection instruments, such as the addition of questions to an interview protocol or questions to a questionnaire (e.g., Harris and Sutton, 1986). These adjustments allow the researcher to probe emergent themes or to take advantage of special opportunities that may be present in a given situation. In other situations adjustments can include the addition of data sources in selected cases. For example, Sutton and Callahan (1987) added observational evidence for one case when the opportunity to attend creditors' meetings arose, and Burgelman (1983) added interviews with individuals whose importance became clear during data collection. Leonard - Barton (1988) went even further by adding several

experiments to probe her emergent theory in a study of the implementation of technical innovations.

According to Whyte (1984), the entry process differs according to whether one studies a formal organisation or a community. The organisation has official gatekeepers who control access. The community has unofficial gatekeepers who can either facilitate entry and encourage access to information or see to it that the researcher never penetrates beyond superficial acquaintance and formal portrait of themselves that the people would like to give to the outside world.

b) Access to the pilot case

In this study, I did the pilot case study at Ranong I realized that in each case, the gatekeepers are very important because they provide the useful contacts so that I could access key persons such as those in Ranong, the gate keeper took me to meet the president of TBA and the president of Ranong Chamber of Commerce and senior official at the public sector without making an appointment. And because they trust and respected my contact, they spoke openly to me. Besides the president of TBA gave me the list and mobile phone numbers of the persons I should interview such as the former chairman of the Chamber of Commerce, the Director of TAT; Region 11 and the Director of the Community College. Then I had a chance to interview the Former President of the Chamber of Commerce who was the President of the Ranong Health Tourism Cluster and she told me that why the cluster was not successful. In addition, my contact gave me the list of people that I should interview senior official at hospital and Health Care Department because they were involved with the cluster.

c) Access to the main cases

On main cases, I used both informal and formal way. For formal way, I sent formal letters to make an appointment in advance and followed up by calling. I had gatekeepers both in the public and private sector and universities. Some interviewees are in public sector so they want formal letter. For example, Tourism Department at Chiang Mai University, I sent formal letter in advance for two weeks and followed up to make an appointment which took about two weeks.

E. Data Presentation and Analyzing Data

As Miles and Huberman (1984) wrote: "One cannot ordinarily follow how a researcher got from 3600 pages of field notes to the final conclusions, sprinkled with vivid quotes though they may be." However, several key features of analysis can be identified. One key step is within-case analysis. The importance of within-case analysis is driven by one of the realities of case study research: a staggering volume of data (Eisenhardt 1989). So I would like to make the reader acquainted with my detailed findings and to provide a platform for answers to the set of research questions. In addition, analysing data is the heart of building theory from case studies, but it is both the most difficult and the least codified part of the process (Eisenhardt 1989).

F. Within-case analyzing

Within-case analysis typically involves detailed case study write-ups for each site. These write-ups are often simply pure descriptions, but they are central to the generation of insight (Gersick, 1988; Pettigrew, 1988) because they help researchers to cope early in the analysis process with the often enormous volume of data. However, there is no standard format for such analysis.

For this study, I conducted face to face interview with 80 interviewees. Consequently, there was the huge chunk of data. So I used within-case analysis to help organise the data. After doing transcripts and translation, Mindmap was created which is the diagram to outline different themes from empirical data. Themes were guided by the conceptual framework and literature. I sifted cases into two levels: at the national and local levels. At local level, Mindmaps was be produced in each case by using the same theme. Themes cover the cluster formation, roles of actors, strategy, policy and implementation, successful and unsuccessful cluster, challenges, barriers and key success factors. Then data was be presents in each theme in a tabular format. In addition, I did the cluster mapping at national level and local level for each case to show how participants interact to each other.

G. Cross case pattern

Coupled with within-case analysis is cross case search for patterns. The tactics here are driven by the reality that people are notoriously poor processors of information (Eisenhardt 1989). One tactic is to select categories or dimensions, and then to look for within-group similarities coupled with intergroup differences (Eisenhardt 1989).

In order to achieve the first objective of this study: to investigate the nature and character of linkages between tourism clusters and universities, I presented the empirical and secondary data by using across case comparison in the tabular format. I selected significant themes to answer the research questions 'Why clusters succeed or decline?' These themes were classified as three themes: characteristics, challenges, cluster development. In each theme, I used key words to demonstrate each case. However, there are several keywords in each table. So I selected the significant case to explain. For example, in the 'weaknesses theme', I used the key word 'organize and sell same things. Then I explained the keyword as follows: Like Phuket, Trung, Ranong who have organized the same event (a vegetable eating festival) at the same time. Next I demonstrated the empirical data in quotation form as follows:

As the Director of Research Division of Tourism, TAT expressed:

> *Thailand is famous for its floating market. The problem is that they are all the same. When something is successful everyone copies it. But each of the copies should be different. Unfortunately, people do not see that each floating market should have its own identity. It is the same with the Vegetarian Festival. They should all be different and held at different times. The planners need to consult each other before organizing any event.*

All these in order to answer the first objective were presented in chapter five.

For chapter six, in order to undertake the second objective: examine the possible model applicable to improving University – Industry Linkages (UILs) in Thailand in order to enhance competitiveness of tourism clustering, I discussed and analysed empirical and secondary data by using across case comparison in tabular format. I selected significant themes to answer the research questions 'How to improve the university-Industry-Linkages and How to enhance the competitiveness of tourism

clusters through UILs?" by addressing the themes of Strategic Formulation, Strategic Implementation, Social Networks, Triple Helix effect across case studies. Besides explaining and using quotations, I discussed and analyzed across cases and compared with the literature to confirm, extend or disagree.

Porter's (2008:279) focus on communications and discussion in clusters insufficiently captures the processes necessary to shift the mindsets of participants. For example, from empirical experience, OSMEP once organized the meeting and then let the experts explain how important the cluster is and an inspiration, after which everything was quiet. This grossly underestimates the time taken to alter mindsets; to allow participants to envision themselves acting in the *new world* that the new cluster creates. Communication is not enough. It seems that OSMEP thought they already did their job and that the next thing is the cluster must do everything by itself. In reality, participants need time to adjust their thinking, ways-of-working, motivation and goals. These are emerging significant themes from my data: the leadership and strategic entrepreneurship will be shown to be critical elements in these change processes.

3.8. Discussion of data analysis method

To analyse data, I used some main stages by Easterby-Smith et al (1996) as a guide: 1) Familiarisation: I re-read the data to find the interesting themes; 2) Reflection: to prevent an oversight of crucial data, I asked these questions of myself: Does it support existing knowledge? Does it answer previously unanswered questions? So I must aware of previous research models. 3) Conceptualisation: the data that interviewees provided may give me more ideas (right or wrong or added) in terms of previous models missed. 4) Cataloguing concepts: I transferred crucial data to a reference guide by labeling. I used colours and personal terms to help with tracking. Card indexes were used. Sources of data were added into this card index. 5) Linking: There should be a clearer conceptual framework at this stage based on evidence obtained. So I linked all of the identified important variables into a model suited to the Thai context. Importantly, this stage linked backward to the literature and forward to data obtained.

Finally, to address the thesis' research questions across case thematic analysis and discussing them, meant that I divided the findings into major categories of themes as identified during the research while adhering to the working conceptual framework. The thematic analyses were classified into three categories for the sake of data reduction.

6) Re-evaluation: I asked critical peers who were my university colleagues and professors to give comments. For the method to be used effectively, the data needed to have been collected by means of a semi-structured questionnaire where respondents have been allowed to write their views on a number of open questions, or by means of a semi-focused interview as described by Easterby-Smith *et al* (1996) and Merton and Kendal (1957).

In addition, I used word processing to store data. While conducting interviews, I used the tape recorder, handy drive that can store data and record. In short, I analysed data by hand because it assists in understanding deeply the quality of data compared with computer analysis that may lead to counting the frequency of categories.

3.9 Reliability, Validity and Language

According to Yin (2009) the quality of any empirical social research is evaluated by its validity and reliability as is the case in this thesis' case studies.

3.9.1 Validity

I used multiple sources of evidence and this is relevant during the data collection, for example, Sakon Nakhon Development Plan between 2010 and 2013 issued by Sakon Nakhon Provincial Office, OSM Andaman Project, TAT annual report.   Besides, I had a key informant review draft case study report.

Internal validity is mainly a concern for explanatory case studies, when an investigator is trying to explain how and why event x lead to event y. I explained what significant factors make clusters fail. (Yin, 2009)

This research also conformed to a conceptual framework, which helped the study to be guided by literature previously reviewed as suggested by Easter-by Smith *et al* (1996).

3.9.2 Reliability

As the goal of reliability is to minimize the errors and biases in a study (Yin, 2009), I used a case study protocol (see Table 3.10) to increase the reliability of the case studies and to be a guide in carrying out the data collecting and developing the case study database. Contents of the protocol are comprised of the introduction to case study and purpose of protocol, data collection procedures, outline of the case study report and case study questions. In addition, the protocol is a major way of increasing the reliability of the case study research and is intended to guide the investigator in carrying out the data collection from a single case (again, even if the single case is one of several in a multi-case study. (Yin, 2009)

Case studies rely on analytic generalization. The investigator is striving to generalize a particular set of results to some broader theory (Yin, 2009).   Yin, (2009) also states that a theory must be tested by replicating the findings in a second or even third neighbourhood, and where the theory has specified that the same results should occur. These results will provide strong support for the theory.

3.9.3 Language Issues

In terms of transcription procedure, I used the ways Yin (2009) suggests and that transcribing audio recording to text involves a series of technical and interpretational issues for which there are not many standard rules; one basic rule state is to explicitly in the report how the transcriptions were made.

In terms of concept, the Thai government has employed the concept of clusters a few years ago. Thus this concept is considered as new in Thailand, and as a result, people do not understand this new concept and terminology. I used definitions and the advantages of having clusters from the government's manual of clusters.

In terms of translation, there are several factors which affect the quality of translation in social research: the linguistic competence of the translator/s; the translator's knowledge of the culture of the people under study; the autobiography of those involved in the translation; and the circumstances in which the translation takes place (Birbili, 2000). There is a need for social researchers who have to translate data from one language to another to be explicit in describing their choices and decisions, translation procedures and the resources used.

Methods of scientific inquiry are languages to the extent that they constitute systems of thought, with terms that have specific meanings and ways of framing problems that make sense only within the system. Most quantitative researchers employ the language of frequency or classical statistics; qualitative researchers often employ the language of participant observation or the different language of in-depth interviewing (Small, 2004).

If methods are languages, then the most important issue facing qualitative researchers---especially those concerned about the science of their work---is translation (Small, 2004).

Birbili (2000), collecting data in one language and presenting the findings in another involves researchers taking translation-related decisions that have a direct impact on the validity of the research and its report.

Thus, I used a pilot case study and pre-test questions that are crucial since they clear up any confusion. As Bryman (2008) argues, questions that seems not to be understood or questions that are not often answered should become apparent. In other words, respondents may not understand technical terms. Thus the pilot case study should assist in identifying the problem and preventing missing data. In addition, he suggests it is best to find a small set of respondents who are comparable to members of the population from which the sample for the full study will be taken. For pre-test questions; to prevent this language problem, I translated questions from English to Thai and interviewed ten people from the public and private sectors related to the service industry to correct ambiguous questions.

3.10 Ethical Issues

In order to cope with ethical issues, I used the guide by Silverman (2007), who claimed in Mason (1996) work's, that one way to confront these problems is to try to clarify intentions while you are formulating your research problem. Three ways of doing this were what the researcher adopted in her investigation and prior to meeting with different parties and setting up her interviews

1. I decided what the purpose of my research was.
2. I examined which individuals or groups were interested or were affected by my research topic.
3. I considered what were the implications for these parties in framing my research topic in the way I had done (Mason, 1996: 29-30)

So I gave information to interviewees about my research that was relevant to the subjects' decisions about whether to participate in the research via a formal letter.

3.11 Conclusion

The aim of research is to develop a theoretical framework that explains how University-Industry Linkages (UILs) can increase the performance of tourism clustering in Thailand. In addition, significant external and internal factors affecting the Thai tourism clusters will be examined. The research questions are significant given the importance of successful tourism cluster through University-Industry Linkages (UIL). These questions recognized tourism clusters, the role of university, the linkages between university and industry, influential factors are contextual, and as a result, I explored four tourism clusters in Thailand. I used multiple case studies designs to explain and understand the nature and character of tourism clusters and University-Industry Linkages (UILs) between tourism clusters and its universities. In this study, I selected the in-depth interview. Case studies are the preferred method because they are relevant to the research questions and the focus is on a contemporary phenomenon within a real-life context (Yin, 2009). Thus this study was suited to a qualitative method that is more appropriate than a quantitative

method. In addition, as I have been working for Kasetsart universities, this assisted me to get access to participants both in the public and private sectors and universities such as Prince of Songkla University. Finally, the findings will be disseminated to target audiences such as participants across tourism clusters, academics in universities, and policy makers.

CHAPTER FOUR
PRESENTATION AND WITHIN CASE ANALYSIS

4.1 Introduction

The purpose of this chapter is to present my detailed findings and to provide a platform for answers of the set of research questions as analysed and discussed in chapter five and chapter six.

This chapter also provides the data presentation in the form of a within case study analysis. It presents the primary and secondary data findings of the research in two stages.

The first stage covers the cluster formation, role of actors, strategy and policy discussed and issued at the national level by governmental and non-governmental bodies.

Also, for the sake of triangulation, a successful cluster is presented in order to give different views of how policies and strategies play an important role in enhancing business; through the interaction of different connected bodies like universities and government offices.

The second stage of the data presentation covers the primary and secondary data findings from the local level of different geographical clusters. At this stage the total number of four case studies, constituting 66 interviews, reports and documentation are presented so that they reveal the empirical data investigation.

This chapter explains what each case study reveals from the empirical data and presents the empirical data in the form of thematic analysis.

The chapter is structured as follows: section 4.2 presents the national level comprehensive illustration of all policies, strategies and role played by governmental and non-governmental bodies in strategy implementation. It also covers a case study that represents a successful cluster. Section 4.3 presents four case studies at the local level in three provinces in three regions. The local case studies are presented as follows:

Section 4.3.1 Northeast: Sakon Nakon - Indigo Textile Cluster,

Section 4.3.2 South: Phuket Tourism Cluster,

Section 4.3.3 North: Chiang Mai

   Section 4.3.3.1 Edutainment Cluster,

   Section 4.3.3.2 Hotel de Charm Cluster.

The data presentation and analysis is guided by the conceptual framework as explained in the methodology chapter. Data presentation and analysis of all case studies are carried out through different themes and presented in a flowchart and a tabular format. The summary of chapter four is presented in the last section, 4.4.

4.2 National Level

At this stage of the research, I started to investigate the cluster formation and the role of the government and non-government bodies in setting out policies, strategies and plans. They explain how these strategies were implemented to enhance the linkages among government, university and private sector so that some geographical clusters benefited and exhibited successful stories.

They also expressed what they would like to achieve through better interaction among the three bodies involved. Their aspiration demonstrated great potential for cooperation on the national level such that companies, students, universities could benefit at the local level.
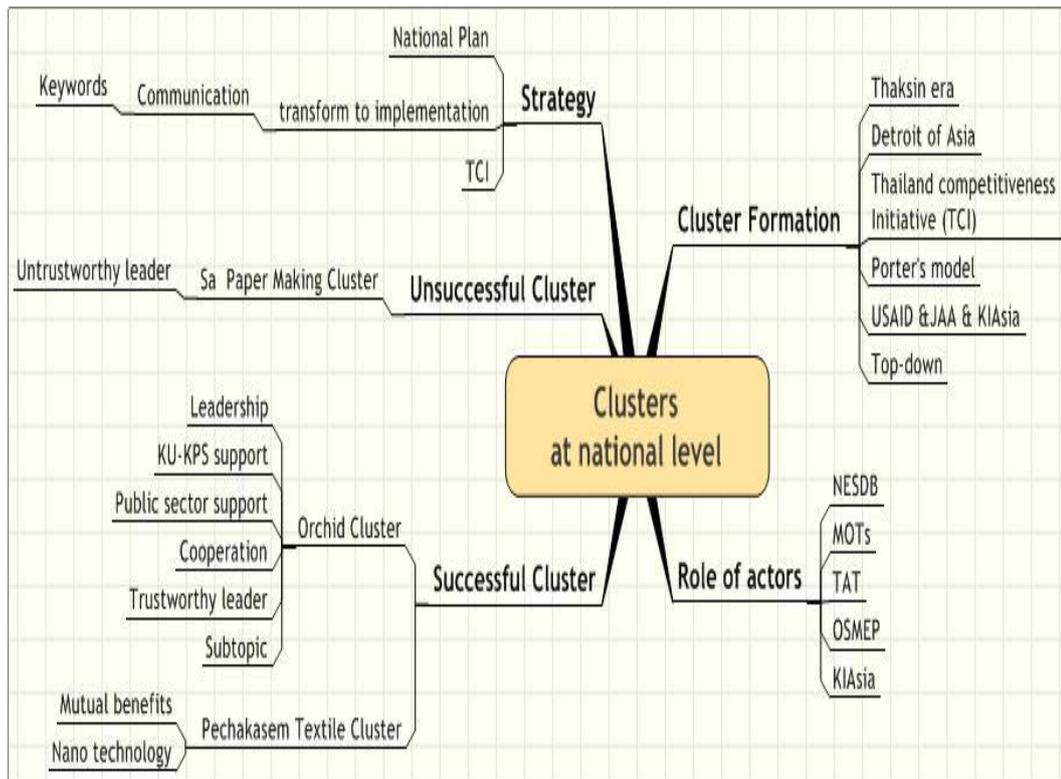
Figure 4.1 Flowchart shows different themes at national level
Source: Author

Guided by the conceptual framework, this section presented the different findings from integration as important expressed by the different bodies involved. These findings from the empirical data are analysed into themes in the flowchart as shown in figure 4.1. Themes cover cluster formation, strategy, successful and unsuccessful clusters, barriers and problems, including key success factors.

4.2.1 The cluster formation

'The cluster formation' refers to the creation of the cluster as a tool in order to enhance the performance of the group or/and increase the competitiveness of the nation.

Theme	Description	Primary Data			Secondary Data
		Public Sector	Private Sector	University/ Non-Profit Organisation	
• Cluster Formation	Creation of cluster as a tool in order to enhance the performance of the group or/and increase competiveness of the nation	• Former PM Thaksin era • Competitiveness of the nation • Detroit of Asia • 2 types of cluster formation: Top-down (public initiative) Bottom-up (private sector initiative) • Porter's Model • Cluster Establishing • USAID support	• Orchid farmers get together from problems • The Orchid Cluster born • Former PM Thaksin invited Michael E. Porter to help cluster in Thailand	• Financial support from USAID • Focus on agricultural industry • Thailand Competitiveness Initiative (TCI)	• Thailand competitiveness Initiatives(TCI) funded by USAID • Cluster Competitiveness co-organized by KIAsia and JAA on Jan 2001 • Form partnership between JAA and KIAsia for cluster development in Thailand and Southeast Asia • TCI Programme-6 clusters: tourism in Phuket and Chiang Mai, Gem and Jewellery, Silk and OTOP • World leader in niche markets • Tourism Capital of Asia

Table 4.1 Clusters in Thailand at national level
Source: Author

The findings from table 4.1 show that there are two types of initiatives of the cluster: the first one is top-down established by the government and the second one is bottom-up established by the private sector. How does the type of cluster creation relate to successful or unsuccessful clusters?

'Detroit of Asia' which introduced the concept of the cluster to Thailand was the vision of the former PM Thaksin government after the financial crisis in 1997. Since then the cluster has been used as one key mechanism of strategies in the hope that it increased national competitiveness and pushed the country forward to compete in the rapidly changing world. Brainstorms were applied in both the public and private sectors; moreover, the government also played a significant role by hiring Michael E. Porter for the cluster project. As the Former Director of Strategies Integration and Formulation Division for the National Economic and Social Development Board (NESDB) said:

The Strategies Integration and formulation Division was established from the government who wanted us to be the Detroit of Asia including Logistic issue. The cluster is the one of the strategies that we use Michael E. Porter's following model. I have wondered how clusters have affected. (See Appendix 1.4 Question 1)

The first public seminar on cluster competitiveness co-organized by the Kenan Institute of Asia (KIAsia) and J.E.Austin Association (JAA) in January 2001 was marked as an initiative to this new programme. After the seminar, KIAsia assigned a team to learn more about Porter's methodology. According to the partnership agreement, JAA concentrated on the competitiveness initiative in Vietnam, Cambodia, and Indonesia while KIAsia was responsible for Thailand. Thus the Thailand Competitiveness Initiative 2002-2005 was implemented by KIAsia. These findings are summarized in the tables below:

In terms of birth of clusters in Thailand, the KIAsia senior official said:

The clusters were begun about eight or nine years ago .For Kenan Asia, we have funding from the USAID. I was in this program called (TCI) The program promoted a variety of clusters and inspired knowledge about clusters. (See Appendix 1.6 Question 1)

Clusters were established during the former PM Thaksin era. As the NESDB Senior Official said:

When the government said the government will support clusters so every province, every government agencies, Industry Promotion Department, every departments, every ministry, every province, and every governor established the clusters in every province. (See Appendix 1.3 Question 3)

KIAsia used the same pattern all around the country; group people for a meeting and workshop. If people did not have a vision, KIAsia helped to do for them. (See Appendix 1.3)

KIAsia did the clusters' mapping project in 2006. There were 152 clusters across the country, out of which 60 were selected for analysis. The results revealed that only 53 per cent had survived and most were in the initial stage. Now what has happened to these clusters? Do they still exist or have they declined?

As Senior Operational Officer, Competitiveness Project Division of OSMEP mentioned to the Health Tourism Cluster at Ranong as follows:

We may not follow up the clusters directly after they are implemented. So we do not know whether they worked. We do not keep records of telephone calls. Are they still together? Do they have more members? In my opinion, if the group understands the concept of the cluster and see benefits, then they should develop further. (See Appendix 1.5 Question 2)

Table 4.2A-C presents tourism cluster mapping at national level.
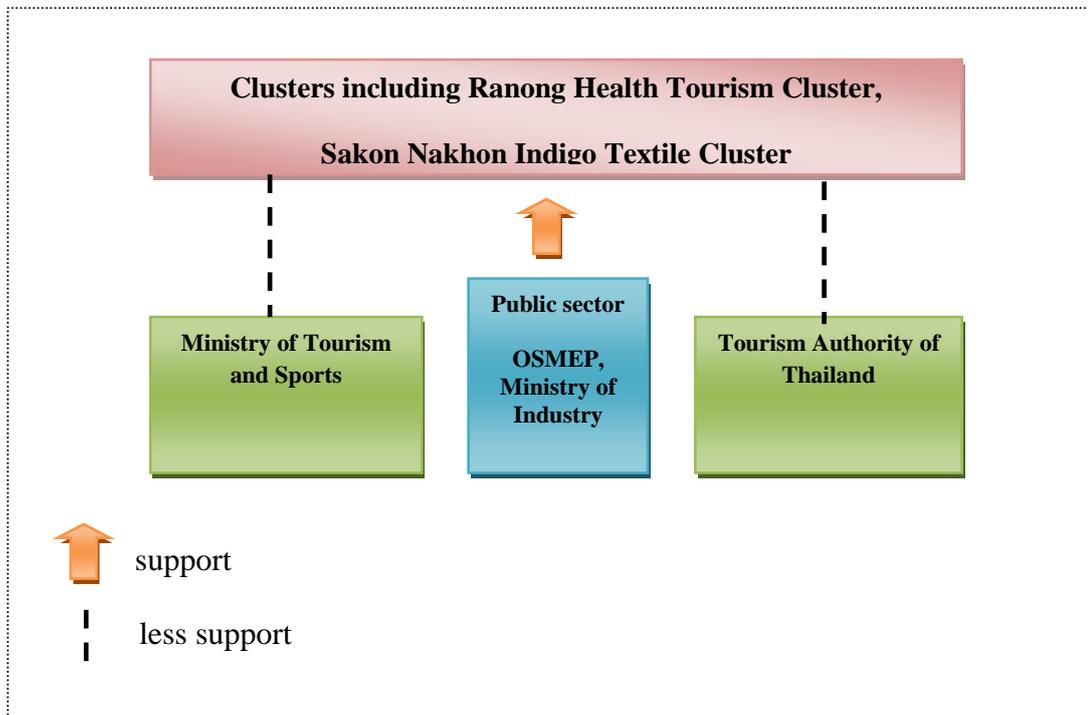
Table 4.2A Mapping clusters at national level
Source: Author

There are several actors involved in both government and non-government bodies such as NESDB, Ministry of Interior, Ministry of Industry, OSMEP, MOTS and KIAsia. From the Table 4.2A showed that OSMEP was involved with the Health Tourism Cluster at Ranong Province and Indigo Textile Cluster at Sakon Nakhon Province.
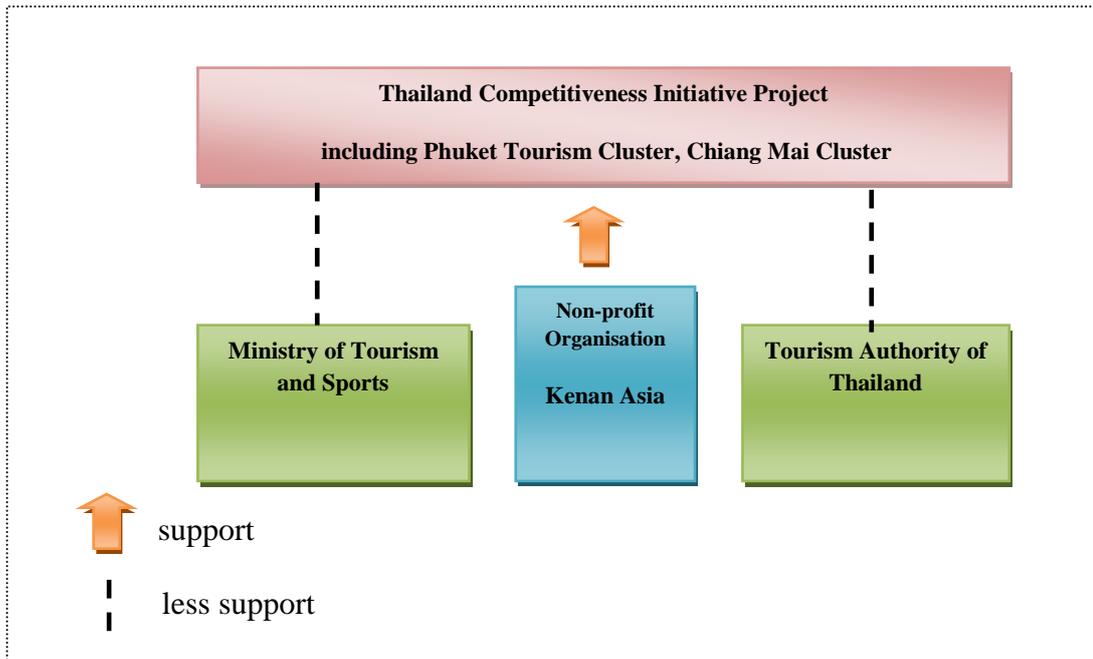
Table 4.2B Mapping clusters at national level
Source: Author

Table 4.2B showed that KIAsia took responsibility of TCI which including Phuket Tourism Cluster and Chiang Mai Cluster
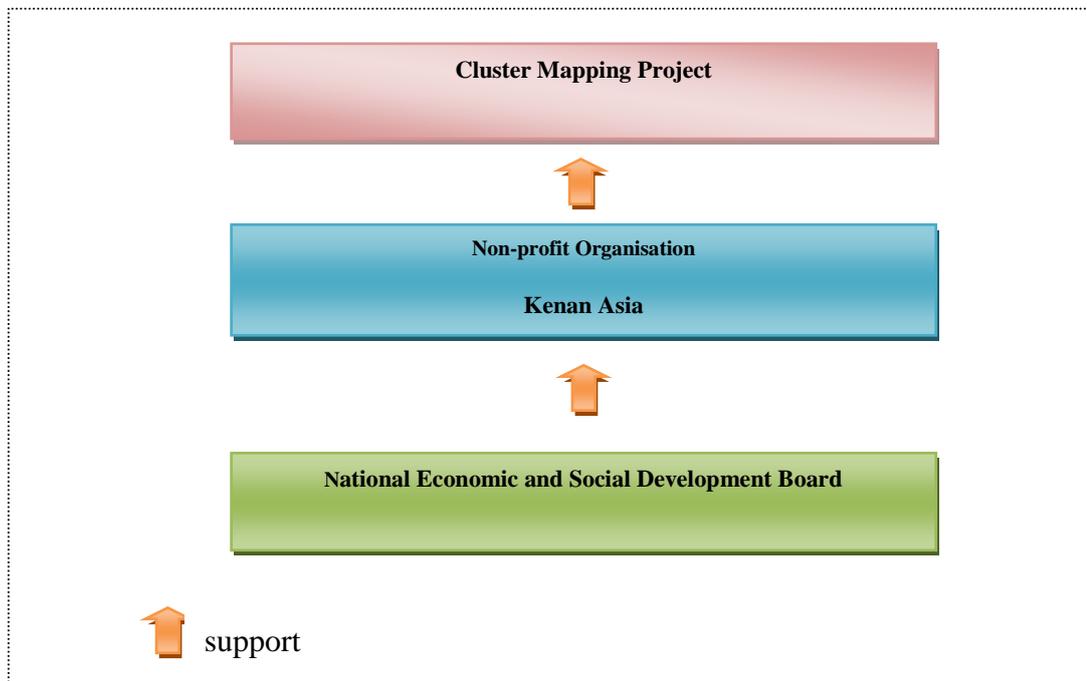
Table 4.2C Mapping clusters at national level
Source: Author

Table 4.2C showed that KIAsia took responsibility of Cluster Mapping Project. What are the roles of these actors and how have their strategies influenced these clusters?

4.2.2. The role of actors

'The role of actors' means prescribed behaviour associated with particular organisations.

Theme	Description	Primary Data			Secondary Data
		Public Sector	Private Sector	University/ Non-Profit Organisation	
• Role of actors	Prescribed behaviour associated with particular organisation	• NESDB-formulate national plan • MOTS-take responsibility of tourism and sports • TAT-promote tourism esp. marketing • OSMEP-promote SMEs • KIAsia promote and inspired of knowledge about clusters • U.-Source of knowledge and stand up for social good	• Ministry of Agriculture support orchid groups • NESDB support • Public sector support • KU-KPS help to do research	• KIAsia gives knowledge about cluster concept • KIAsia train 7 industrial provincial officials per province (75 provinces) including train CDA • OSMEP financial support • KIAsia cooperate with KU-KPS	• NESDB-role of public sector are to support clusters development and to formulate policies or regulations that support clusters' competitive-ness

Table 4.3 the role of actors
Source: Author

Table 4.3 shows the role of influential actors at the national level towards clusters. Starting with the role of NESDB, this government agency formulates the national plan and then transforms the plan into action with a five year timeframe. To obtain the budget and support from the government, organisations both in the public and private sectors must follow the national plan which has a framework and government keywords to guide the direction of the country.

The Ministry of Tourism and Sports (MOTS) is the ministry that takes responsibility for tourism and sport in the country whereas the Tourism Authority

of Thailand (TAT) is the organisation that promotes tourism by emphasizing marketing. In the past, TAT covered all areas but now the Tourism Development Department under MOTs is the organisation that takes responsibility for development and attractions. As the Director of the Marketing Research Division of the Tourism Authority of Thailand (TAT) said:

> *There is a problem in the Tourism and Sports Ministry because the ministry is an amalgamation of the TAT with the sports minister. There is conflict of interest within an organisation. The TAT people have 51 years of experience in tourism, but now are only permitted to carry out the marketing side. This is why, when tourists came to Thailand, they may see an attraction that is in ruins but because tourist attractions are the responsibility of the MOTS at local level so the TAT people can say that it is nothing to do with them.* (See Appendix 1.2)

The result of changing as the Director of Marketing Research Division of Tourism Authority of Thailand said:

> *When tourism and sport were amalgamated half of personnel came from Physical Education. They knew nothing about tourism. The TAT people said half our work has been taken over but they did not take our tourism experts. The main concern now is sport.* (See Appendix 1.2)

Another government agency is the Office of Small and Medium Enterprise Promotion (OSMEP) that is under the Ministry of Industry. OSMEP does not take responsibility directly for tourism clusters but to the SMEs in tourism, the task of OSMEP is to promote SMEs. However they must be careful not to overlap with the Tourism and Sports Ministry. Also, the decisions whether to do SMEs projects in relation to tourism depend on their board. As the Senior Operational Office, Level 2 Competitiveness Project Division, Project Administration and Coordination Bureau of OSMEP explained that:

> *It does not say directly that we will do tourism clusters. It depends on if, that year it was decided that clusters were important. It was the Board that made the decision.* (See Appendix 1.5)

In terms of the role of universities, the Permanent Secretary of the Tourism and Sports Ministry expressed his opinion on the missions of university and commented that:

The preservation of our art and culture is one of the core goals of our country. Moreover our university should be prime source of knowledge regarding both arts and culture. We rely on our universities to stand up for the social good. But I do not know what has gone wrong. (See Appendix 1.1 Question 1)

Whether or not particular actors are involved can significantly impacts on the cluster's performance and survival.

4.2.3 Examples of Successful and Unsuccessful Clusters

The successful and unsuccessful cluster in Thailand are presented in order to give different views of what are the Key Success Factors that play an important role in enhancing or declining the cluster; through the interaction of different connected bodies like universities and government and non-government bodies. Examples in Thailand of successful and unsuccessful clusters are recognized by senior officials.

4.2.3.1 Successful cluster

I define a 'successful cluster 'means the cluster that achieves its objectives and becomes sustainable. An example of a successful cluster is the Orchid Cluster

Theme	Description	Primary Data			Secondary Data
		Public Sector	Private Sector	University/ Non-Profit Organisation	
Successful cluster	The cluster that achieves to reach some tasks' objectives in particular time and can survive	• Orchid Cluster • Bottom-up • Private sector led • Successful Elements • Leadership • KU-KPS support • Public sector support • Cooperation • Pechakaseam Textile Cluster • Mutual benefit • Educational institute support- Nano technology	• Orchid groups occurred from the insect problem • Orchid Cluster leader cooperate with public and private sector • Orchid Cluster emphasis on Quality Control from upstream suppliers to downstream customers	• Ratchaburi Orchid Cluster • Korat Pork Cluster- strong purchasing power of raw material and differentiation	• Ratchaburi Orchid Cluster • Wine clusters in Argentina success from Public Private Institute (PPI)

Table 4.4 Successful Cluster
Source: Author

The Orchid Cluster is a successful cluster as it achieves it is objectives and appears sustainable. As table 4.4 illustrates, that Orchid cluster exhibited the following key success factors, which were gathered and analysed from primary and secondary data sources. These characteristics involved the bottom-up Private sector led, leadership abilities, and the support of KU-KPS University alongside the cooperation and support of the public sector. The Orchid groups arose as a result of the insect problem affecting exports; because of this knowledge transfer from the University proved critical in the success of the cluster enabling quality control by upstream suppliers to downstream customers.

The table 4.4 shows a successful cluster. As the NESDB Senior Official said:

> *A really successful cluster is the Orchid Cluster. It began in the private sector and still has people actively involved. The leader is Mr S who continuously drives the cluster forward by finding new networks, pulling the parties together. He organizes a yearly meeting for the entire cluster membership and some representatives from the public sector. Because it is so successful outsiders want to join and it now has government support despite being ignored in the past. KU-KPS has had an input in this cluster from the beginning. Mr S approached KU and in particular a researcher called Mr Jul. There was a problem with insect infestation that led Mr Jul to conduct experiments which resulted in solving the problem. They have co-operated all the time with product development and KU has not charged any fees.* (See Appendix 1.3)

Consistently the Manger, Business Advisory Service of KIAsia said:

> *The Ratchaburi Orchid Cluster is successful because their main leaders push for business and make personal sacrifices. This cluster took up to 8 years to develop and finally succeeded.* (See Appendix 1.6 Question 2)

Regarding other successful clusters, the Senior Operational Office, Level 2 Competitiveness Project Division, Project Administration and Coordination Bureau of OSMEP said:

> *I think the successful clusters those such as the textiles at Pechakaseam. There are those upstream, middle stream and downstream. Perhaps the cluster began in the middle stream and even though it was small when people saw it, they joined and the group expanded. However, management is the core of this enterprise but if it is not trustworthy, it cannot survive. I give examples of those that are successful and those that do not succeed. What are the reasons they cannot survive? The textile cluster Pechakaseam, did not have any idea how to join together at first. They thought that since each own a factory producing garments, why should they have to join together? I spent a lot of time in meetings to explain why they should join together. They did not want to join a cluster. However, they suddenly got a lot of orders for yellow T shirts,*

too many for one factory. As a result they decided to share the orders and combined to buy the materials necessary. A research institute introduced them to a special fabric in Nanotechnology. As a result the T-shirts they produced from this material sold at 450 Baht (two or three times the price of a cheap cotton T-shirt). This is an example of adding value to a product. (See Appendix 1.5

4.2.3.2 Unsuccessful cluster

'Unsuccessful cluster' in this study means the cluster fragmented, failed to achieve its objectives and proved unsustainable. An example of an unsuccessful cluster is the Sa Paper Making cluster.

Theme	Description	Primary Data		
		Public Sector	Private Sector	University/ Non-Profit Organisation
Unsuccessful cluster	the cluster that declined	• Sa Paper Making Cluster • Untrustworthy Leadership	• Orchid groups had conflict • Discontinue activities • Limited budget • Quality problem • Market problem	• Projects gradually decreased due to discontinuous budget • Projects were too short • SMEs entrepreneurs are narrow-minded

Table 4.5 Unsuccessful cluster
Source: Author

Regarding an unsuccessful cluster, the Senior Operational Office, Level Competitiveness Project Division, Project Administration and Coordination Bureau of OSMEP said:

I will give you another example of a cluster that did not succeed. It concerns Sa paper making in the North. OSMEP gave support and told them how to prevent water pollution. In order to develop more products they took people from the paper mill on a study trip abroad to see how others worked. As a result they invited foreign designers and adopted European trends. Then they sent four to five people abroad to get orders but when they returned they did not share their orders and knowledge. The other members of the cluster were very angry and as a result their group collapsed. So they grouped and had to count one again. It maybe not be specific to tourism but the story is the same. (See Appendix 1.5)

The table 4.6 below demonstrated the strategies at national level. In terms of strategy, the government uses the national plan, framework and keywords to guide and allocate budget to the government and non-government bodies all around country. When they want to apply for the government budget, their plans must be consistent to the national plan, the government framework and the government keywords in order to obtain budget. When the government changes so do the government keywords. Consequently, almost all previous projects stopped.

'Strategy' means plan that was formulated to achieve the desired goal.

Theme	Description	Primary Data			Secondary Data
		Public Sector	Private Sector	University/ Non-Profit Organisation	
Strategy	plan that was formulated to achieve the desired goal	• PM Thaksin era- Cluster as a tool to increase competitiveness of the country • Porter's model • PM Abhisit era – Creative Economy • Keyword • Transform strategy to implementation	• Orchid group joined the cluster project • Orchid cluster emphasis quality control from upstream suppliers to downstream customers	• KIAsia did not focus on tourism • Lack of people who look at the big picture of tourism industry • Overlap function • Department of Industrial Promotion take care of clusters' projects	• On 17 April 2009, Thai Cabinet approved tourism as the national agenda to solve crisis of Thai tourism industry • Strategic tourism planning 2009-2012 • Strategic tourism planning 2012-2016

Table 4.6 Strategy at national level
Source: Author

The Former PM Thaksin government used keywords such as competitiveness and clusters. When the Abhisit government came into power those keywords were dropped. As the Senior Official of NESDB said:

> *During the Abhisit government, the key word was creative economy so I emphasise these two words.* (See Appendix 1.3)

Some policy makers gave up and followed the new keywords that the new government launched. As the Senior Official of NESDB said:

> *When I went to OSMEP and spoke to Mr.J. He told me that although he wanted to push the cluster project, he was not able to do so because the top*

management of OSMEP wished to follow the Abhisit government plan to encourage the 'creative economy. (See Appendix 1.3 Question 22)

But some project workers tried to think of ways to make their old plan continue to work by linking with the new concept and responding to the politicians at the same time. As the senior official of NESDB expressed:

*My objective is not the name but the goal, so I adjusted my language from the word 'cluster' to the words 'creative economy'. (*See Appendix 1.3 Question 23)

In terms of clusters, the Former Director of Strategies Integration and Formulation Department, NESDB said:

The cluster is the one of strategies that we use- Michael E. Porter's model until now. From the beginning of clusters from my reading and interpretation, actually, a cluster starts by itself. The government, the policy makers help a little bit. I never saw a cluster that the government supported work, and so I would like you to go to talk with the NESDB senior official who is the cluster expert. She knows better because actually- does the cluster work or not? Even Michael- he has studied the cluster that already exists for more than ten years. I have never seen clusters that the government established work. (See Appendix 1.4 Question 2)

4.3 Local Level: Four Case Studies

At this stage of the research, I started to investigate the four case studies at local level in three provinces in three regions:

4.3.1. Northeast- Sakon Nakon - Indigo Textile Cluster,

4.3.2. South- Phuket Tourism Cluster,

4.3.3. North- Chiang Mai,

    4.3.3.1. Edutainment Cluster, and

    4.3.3.2. Hotel de Charm Cluster

I explain each case study, using new empirical and secondary data what happens at a local level; using the conventions of qualitative research, I then distil this data (using a process of coding, patterning and theming) to identify key strategic variables that are then utilised in the presentation and analysis of data to identify why some clusters succeeded more than other.

Guided by the conceptual framework and flowchart, this section presents the different findings in each case study interacting by the different bodies involved.

4.3.1 Northeast- Sakon Nakon - Indigo Textile Cluster

In this sector, I made themes within the case study and present the findings of this case study in the format of a flowchart and tables as well as explanations under each table, meaning what is in the case study using quotations and documentation as examples. Different themes are presented in the tables. These themes in the case study cover cluster formation. Also, how the role of government and non-governmental bodies at regional and local level concerning policy and strategies affected the cluster implementation.

The Indigo Textile Cluster is comprised of groups of local people in each village in Sakon Nakhon Province who dye Indigo clothes linked with government and non-government bodies and universities for mutual benefits.

The map below (see fig 4.2) shows where Sakon Nakhon Province in Thailand is:

Figure 4.2 Indigo Textile Cluster located in Sakon Nakhon Province
Source: Sakon Nakhon (2013)

Guided by the conceptual framework and flowchart, this section will present the different findings regarding integration expressed in terms of importance by the different bodies involved.

Data presentation and analysis of the Indigo Textile Cluster Case Study carried out through the different themes presented in a flowchart and a tabular format.

These findings are analysed in the flowchart below:
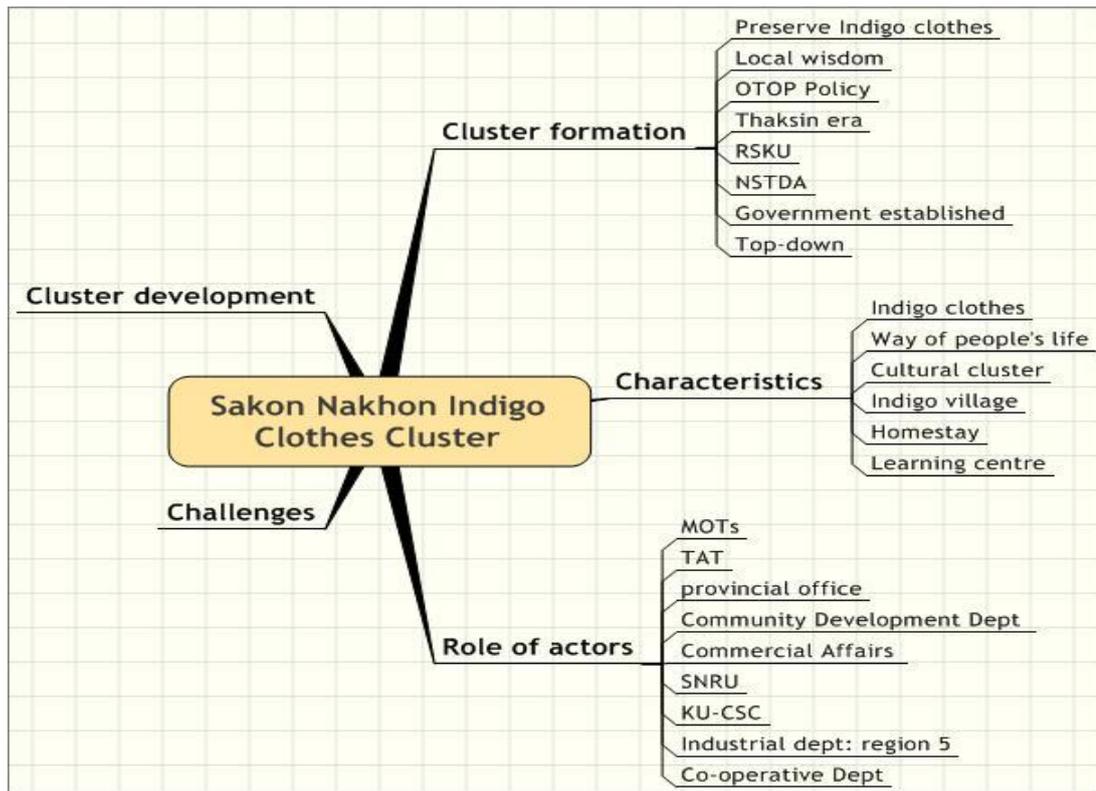
Figure 4.3 Flowchart shows different themes in Indigo Textile Cluster;
Source: Author

The Figure 4.3 shows findings from the empirical data in the form of a thematic analysis. Themes covers cluster formation, strategy, barriers and problems including key success factors. The findings are summarized in the tables below.

Theme	Description	Primary Data			Secondary Data
		Public Sector	Private Sector	University/ Non-Profit Organisation	
Cluster Formation	Creation/ original of cluster	• Preserve Indigo clothes as local knowledge • PM Thaksin era • OTOP policy	• Top-down - Governor established the cluster and appointed president and CDA	• Top-down - Governor established the cluster • Sakon Nakhon Rajaphat University-seminar made indigo well known.	• Cluster formed on October 2005 • Revenue of indigo clothes in the year 2005- 70 million Baht (£1.4 million) • Register as Indigo group 60 groups but only 9 groups are 4-5 star OTOP

Table 4.7 Sakon Nakhon Indigo Textile Cluster Formation
Source: Author

The table 4.7 shows the original of Sakon Nakhon Indigo Textile Cluster. Indigo clothes disappeared from the country for one generation about 50 years ago. In 1992 Mrs P (head of Maeteeta Indigo Group at Nadee Village, Punna Subdistrict) and her mother started to find out how to dye indigo clothes. Mrs P travelled all around the country to find the indigo seed. Finally she got it from the Karen tribal people on a mountain in the North of Thailand. Then she tried to learn how to dye by looking for someone who knew about the dyeing process. She travelled around and once she went to the market and tried to find anyone who had black nails. She did find one person, but that old lady did not dye anymore and had forgotten how to do it. For five years Mrs P and her mother experimented.

In 1997 Mrs P met Mrs A, who was Dean of the Faculty of Science and Technology at Rajabhat Sakon Nakhon University. Mrs P told Mrs A that a Professor at the National Science and Technology Development Agency (NSTDA) wanted a researcher to carry out research into indigo clothes. At the same time, Mrs A wanted to preserve indigo clothes as local knowledge. Moreover, her ancestors used to make indigo clothes and had their own family pattern. Thus Mrs A proposed and obtained a budget from NSTDA. With help and advice from NSTDA Professor, Mrs A knew how to disseminate. After experimenting for a while, Mrs A organized a seminar because she knew she already had some knowledge from three sources; firstly from documents. At first she tried everywhere in Thailand but was unsuccessful so she asked her friend studying in Michigan, US. Her friend investigated at the library but found few relevant chapters from two books. Secondly, she had knowledge from her experiments. The third part was from local people who had dyed indigo clothes. So she pulled the three parts together, summarized them and wrote a report. The seminar was unusual because the person who gave the speech was a local lady and the listeners were academics. At that time, people were becoming interested in natural products. So participants were amazed to learn about the indigo dyeing procedure. News was distributed through every channel; newspaper, radio, TV. At that time, the Thaksin Government wanted to promote OTOP (One Tambon One Product). As the news spread, more people

became interested in indigo. There are more buyers and more people who dye indigo. The activity has expanded from her village to other districts and other provinces.

Because Mrs P's product was outstanding, she had the chance to go abroad several times with public sector bodies such as the Export Promotion Department. When in Japan she saw that the machine was operated only by one person and began to wonder how she could compete with them. She came up with the idea that she could compete only by handcrafting. Since then, quality is her main priority. Her goods are highly priced but unique. The film "Troy" used her product for the actors, buying from her home in Sakon Nakhon.

With the cluster's policy of the Thasksin era, the governor established the Indigo Textile Cluster. Even though 'Indigo' was started by Mrs P, she stepped back from being the president when the cluster was established by the government. So the governor chose another woman to be the president.

The President of Province Official Administration (POA) said:

> *Indigo is a very expensive product and the fabric is hand dyed. We aim at the middle and upper classes. I want to build a learning centre where foreigners can come and learn about indigo whilst staying in indigo houses. If many tourists come we can build at Punna Village. I want farmers to have a sustainable life. I can provide funding for seeds and help with animal breeding. (See appendix 4.2 Question 1)*

In addition, the province has promoted the product by persuading every organisation, both in the public and private sectors, to wear indigo clothes once a week. At that time the governor wanted to promote indigo dyeing as a local knowledge and to create the indigo village as a learning centre, so he approved the project. However when the governor changed, even though the project was approved, the project was dropped.

Table 4.8 below shows the role of the public sector towards tourism; TAT takes responsibility for marketing including advertising, PR, events promotion. But in the past, TAT covered development and marketing, activities support and

traditional events support. Some activities, TAT creates by itself whilst some worked up with communities and with local people to generate activities.

Theme	Description	Primary Data			Secondary Data
		Public Sector	Private Sector	University/ Non-Profit Organisation	
Role of actors	Prescribed behaviour associated with particular organisation	• MOTS-take responsibility of tourism attraction • TAT-promote tourism esp. marketing • OSMEP-promote SMEs • SNRU.-Indigo dye process, curriculum • KU-CSC-Garment Cluster • Local government bodies support such as OTOP fair	• Public sector support such as Office of Commercial Affair Sakon Nakhon Province • Supportive institutes such as RSNU	• KU-CSC work as coordinator • KU-CSC cooperate the cluster participants such as with PAO, Sakon Nakhon Chamber of Commerce, Community Development Provincial Office • OSMEP supported • Industrial Promotion Centre Region 5 provide financial support	• Provincial meeting-public and private sector in Sakon Nakhon wear indigo clothes every Fridays • Public sector support such as Community Development Provincial Office, Office of Commercial Affair Sakon Nakhon Province • Supportive institutes such as SNRU, KKU, Sakon Nakhon Chamber of Commerce

Table 4.8 Role of actors
Source: Author

At present, TAT does the marketing whilst MOTS takes responsibility for development such as attractions, human resources, tour guides, and tourist statistics.

However, the local government body has not paid much attention to tourism as the Chief of Tourism and Hotel Management Department, KU-CSC said:

Tourism is important but the role of the public sector is still small in this province. (See appendix 4.15 Question 5)

In terms of the role of the public sector, the governor did persuade private and public sectors and universities to wear indigo clothes every Fridays but this runs the risk of creating counterfeit demand; if the governor withdraws his support - who will buy indigo clothes? This worried local government bodies as the Vice Governor said:

If there is no One Tambon (village) One Product (OTOP) Fair or if the province does not organize events or support indigo groups to sell their products, they will be in difficult situation. If one day the demand in our country finishes, where will they sell. I am worried. (See appendix 4.13 Question 8)

In terms of the role of the university towards the cluster, the Deputy Director of Research Centre, KU-CSC said:

What we can do with our connections is to go to the Export Department. In terms of marketing, we have experts in marketing. They have channels which participants want. I want to use the Rubber Cluster Model. We might set the company to get orders then distribute these orders amongst them. This is an issue for Dr. Sumalee who does clusters for the Industrial Ministry. She is the advisor to this project too. So what the university can do is the marketing by finding experts who come and analyse the opportunities. So KU works as the coordinator bringing several organisations together to support each other. If the Export Department has an order, send for us. It is our duty to manage and to cooperate. Then in 3-5 years, we will phase out. They must continue by themselves. After that we will act as consultants. But we will not abandon them. Now we act as an organizer. (See appendix 4.13 Question 16)
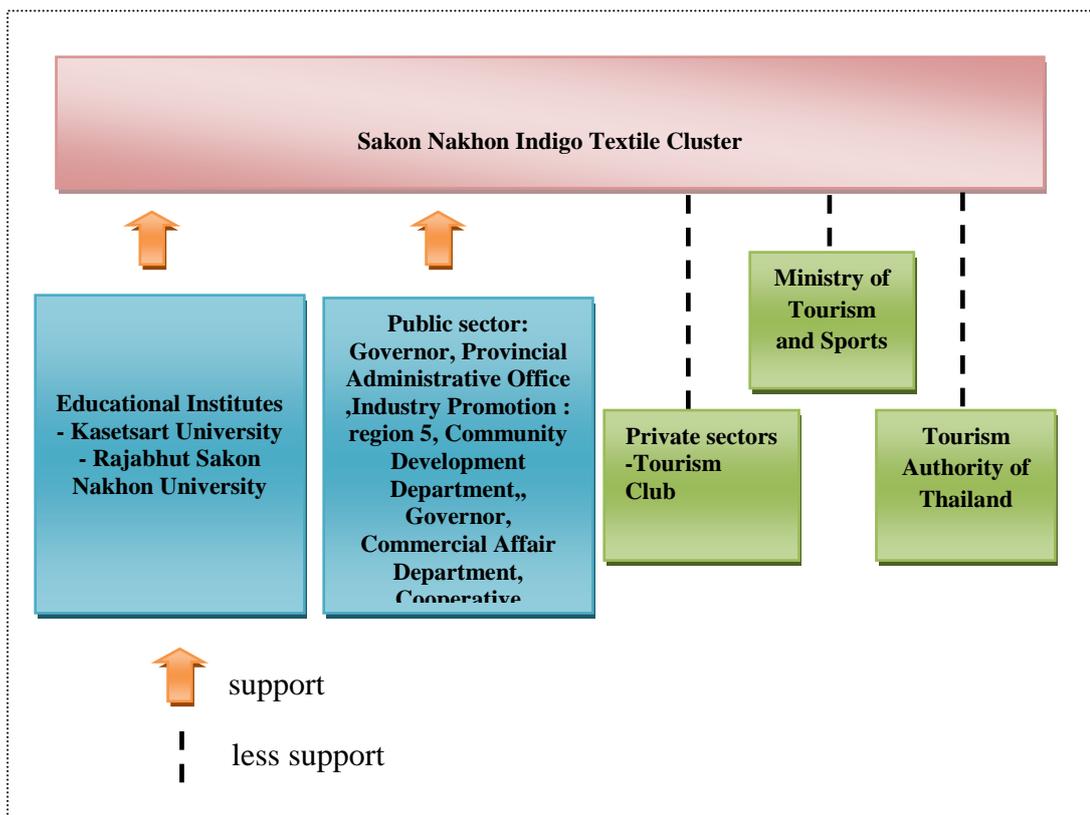
Table 4.9 Sakon Nakhon Indigo Textile Cluster Mapping; Source: Author

At Sakon Nakhon province, there are several actors involved with Sakon Nakhon Indigo Textile Cluster. In the public sector, there are Govenor, Provincial Administration Office (PAO), Tourism Authority of Thailand (TAT), Sakon Nakhon Provincial Office of Tourism and Sports (MOTS), Office of Commercial Affair, Community Development Department, Industrial Department, Cooperative Department. These government agencies have provided periodic support depending on the policy and the budget. Each acts only within its own scope such as TAT and MOTS.

In terms of boundaries, the TAT at the regional level takes responsibility for three provinces. For example, TAT: Nakhon Panom office will take responsibility for Nakhon Panom, Sakon Nakhon and Mudahan. Regarding the MOTS, Sakon Nakhon Office falls under the Nongkai province. As the Director of the TAT: Nakon Panom office said:

> *When MOTS: Sakon Nakhon Office bids for the budget, they must ask from the Nongkai Province. I think they will have to adjust again. They have to adjust like TAT. (See appendix 4.3Question 2)*

4.3.2 South- Phuket Tourism Cluster

In this sector, I started to investigate the government National Tourism Policy, and the Visiting Thailand Policy. The findings of this case study are demonstrated in the form of flowcharts and tables as well as explanations under each table using examples from quotations and documentation.

The Phuket Tourism Cluster is a geographical group in relation to tourism and associated institutions linked by particular projects. This map below (Fig 4.4) shows where Phuket Province is in Thailand.
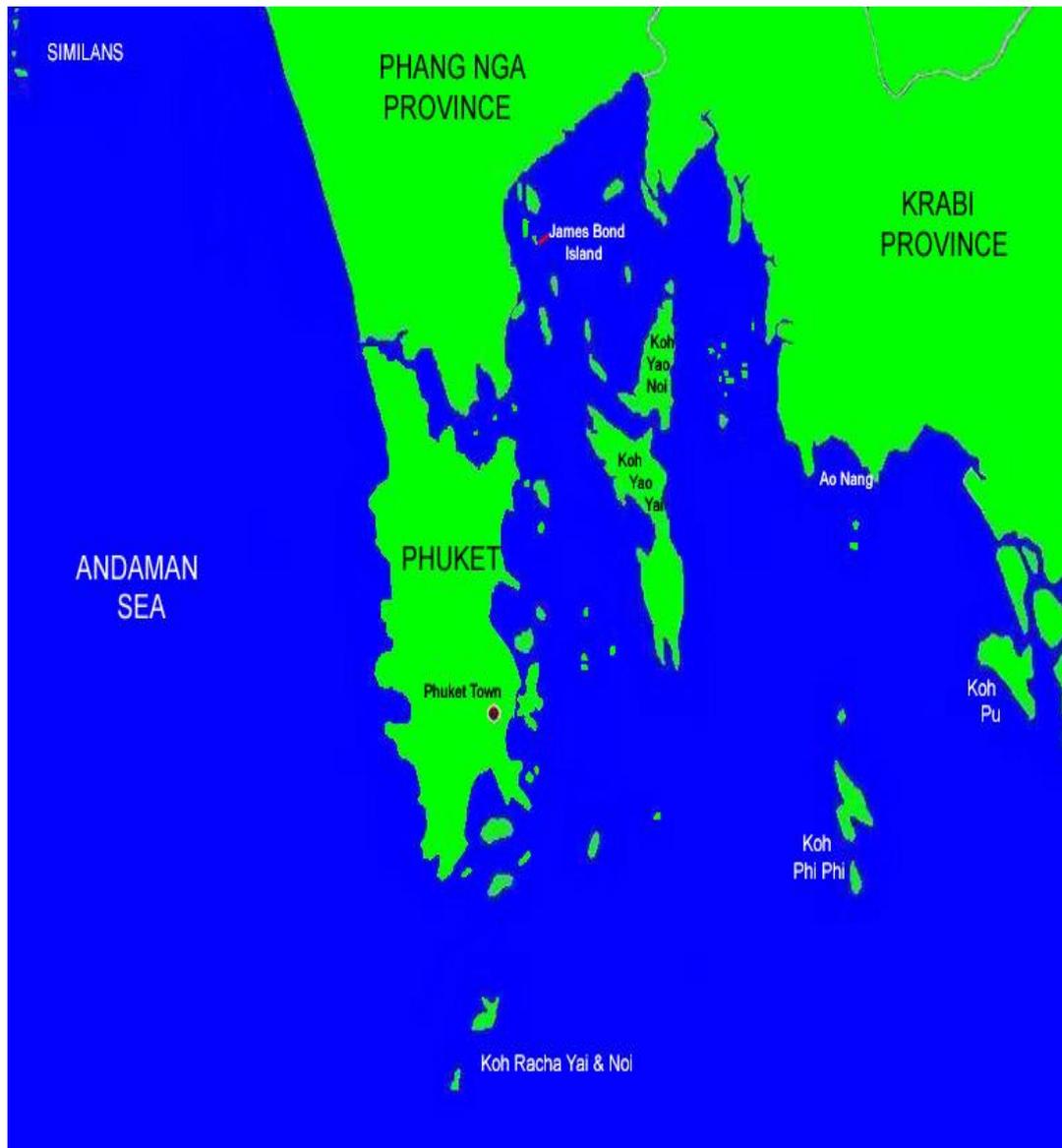
Figure 4.4 Phuket Tourism Cluster located in Phuket Province
Source: Welcome to Phuket (2013)

The Phuket Tourism Cluster is a geographical group in relation to tourism and associated institutions linked by particular projects.

Data presentation and analysis of the Phuket Tourism Cluster Case Study carried out through different themes is presented in a flowchart and a tabular format.

These findings are analysed in the flowchart below:
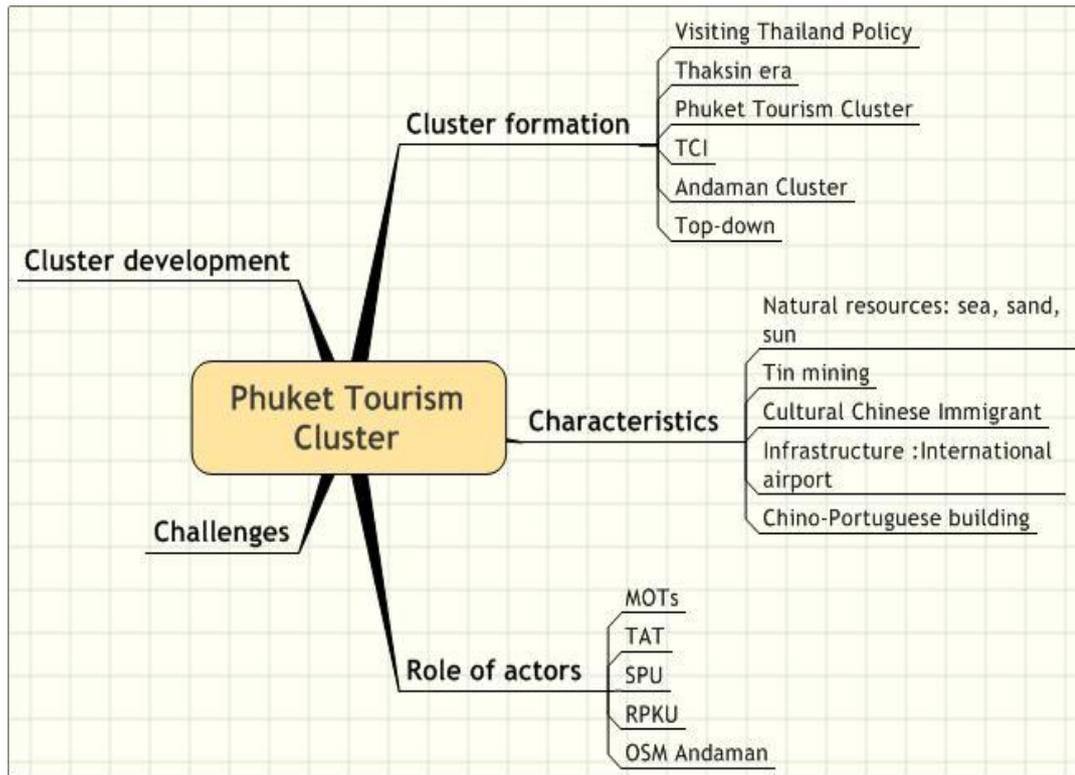
Figure 4.5 Flowchart shows different themes in Phuket Tourism Cluster
Source: Author

Figure 4.5 shows findings from the empirical data in the form of thematic analysis. The themes cover cluster formation, strategy, barriers and problems including key success factors.

Theme	Description	Primary Data			Secondary Data
		Public Sector	Private Sector	University/ Non-Profit Organisation	
Cluster Formation	Creation/ original of cluster	• Visiting Thailand Policy • Thaksin era • Top-down • Government led • CEO Retreat • Phuket Tourism Cluster • Andaman Cluster	• Thai Hotels Association: Southern Chapter tries to push hotels and universities to cooperate to each other and create standard service	• Andaman Triangular	• TCI Programme-6 clusters: tourism in Phuket and Chiang Mai, Gem and Jewellery, Silk and OTOP

Table 4.10 Phuket Tourism Cluster formation

Table 4.10 shows how the national policy affects the direction of Phuket Province. Since the Visiting Thailand Policy of 1985, Phuket abandoned tin mining in favour of tourism. Consequently, the city has grown dramatically.

Then, after the Asian Financial Crisis of 1997, in order to generate economic competition at regional and international levels, the Thaksin Government employed the concept of the cluster because it thought that the provinces themselves could not generate the power to compete with their regional and international competitors. As a result, it made sense for the provinces to join together as clusters since they have different potentials. To meet their economic goals they were selected according geographic location. Consequently, the Phuket Tourism Cluster expanded initially to three provinces and then to five provinces which are now named Andaman Cluster.

However, even though Phuket is a small Island with three districts but there are several actors both in government and non-government bodies involved with tourism because of the Visiting Thailand Policy; this turned Phuket into a tourism city. How have these actors interacted?

Theme	Description	Primary Data			Secondary Data
		Public Sector	Private Sector	University/ Non-Profit Organisation	
Role of actors	Prescribed behaviour associated with particular organisation	• Interior Ministry-take care of Andaman cluster • The governor is the head • MOTS-take responsibility of tourism attraction • TAT-promote tourism, organize Andaman Travel Trade show • PSU and PKRU-graduates, research, academic service	• Thai Hotels Association: Southern Chapter tries to push hotels and universities to cooperate to each other and create standard service • Universities started cooperative program	• Faculty of Management-PKRU curriculums response to local context such as marine curriculum	• OSM Andaman takes responsibility of the cluster

Table 4.11 Roles of actors
Source: Author

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Table 4.11 shows the roles of actors towards the cluster. There are several actors involved within the cluster. However, I selected some influential actors inside the cluster such as the Interior Ministry, PAO, and TAT. The Interior Ministry has responsibility for the Andaman Cluster. The leader of the cluster is the Phuket Governor, and the Andaman Strategic Office (OSM Andaman) at the Provincial Office acts as secretary to the cluster. Both positions are under the Interior Ministry.

In terms of the role of the actors, some problems occurred when the cluster was implemented. The senior provincial official of OSM Andaman explained the origins of the Phuket cluster and how the government strategy was implemented, saying:

> *In Thaksin's time he divided the country into 18 clusters spread through the 76 provinces. There was one deputy for 2-3 clusters. This was a problem because the clusters were too big. For instance from a regional perspective it is impossible for the governor of Phuket to manage five provinces, each of which has their own governor. He does not have authority.(See Appendix 3.1)*

PAO has a supporting role because they collect revenue of one per cent from local taxes on hotel rooms, which means about 50-60 M (£1-1.2 M) that is used for Phuket marketing in order to penetrate new markets. They will go to tourism events such as the international tourism trade show in Berlin. The Phuket booth was opened there by using the PAO budget.

Whereas the Director of TAT, Phuket Office said:

> *TAT organized a trade show for the Andaman Travel Trade and invited travel agencies from abroad to attend. We saw this as being TAT'S role in encouraging tourism.* (See Appendix 3.3 Question 26)

In addition, TAT does PR and cooperates with other organisations by organizing activities such as the Chinese New Year, Song Kran (Thai New Year), Loi Krathong and vegetarian festivals. They organize these activities to attract more tourists.
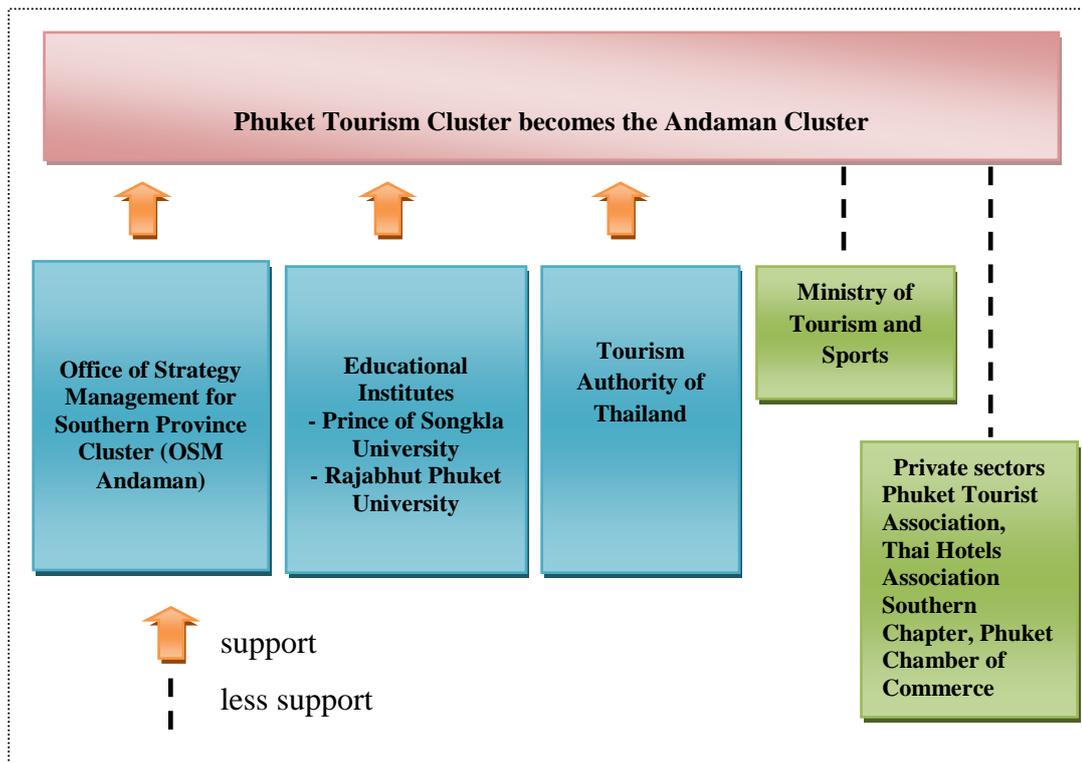
Table 4.12 Phuket Cluster Mapping; Source: Author

Table 4.12 shows the Phuket Cluster Mapping. There are several actors involved such as OSM Andaman, TAT, and Municipality whilst there are two universities: Prince of Songkhla University and Rajabhut Phuket University supported the cluster. In the private sector, there are the Phuket Tourist Association, the Thai Hotels Association Southern Chapter and other organisations such as the Spa Association and the Phuket Chamber of Commerce. The Director of TAT: Phuket Office said:

> *Tourism is our core industry. Our revenue is approximately 100,000 million Baht per year (£ 2,000 M). There is four million for foreign and 1 million for Thai tourists. Everything that happens here is linked to tourism; the main revenue of the people here is from tourism, and the public sector and the private sector both support tourism. (See Appendix 3.3 Question 1)*

In terms of boundaries, there are several organisations involved such as the Tourist Association, the Thai Hotels Association, the Spa Association, and the Transport

Cooperative. Much depends on what projects the local government decides to promote, so it is difficult to measure where the boundary is.

4.3.3 North- Chiang Mai

There were two tourism clusters in Chiang Mai: the first one was the Edutainment Cluster; the second was the Hotel de Charm Cluster.

The map below (See Fig 4.6) shows where Chiang Mai Province is in Thailand:

Figure 4.6 Edutainment Cluster and Hotel de Charm Cluster located in Chiang Mai
Source: Google Map (2013)

In this sector, the research presents themes that start from the original cluster and interaction between three bodies; the public and the private sectors plus the university who were involved in generating Chiang Mai Charm. In addition, the research explains the role of the government and non-government bodies, how their strategies were implemented, and why the cluster disappeared. The findings of this case study are demonstrated in the format of a flowchart and tables as well as explanations under each table using examples from quotations and documentation.
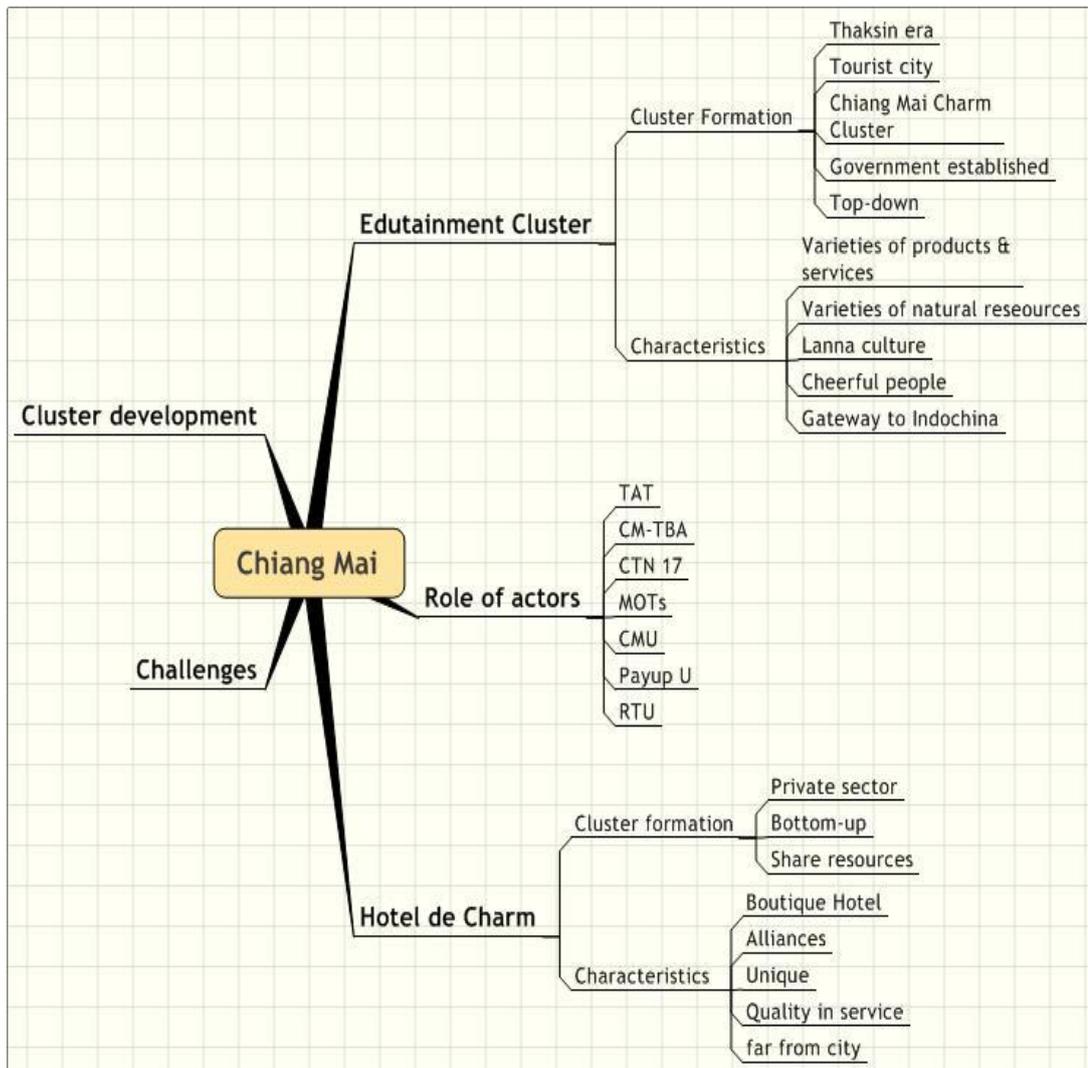
Figure 4.7 Flowchart shows different themes in two Clusters in Chiang Mai:

Edutainment Cluster and Hotel de Charm Cluster; Source: Author

The figure 4.7 shows findings from the empirical data in the form of thematic analysis. Themes covers cluster formation, strategy, barriers and problems including key success factors.

4.3.3.1 Edutainment Cluster

'Edutainment Cluster' is the geographical group of companies in relation to tourism, linked with associated institutions to achieve mutual benefits

Theme	Description	Primary Data			Secondary Data
		Public Sector	Private Sector	University/ Non-Profit Organisation	
Cluster Formation	Creation/ original of cluster	• Government support	• Thaksin era • Tourism city • Chiang Mai Charm • Government established • Top-down	• KIAsia led	• Chiang Mai Charm Cluster • TCI Programme-6 clusters: tourism in Phuket and Chiang Mai, Gemand Jewellery, Silk and OTOP

Table 4.13 Cluster Formation; Source: Author

Table 4.13 shows the cluster formations. In the beginning the cluster used the name 'Chiang Mai Charm Cluster' for the big picture. The Vice President of Chiang Mai Tourism Business Association said

Under the umbrella of Chiang Mai Charm, we have separate sectors such as eco-tourism, adventure holidays etc. (Appendix 2.9 Question 69)

This cluster was the top-down and established by the government.
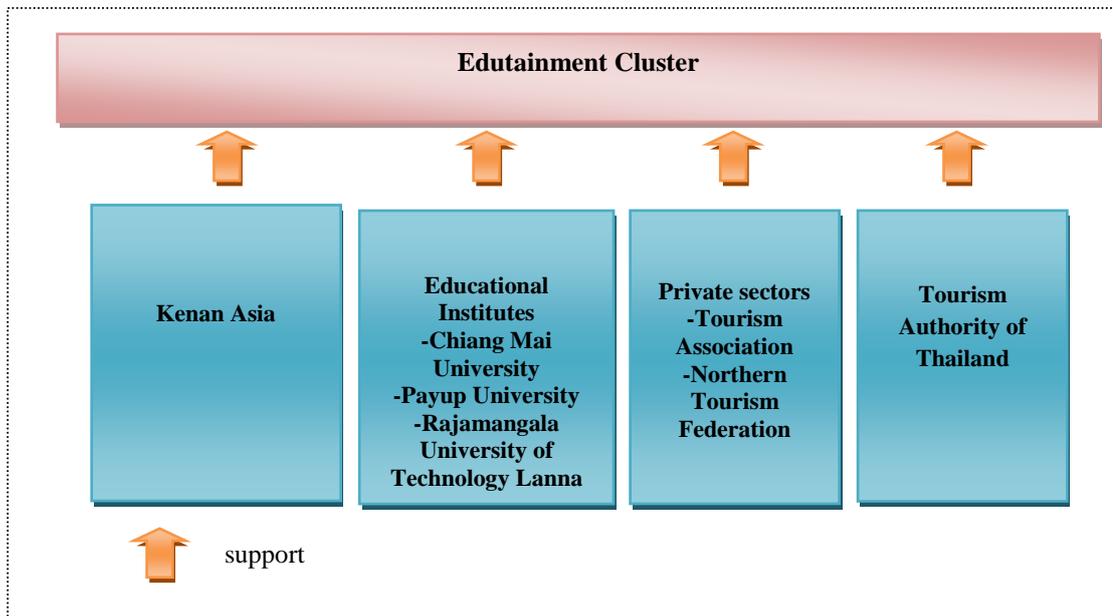
Table 4.14 Edutainment Cluster Mapping; Source: Author

Table 4.14 presents the Edutainment Cluster Mapping. There are several actors supported the cluster such TAT, the Tourism Business Association, the Association

of Northern Tourism Federation, Chiang Mai, KIAsia, ChiangMai University, Payup University, Rajamangala University of Technology Lanna.

Chiang Mai is a big city and there are several organisations in relation to tourism. In the beginning, KAsia gave financial support and worked with CM-TBA and then, in order to continue the cluster the government allocated a budget through TAT.

The relationship between the university and the private sector is loose. However, some entrepreneurs have informal relationship with universities and so both entities derive mutual benefits.

As the Vice-President of the Tourism Business Association said:

Because I have taught some universities' courses I have formed informal links with the university and this has enabled me to receive help from the universities. Other entrepreneurs who have no informal links find it difficult to get help. (Appendix 2.9 Question Q25, 78)

Theme	Description	Primary Data			Secondary Data
		Public Sector	Private Sector	University/ Non-Profit Organisation	
Role of actors	Prescribed behaviour associated with particular organisation	• TAT takes responsibility of marketing • MOTs takes responsibility for provincial tasks in tourism areas in Chiang Mai, Lumpoon, Lumpang	• Big city - several actors • CM-TBA cooperate with public and private sector and universities	• College of Media and Arts and Technology, CMU support 2 parts: consultant and e-tourism	• TCI Programme-6 clusters: tourism in Phuket and Chiang Mai, Gem and Jewellery, Silk and OTOP

Table 4.15 Roles of actors; Source: Author

Table 4.15 shows the roles of actors. There are several actors: within the public sector, there was TAT and CM-TBA. Within the non-profit organisation, there was KIAsia. There were several Universities such as Payup University, Chiang Mai University and Rajchamongkol Technology University.

I have therefore chosen actors that are influential towards the cluster. In the beginning, KIAsia gave financial support and worked with CM-TBA and then, so as to continue the cluster, the government allocated the budget through TAT. But

the actors changed from CM-TBA to the Association of Northern Tourism Federation, Chiang Mai. The Vice President of CM-TBA was the person who cooperated with KIAsia at the beginning of the cluster and used the cluster concept for his business. He explained the role of the association in relation to the university

As an Association we want stronger links with the universities. We want to invite lecturers in tourism to meet us. We need the universities to produce the type of graduates that we want and need. (Appendix 2.9 Question 17)

4.3.3.2 Hotel de Charm Cluster

In this sector, the research presents themes starting from a cluster formation that is different from other clusters, and how this cluster still exists whist others have disappeared. The research also expressed what participants would like to achieve through interaction between the three entities involved. Similarly the role of the government and non-government bodies is explained and how their strategies were implemented.

Hotel de Charm Cluster is a group of boutique hotels that allies itself to associated institutions in order to achieve mutual benefits.

Theme	Description	Primary Data			Secondary Data
		Public Sector	Private Sector	University/ Non-Profit Organisation	
Cluster Formation	Creation of the cluster as a tool in order to enhance the performance of the group or/and increase competitiveness of the nation.	• Private lead	• Bottom-up • Entrepreneurs joined together to share marketing expenses then turn guest house to boutique hotel	• Tamarinnd owner and his friends who own boutique hotels joined together to share marketing expenses and tried to make the same standard • Champion product of OTOP	• 5 boutique hotels joined together and emphasises on local culture • TCI Programme-6 clusters: tourism in Phuket and Chiang Mai, Gem and Jewellery, Silk and OTOP

Table 4.16 Hotel de Charm Cluster Formation; Source: Author

Table 4.16 shows the cluster formation. The cluster originally consisted of the group of boutique hotels alone, and then the province wanted the Hotel de Charm to be the model for the champion product of OTOP so that the province and Chiang

Mai University would support it. However, from the beginning the university joined as the consultant and guide for the cluster. As the Director of the Knowledge and Innovation Centre, College of Arts, Media, and Technology, CMU said:

> *The first thing is to let them see the benefits of the cluster, and then they will work towards its implementation. The cluster will combine loosely. But they know that if they share something in the cluster, they will get something in return. The college itself, the consultant, will help in trying to shape the framework. It is vital to make them understand the cluster first.* (Appendix 2.2 Question 4)

However, this boutique hotel group was started by Mr A, who used to be the manager of The Oriental Hotel in Bangkok. He built Tamarind as a guesthouse and contacted friends to join the group to share the marketing costs. In addition, he wanted to write his story to the legend. They saw that if they were overbooked, but part of a cluster they could share resources with each other and set about joint promotions. The potential for exploiting opportunities, trade patterns and any associated problems jointly has brought them together:

> *People in the cluster must be confident that the leader of the cluster will pass on his customers when he is over-booked to members of the cluster.* (Appendix 2.2 Question 4)
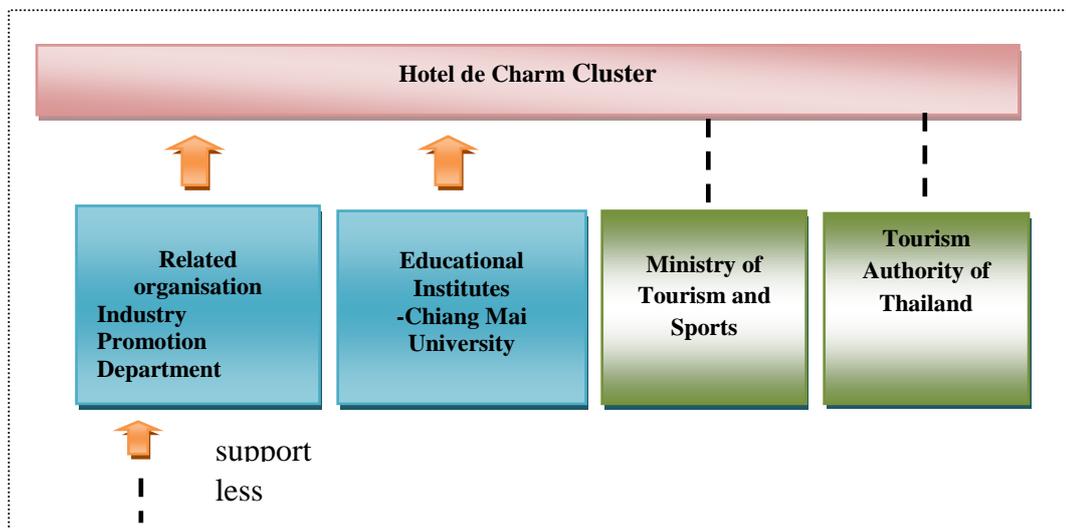
Table 4.17 Hotel de Charm Cluster Mapping Source: Author

Table 4.17 presents the Hotel de Charm Cluster Mapping. There are several actors such TAT, Industry Promotion Department, CMU involved.

However, relationships within the cluster are strong as most are friends and they are happy to meet each other once every 3-4 months to have a dinner and share experiences. As the MD of Peak Adventure Tour said:

> *The way to communicate within the group is by using the telephone. But, for the last 3 months or so there has been no communication. (Appendix 2.12 Question 15)*

The way the participants in the cluster accept new members is that they agree on the criteria such as that they must already be the owner of a hotel to make decision and the location must not be near each other, and they must feel they can get along.

Theme	Description	Primary Data			Secondary Data
		Public Sector	Private Sector	University/ Non-Profit Organisation	
Roles of actors	Prescribed behaviour associated with particular organisation	• TAT support	• CMU-consultant • TAT-budget	• College of Media and Arts and Technology, CMU support 2 parts: consultant and e-tourism	• Lack of link and support from public sector

Table 4.18 Roles of actors
Source: Author

Table 4.18 shows the roles of actors. In terms of actors, the Director of TAT: Chiang Mai office said:

> *As I said the private sector always makes it look good at first. I came to this quite recently so they were already established before I came. As regards to associations, there are many. As I told you, there are many associations such as Chiang Mai Tourism Business Association, The Association of Northern Tourism Federation Chiang Mai, Guide Association, and Hotel Association. Besides, there is the Jungle Tour Association. Each has its own character. But for Hotel de Charm, it is ok. They are associated because they would like to reduce costs of promotion. It works better, for example N17 means north in 17 provinces. So these Tourism Associations join together. Their objectives are the same. Their members may belong to the same group. Their activities are the same. The only difference is who is strong. But I think, they cannot all be as strong as Phuket. (Appendix 2.7/Question 17)*

4.4 Summary

Findings from in-depth interviews with the government and non-government bodies in the three entities reveals that government policy has had a huge impact on tourism and especially clusters formations such as the Phuket Tourism Cluster. This was started from the Visiting Thailand Policy that changed Phuket dramatically from a tin mining to a tourism city. USAID funded the establishment of the TCI in order to assist Thailand's recovery from the Asian Financial Crisis. Consequently, clusters ware established in regions across the country by government bodies as a tool for increasing the competitiveness of the country. Therefore, every province established clusters including the three cases that I studied. Only one was established by the private sector. Also, in the cluster development established by the government, the local public sector is the lead agency.

However if we look at one of the successful clusters, the Orchid Cluster, findings show that this cluster occurred through the private sector in order to solve the insect problem. The outstanding character of the leader of the cluster and his close working with the university were key success factors. In contrast, unsuccessful clusters such as the Sa Paper Making Cluster were established and supported by the public sector. However, the key factor that made this cluster fail was its untrustworthy leader.

In terms of the role of actors at the national level, public sector and non-profit organisations play a very important role via their strategies and plans. At the national level, findings reveal that government bodies often obtain new remits; as a result, officials cannot continue to work on some previous tasks. For instance the NESDB official had too great a workload and when she was assigned to more responsibilities, she could not finish the strategic plan for tourism and had to pass it to the Thailand Development Research Institute (TDRI). Another important actor is KIAsia, the organisation promoted and provided knowledge to clusters all around the country. KIAsia used the same pattern for all these clusters across the country. Hence, these findings will be analysed and discussed further in chapter five and six

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in the cross case analysis such that the "why" and the "how" questions are addressed in relationship to the literature previously reviewed.

CHAPTER FIVE
ANALYSIS AND DISCUSSION ACROSS CASE COMPARISON:
ANSWERING THE "WHY" QUESTION

5.1 Introduction

The purpose of this chapter is to analyse and discuss the empirical findings in order to achieve the first objective of this thesis: to investigate the nature and character of tourism clusters and the linkages between tourism clusters and universities.

The analysis and discussion of data is done across case studies for the sake of comparison and triangulation with literature. The different themes are analysed and discussed across cases and are compared to literature to confirm, extend or disagree.

This chapter answers the thesis research question of *"Why clusters decline or succeed?"* by addressing the theme of Characteristics, Challenges and Cluster Development across case studies.

The thesis' research questions will be addressed through across case thematic analysis and discussion comprised of major categories of themes as identified during the research while adhering to the working conceptual framework. The thematic analyses were classified into three categories for sake of data reduction as explained in the methodology chapter.

The three categories of themes are:

Theme One: Characteristics

    a. Current Situation
    b. Strengths and weakness

Theme Two: Challenges
    c. External factors

Theme Three: Cluster Development
    d. Cluster Development
    e. Why clusters were unsuccessful

    f.   Barriers against tourism clusters

    g.   Key Success factors

This chapter is structured as follows: Section 5.2 discusses the characteristic of the tourism clusters and linkages towards tourism clusters. Section 5.3 discusses the challenges of general environments that affect tourism clusters through analysing both influential external and internal factors. Section 5.4 examines the cluster development across all case studies and identifies the pattern of the reasons for failure. This section also examines the key success factors indicating the role of universities towards tourism clusters. The different themes are analysed and discussed across cases and are compared to literature to confirm, extend or disagree with.

This chapter concludes with section 5.5 as a summary to all relevant themes analysed and discussed.

5.2 Theme One: Characteristics of Tourism Clusters

In this section, I analyse and discuss across case comparison concerning the current situation and the strengths and weaknesses of clusters.

a. The Current Situation of tourism cluster

This section analyses and discusses the current circumstance of clusters. It also covers why some clusters have declined and why others still exist.

'The current situation of tourism cluster' in this study means the existing circumstance of tourism cluster such as declines or exists.

Table 5.1 below shows the current situation of clusters. After the financial crisis in the year 1997, 152 clusters were established. Later in the year 2005, only 53 per cent of 60 clusters have survived. However there is no research showing how many are still in existence. In addition, when the Government changes the key words also

change. PM Abhisit used the word 'creative economy' to communicate to all Government and non-Government bodies. As the NESDB senior official said:

Of all the cases that KIAsia set up in Thailand, none have continued, and KIAsia in Vietnam failed also.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Current situation of tourism cluster	Existing circumstance of cluster	• Less discussion of cluster • All cluster by KIAsia declined	• Declined and re-established as the Garment Cluster	• Now become the Andaman Cluster • City growth very fast • No regulation or controls for building new hotels.	• Declined	• Exists and has expanded

Table 5.1 The current situation of tourism cluster; Source: Author

Findings show the current situation of those clusters that I have studied. In the North there were two clusters, namely the Hotel de Charm Cluster and the Edutainment Cluster. The Hotel de Charm Cluster still exists whilst the Edutainment Cluster declined. In the South: pilot case study: the Health Tourism Cluster at Ranong declined whilst the Phuket Tourism Cluster changed its components and was renamed as the Andaman Cluster which now combines five provinces: Phuket, Krabi, Pang-nga, Trang and Ranong. The Northeast- Indigo Textile Cluster has also been rearranged and renamed as the Garment Cluster. In addition, there are several public and public sector and universities that are involved with tourism clusters but I selected only the public and private sector and universities with tourism clusters for study.

b. Strengths and weakness

In this section, strengths and weaknesses themes are analysed and discussed across cases and are compared. There are several criteria that were used to select the

strengths and weaknesses of the cluster that make the cluster gain advantage and disadvantages compared to others such as characteristic of the cluster, resources and policy of public, private sector and universities. For example, if the public, private and universities have a policy to support the cluster, their policy can help the cluster stronger than before.

'Strengths' in this study means strong quality characteristics that make a cluster gain advantage compared to others.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Strengths	Strong quality characteristic that make a cluster gain advantage compared to others	• Public and private sector and universities support	• Public and private sector and universities support • Local knowledge • Plenty of natural resources • Indigo is one of the famous products of city • Innovative product	• Public and private sector and universities support • 1/8 total tourism revenue • Cooperation among entities • Natural resources; sea, sand, sun • Culture-Chinese immigrant • Historical sites • Chino-Portuguese old building • Live museum • international airport for the cluster • Deep water port • Royal Phuket Marina International Exhibition and Conference Centre • Environment Law • Unique spa products and services	• Public and private sector and universities support • Varieties of products and services • Varieties of natural resources • Lanna Culture • Cheerful people • Gateway to Indochina	• Unique products-boutique hotels • Leader's hotel overbooking • Alliances • Help each other • Share opportunities, Information, marketing expenses • Join booth together • Gov. and U. supported

Table 5.2 Strengths of the cluster; Source: Author

Table 5.2 shows the strengths of the clusters. It can be seen from the table that each cluster has several strengths. For example, Phuket has sea, sand and sun whereas Chiang Mai has mountains, waterfalls and Lanna culture. I present only a few influential strengths. Findings show that all clusters established by the Government or private sector get support from the public sector. Each is unique. I selected empirical data from the Phuket case study, starting with current tourism situation in Phuket as the Deputy Director of the Research and Development Institute at Phuket Rajabhut University (PKRU) explained:

> *Phuket recovered very fast from the bird flu scare of 2003 and the Tsunami in 2004. Previously we expected a growth of seven per cent a year even though we only achieved six per cent. Tourism generates revenue of about 800,000 million Baht (£16 billon) per year. Phuket alone can generate 100, 000 million (£2billion) which means about 1/8 of a total tourism revenue.*

After the Tsunami happened in 2004, the government had the policy to help Phuket to recovery; as a result, Phuket was in good health very quickly.

The study by Institute of Management Education for Thailand Foundation (2002) applied Porter's diamond model (see the figure 5.1).The institute found that the factor conditions that support the competitiveness of Phuket tourism are beautiful beach, good climate and location and impressive Thai hospitality. The factor that hinders competitiveness in Phuket tourism is insufficient qualified human resources. Also, in terms of demand conditions, there are high purchasing power and long-term sustainability and repeat tourists. However, Brimble and Doner (2007) argued that the Thai economy would find it difficult to sustain growth by continuing to rely on natural resources, cheap labour, good macroeconomic policy, and strong infrastructure.

Strategy, Structure and Rivalry

+Healthy domestic competition keeping efficiency improvement in tact

-Not proactive to international competition

Government

+Support from

-No clear ownership
- Lack of strict law enforcement

Factor Conditions

+Beautiful beach, good climate and location
+ Impressive Thai hospitality

-In adequate shopping and high-quality entertainment
- Substandard local transportation
- Accessibility problems
- Insufficient qualified human resource

Related and Supporting Industries

+Complementary food-related industries

- Lack of co-operation for strategic issues; both within tourism sector and with related sector e.g. airlines

Demand Conditions

+High purchasing power, long-staying, repeating tourists
+Domestic tourists sophisticated on food taste and appearance and personal services

-Domestic tourists not sophisticated on food hygiene
-High seasonality of demand

Figure 5.1 Diamond model: Factors that support Phuket's Competitiveness
Source: Institute of Management Education for Thailand Foundation (2002)

In addition, Chaisawat and Boonchoo (2005), NESDB (2004) found that the *quantity* of graduates from educational institutions was sufficient to serve the demand of the industry. However there were problems in terms of *quality* since graduates' qualifications were not up to the standards required by employers. They recommend that Thailand should be positioned as a centre for hospitality and tourism studies and training should be located at major tourism destinations. In terms of strategic

implementation of tourism development, tourism education and training institutions should play the catalyst and coordinating roles with the stakeholders in each region or destination.
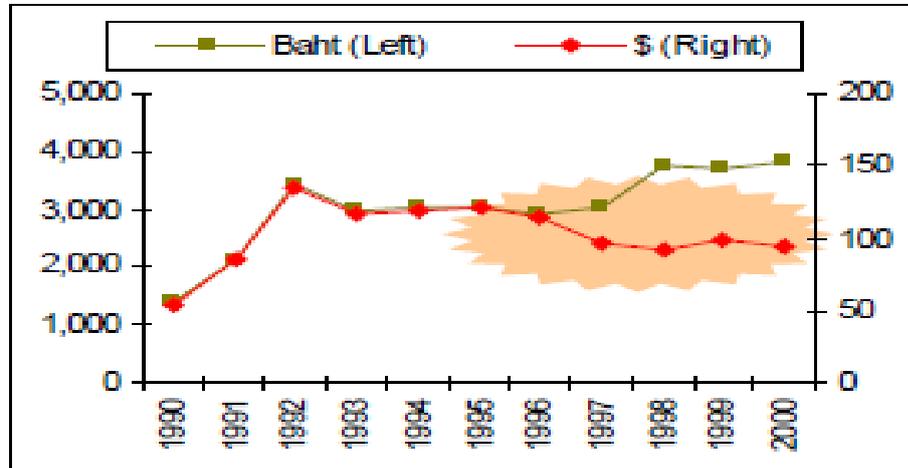
Figure 5.2 Tourist's spending per day in Phuket
Source: TAT, BOT

However, figure 5.2 shows that since the Baht depreciation in 1996, in terms of US dollars, tourist's spending per day in Phuket has decreased gradually, whereas it has but slightly increased in terms of the Thai Baht.

Figure 5.3 Phuket's Revenues from Tourism

Source: Institute for Management Education for Thailand for Thailand Foundation (2002)

Figure 5.3 shows that since the Baht depreciated in 1996, Phuket's revenue from tourism has decreased in terms of dollars but increased in terms of Baht. Findings showed that after the number of tourists dropped due to several significant circumstances such as the Tsunami in 2004 and Thai political unrest in 2010, the number of tourists has increased dramatically but spending per day has decreased. The Director of Marketing Research Division of Tourism Authority of Thailand expressed it as follows:

> *The premium market won't mix with the low market so they go to other destinations. The premium market has high loyalty and high spending. What are the concerns? The concern is about wanting higher numbers.*

However, when tourists come to Phuket they go straight to the beach. As a result, the city is quiet. Later, the city organized an Old Town Festival. The Old Town Community started from one local woman encouraging her neighbours to preserve their culture; she then became the leader of the old town community. With help from informal connections such as the foundation, Phuket Rajabhut University (PKRU), the old town community use their own homes which they call live museums to show the way ordinary people live (e.g. Baba dresses and local food) in the Chino-Portuguese old building at Thalang Road. Later, the public sector in the form of the Mayor and TAT came to support the event. The community has organized the Phuket Old Town to present their culture every year. This achievement demonstrates that cooperation among entities can generate unique products and services. Moreover, they pass on their culture - such as how to fix dresses in the traditional way and train the younger generation to be guides who can explain their own community when tourists come to their old town community.

Consequently, this leads the younger generation to preserve their own culture, making them have pride in their culture and in themselves. This is an example of local people using their strengths, with help from universities, to create opportunities so that the public sector will give recognition and support. In reality, Thailand has many such stories in each area but do not use them. As Vice-President of Chiang Mai-Tourism Business Association (TBA) said:

We didn't do our homework on things that we are good at. The stories that we have are of tremendous value. Why do we have to build a new city to compete with Hong Kong, Singapore or Dubai? We have a lot of stories. How can Singapore stories compete with us? They don't have any.

'Weaknesses' in this study means limitation characteristics that makes clusters weak compared to others.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Weak-nesses	Limitation Characteristics That makes Cluster weak Compared to Others	• Political unrest • Structure-Dysfunction • Budget system- • Lack of Integration • Focus on quantity • Organize or sell the same things	• Political unrest • Sell same products • Products-lack in design, engulf, packaging and different quality • Product must be package with neighbouring cities • Depends on public sectors and leader • Structure-Dysfunction • Leader • Lack of resources such as capital • Attitude • Lack of cooperation • Too many participants • Communication problem • Distance areas • Lecturers involve only for their interest	• Political unrest • Organize same products and events (vegetable eating festival) • Infrastructure problems • Lack of man power every level • No long term plan • Same products and events (vegetable eating festival) • Less and narrow roads • 80% of people depend on tourism-sensitive to rumour like Tsunami • Noise and traffic and noticeable smell from vehicles (motorcycles, cars, small buses, tuk-tuk	• Political unrest • Strategies have often changed • Entrepreneurs –old generation-discount price/ price cutting • Entrepreneurs in tourism are less active • Few booking online • Problem of entrepreneurs -Aggregation • Bring weakness to compete • Tourism is sensitive • Foggy city	• Political unrest • Boutique hotels outside of the town • Some hotels not well known • Less communication • Foggy city

Table 5.3 Weaknesses of the cluster; Source: Author

Table 5.3 shows the weaknesses of the cluster. My findings demonstrate that each case study contains several weaknesses. I have selected some significant weaknesses that impact towards tourism clusters. The enormous weakness of Thai products and services is imitation. Everywhere people organize the same type of events and sell

the same things. For instance, Phuket, Trung, Ranong all organized the same event (a vegetable eating festival) at the same time. As the Director of the Marketing Research Division, TAT said:

> *Thailand is famous for its floating markets. The problem is that they are all the same. When something is successful everyone copies it. But each should be different. Unfortunately, people do not see their own identity. If it is the same with the Vegetarian Festival, they should all be slightly different and be held at different times. The planners need to consult each other before organizing any event.*

Porter's (2003) Diamond Model shows that in relation to the strengths and weaknesses of Thai's business environment, Thailand has the advantage of beautiful natural resources but has the disadvantage of low skill labour. However when this beautiful nature was increasingly consumed without taking precautions such as the case in Phuket, the city has grown dramatically but with no direction. In addition, Brimble and Doner (2007) emphasised that although Thailand has emerged in fairly good shape from the 1997 financial crisis, much of the country's recent growth has come from rising export prices and public investments, not improvements in competitiveness and productivity.

Subsequently Thailand has turned strengths such as rich natural resources into weakness when these natural resources are rapidly and unceasingly destroyed. Moreover, her low-skilled labour must be upgraded. Otherwise how can Thailand compete and survive in a sustainable way. Thus to meet challenges such as tourism trends in environment and wellbeing, Thailand needs to prepare itself.

5.3 Theme Two: Challenges

In this section, I analyse and discuss across case comparisons influential factors affecting clusters.

c. External Factors

In this section, I consider external factors such as global tourism trends going green, wellbeing and oriental food. In addition, the world economic crisis, natural disasters, and the ASEAN Economic Community (AEC) are analysed and discussed across cases and are compared**.**

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
• Political	Influences that affect the cluster	• Political unrest • Terrorism	• Political unrest	• Political unrest	• Political unrest	• Political unrest
• Economic		• AEC • European economic crisis • Thai Tourists travel depends on economic issue	• AEC	• AEC	• AEC	• AEC
• Social		• WTO-Trend is Asia • Tourism trend: Sport, space, snow, happiness, Buddhism • Product: mixed-LG laptop with Levi, museum with spa atmosphere • World population-7.8 billion in 2025-aging • 6-7 times in 50 years foreign tourists decreased • Main tourists in Thailand / top 5 are Asians	• Main tourists: retired people	• European tourists decrease but more Russian, Australian, Asian tourists • Main tourists-Chinese, Korean, Singapore, Malaysian • Tourists want to see authentic East	• Foreign tourists are interested in eco-tourism, cooking school, Homestay	• Premium market • Tourists behaviour: Thai tourists do not book in advance
• Technology		• Social media	• ICT as a tool to improve performance & access customers	• Tourists search, buy & book online	• Tourists search, buy & book online	• Tourists search, buy & book online
• Environment		• Global tourism trend; Going Green, well-being, healthy, oriental food • Bird flue • SARS • Flooding	• Environment preserve • Bird flue • SARS	• Bird flue • SARS • Tsunami	• Eco adventure • Bird flue • SARS	• Bird flue • SARS

Table 5.4 Challenges; Source: Author

Table 5.4 shows that there are several external factors have impacted on Thai tourism clusters. The United Nations World Tourism Organisation (UNWTO) forecast that

the number of people travelling would continue to grow in the 21st century, with the number of international arrivals worldwide increasing to almost 1.8 billion in 2030. I selected some significant factors such as natural disasters, the economic factor, and global trends the economic factor.

In terms of external factors that made tourism decrease in Thailand, the Director of Marketing Research Division of Tourism, TAT explained this as follows:

> *TAT is now 51 years old. During that time many interesting facts have emerged. When we looked at the number of foreign tourists coming to Thailand we found that there were decreases in on only six or seven occasions. All these decreases in tourism were due to external factors such as world economies; fuel price; the Gulf War and Bird Flu. There is nothing we could have done about any of these problems.*

In terms of economic factors that impact on Phuket, empirical data shows when the European economy downturn occurred, this made European currency depreciated so their purchasing power decrease so they travelled only short-haul. However, more Asian tourists came to Thailand as the Director of TAT: Phuket said:

> *There are more Asian tourists come to Phuket; Chinese, Korean, Singaporean, and Malaysian are the main tourists. There are a lot of charter flights that come to Phuket. (See Appendix 3.3 Question 6)*

In terms of global tourism trends, in the past mass tourism flourished because travelling became easier for tourists and the most popular destination were the 3S: sun, sea and sand. However, the global tourism trend has changed; tourists have unique needs and have become more interested in outdoor activities. They are more concerned with the environment. The present Government, Yingluck, captures this trend, so the Government keyword is 'Green'. This is consistent with what the Director of Marketing Research Division of the Tourism Authority of Thailand who said:

> *The next trend, which will definitely come, is going green.* (See Appendix 1.2 Question 22-23)

It is most important that entities involved with tourism understand tourist behaviour and aspirations. Empirical data shows that tourism's global trend is toward Asia.

Tourists want to experience the authentic East. The Director of Marketing Research Division of Tourism said:

> *Tourists want to see traditional Thailand, but the Thai people think that "traditional means 'backward'" They think that eastern is bad and western is good. The next trend in tourism is Green, which is a characteristic of the East. Researchers tell us that oriental nutrition is good and meals are balanced. (See Appendix 1.2 Question 20)*

I have experienced another example. A lady from Austria, who I interviewed, was impressed when she went to Phuket Old Town and saw the very old tea pots that the grandmothers still use today. She told me:

> *This is I want to see, the authentic East. This is charming.*

After the Asian Financial Crisis hit Asia in the year 1997, AEC was formed to stimulate our economies and increase competitiveness among the group. This will affect the social structure since our labour force can move and work across ASEAN Countries. The Permanent Secretary of Tourism and Sports talked about how to prepare for this:

> *We have 32 courses in preparation relating to tourism. It is vital that our tourism graduates etc. have good English. Because our Thai graduates will be well trained, speak good English; they will be easily obtain good positions both here in Thailand and in the other ASEAN countries. (See Appendix 1.1 Question 9)*

In 2015 Thailand joins the AEC, bringing advantages and disadvantages. When Thailand joins the AEC, there will be more competition. As the Governor of the Tourism Authority of Thailand stated that the Tourism Authority of Thailand (TAT) has announced that the biggest tourism festival of the year called the Thailand Tourism Festival 2013, the key talking point will concern Thailand's tourism as the hub of ASEAN Economic Cooperation (AEC) regional tourism, developing a high-quality workforce to serve the industry and promoting intra-tourism under cooperation with ASEAN members (www. tourismthailand.org)

In this section, factors such as political unrest and law and regulation are analysed and discussed across cases, and are compared.

As the Director of Marketing Research Division of Tourism, TAT explained why Thai tourists travel or not.

> *In terms of Thai tourists, the situation is not too bad. But the worry here is our country's internal politics. In terms of Thai travel in Thailand, whether Thai people will travel or not, depends on the economy.*

In terms of natural disasters impacting on Phuket, The Deputy Director of the Research and Development Institute of Phuket Rajabhat University described the circumstance as follows:

> *Phuket recovered very fast from the bird flu scare of 2003 and the Tsunami in 2004. Previously we expected a growth of 7 % a year even though we only achieved 6% Tourism generates a revenue of about 800,000 million Baht (£18 billon) per year. Phuket alone can generate 100, 000 million (£2billion) which means about 1/8 of a total tourism revenue. Thai tourists do not go to Phuket because the prices are too high. A serious disadvantage is that 80% of Phuket is dependent on tourism so when, for instance, a tsunami occurs, tourism crashes. Even a rumour of an impending tsunami can devastate Phuket's tourist trade.* (See Appendix 3.12 Question 16)

Tourism is a sensitive issue - when a bomb explodes somewhere in Thailand, the media will distribute the news and other Governments will warn their own people not to come. So Thailand must have a quick response system to inform tourists about the true state of affairs. Tourists are able to assess the situation for themselves. As the President of Phuket Tourist Association said:

> *I have four hotels with 1,300 employees. In the current situation, there is strong competition among hotels. Purchasing power has decreased and there are political problem and political unrest. These are factors that have had a powerful impact. Starting from the bomb news in the South, several Governments advised their citizens to avoid coming here. This affected tourist confidence. (Appendix 3.13 Question 26-27)*

5.4 Theme Three: Cluster Development

In this section, I analysed and discussed across case comparison concerning reasons for cluster formation and why some were unsuccessful.

d. Cluster Development

In this section, the reasons for cluster formation were analysed and discussed across cases and were compared.

In terms of the role of clusters in fostering economic development, in the UK, DTI (1998) and Brown (2000) note that clusters are seen as an effective way of promoting regional local and national economic competitiveness across the UK. Whilst work in Australia (2000) and Lade (2006) reveals that clusters have been used as a method to shape economic development in many states and regions of the United States as well as in regions worldwide. In terms of tourism clusters in relation to economic growth, Porter (1998) states that:

> *While it is essential that clusters form, where they form also matters. In developing economies, a large proportion of economic activity tends to concentrate around capital cities such as Bangkok and Bogota. That is usually because outlying areas lack infrastructure, institutions, and suppliers. The building of tourism clusters in developing economies can be a positive force in improving the outlying infrastructure and in dispersing economic activity*
> *(Porter, 1998, p. 86)*

Table 5.5 below shows the cross case comparison of cluster development in Thailand. Research shows that clusters have been established by the Government to increase the competiveness of the country. However, it is clear that clusters cannot just be established by the Government organizing a meeting to select a leader and the Cluster Development Agent (CDA) and after that leaving the private sector to run the cluster by itself. Contrast this with Hotel de Charm that was established and led by the private sector. That cluster still exists and is expanding even at a slow pace.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Cluster Development	Creation/ Original of cluster	• Government initiate • Thailand Competitiveness Initiative (TCI)	• Government established • Public sector lead • Declined and re-established to be the Garment Cluster	• Originated from Thailand Competitiveness Initiative (TCI) • Government established • Public sector led • Turned into the Andaman Cluster	• Originated from Thailand Competitiveness Initiative (TCI) • Government established • Public sector led • Decline	• Privately established • Privately led • Expanding

Table 5.5 Clusters development in Thailand; Source: Author

This is confirmed by the literature concerning the birth of clusters identified by Porter (2008) that stated that from numerous case studies, it appears that clusters

require a decade or more to develop depth and gain real competitive advantage - one reason why Government attempts to create clusters normally fail. Clusters may also arise from unusual, sophisticated, or stringent local demand. Israel's cluster in irrigation equipment and other advanced agricultural technologies reflect that nation's strong desire for a self-sufficient food supply, coupled with its scarcity of water and its hot arid growing conditions (Porter, 2008). Finland's environmental cluster emerged from pollution problems created by local process industries. (Porter 2008:254).

The Kenan Institute of Asia (KIAsia), working in partnership with J.E. Austin Associates (JEA), originated the Thailand Competitiveness Initiative 2002-2005. As part of its Accelerating Economic Recovery in Asia (AERA) Program USAID decided to support a competitiveness initiative because it promised to provide value to a large number of SMEs and other companies while putting Thailand (and other regional countries) on the way to a sustainable recovery based on the ability to compete effectively in world markets. The project was established and executed in accordance with KIAsia's "*Proposal to Support a Competitiveness Program – Building a Cluster-based Competitiveness Process in Thailand and the Region…*" (2003); this was incorporated into the cooperative agreement between KIAsia and USAID.

The former Director of Strategies Integration and formulation for the National Economic and Social Development Board has said:

> *From my reading and interpretation, actually, a cluster starts by itself. The Government and policy makers tried to help a little bit. I have never seen a cluster that the Government supported work. I do not think the Government can run clusters and makes them work except by using money to stimulate a cluster that is already running.*

In regard to Maeteeta Indigo group at Nadee village, Punna Subdistrict in Sakon Nakhon who started indigo dyeing, the Former Dean of Science and Technology Faculty- SNRU said:

> *The objective was to pass on our local knowledge to the younger generation.*

Under the umbrella of the Sakon Nakhon Indigo Textile Cluster, there were several indigo groups. Findings show that only a few groups that were born by entrepreneurs can survive and have developed and they were counted as the groups of genuine indigo dyeing. Whilst most of clusters established by the Government declined.

I agree with Porter (2008), in terms of cluster decline. There are two categories: endogenous or deriving from the location itself and exogenous or due to developments or discontinuities in the external environment. Empirical data shows, as a Senior Official of NESDB said:

> *USIAD announced how many clusters they would like to have, and called meetings accordingly. KIAsia paid for the meetings using money from USAID. Many people attended. However, when the money ran out everything stopped.*

There are several internal and external factors that make the cluster decline. In case of clusters in Thailand, most of clusters declined because these clusters were established and obtained financial support by the public sector. When the government did not allocate the budget, as a result, almost clusters in Thailand declined.

However, I disagree with Porter (2008:260) when he argues that:

> *External threats to cluster success arise in many areas. Technological discontinuities are perhaps the most significant, because they can neutralize many cluster advantages simultaneously. Market information, employee skills, scientific and technical expertise, and supplier bases may be rendered inappropriate. Unless the requisite new technologies and skills are available from other local institutions or can be rapidly developed, competitive advantage will shift to another location.*

I agrue, technology discontinuities are not always the most significant external threats because most of tourism and hospitality business use technologies to facilitate their business but human resources is the significant key for success of their business. Findings show that boutique hotels in Chiang Mai and Hotels in Phuket use technology to access their customers and facilitate their business but entrepreneurs emphasize on human resources because they believe that their success depends on their own unique products and services and their human capital.

e. Why clusters were unsuccessful

'Reasons of unsuccessful cluster' means causes that make the cluster fail.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Reasons of unsuccessful cluster	Causes that make the cluster fail	• Government policy not continue • One pattern use all • Cluster is process not project • Budget system	• Untrustworthy leader	Dysfunction structure	• Actors changed	-

Table 5.6 why clusters were unsuccessful; Source: Author

In this section, I analyse and discuss why most Thai tourism clusters were not successful. Findings show that clusters take time to develop. There are several factors that make clusters unsuccessful. I have selected some significant factors. When the Government established clusters all around the country the Government communicated by using the key word 'cluster'. Thus, all organisations both in the public and private sectors in each province, used the Government keyword 'cluster' and used the Government framework in proposing their budgets. In addition, the Government allocated the budget as a yearly project. As senior Official, NESDB said:

> *A cluster is not a project, it is a continual process. When Government money is withdrawn a cluster project will fail. Some clusters have developed over a period of 100 years or more, for example the Industrial District. In my opinion it is a community based cluster-every house in that area forms part of the community. There is a village making shoes and other making leather goods. Each village is unique. Clusters can be developed like this. They do not have to copy each other. This is the way to succeed.*

When the Government changed there was a policy change. As a result, implementation did not continue, whereas the Government bodies targeted clusters as **quantity** not quality. This is a major problem of the Thai Government. The Former Director of Competitiveness Division, NESDB said:

I have worked at this job for ten years and never seen a cluster succeed. Maybe the reason for this is that our policy has been superficial. I can say with certainty that when Government changes all projects are put in hold. In one year we could be asked to form many clusters, but a cluster takes more than 10 years to generate. (See Appendix 4 Question 2)

The Government used one pattern to implement all. They called for a meeting, at a hotel, selected the president of the cluster and CDA, and then hired experts to lead a workshop to do Strengths, Weakness, Opportunities and Threats (SWOT) and set the vision. All of the clusters did it this way. After a meeting, they generated one strategic book and then let them do everything themselves. Unfortunately, each cluster has a different character but the Government use the same pattern for everyone. This is one of the reasons why those clusters were unsuccessful. As a Senior Official, NESDB said:

Each has a different problem. The compositions of the cluster and the people who involved are not the same. But we just copied a formula. It is way of implementation but it did not work.

f. Barriers against tourism clusters

'Barriers' are problems and obstacles that prevent the cluster from achieving its goal.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Barriers	Obstacles that prevent the cluster from Achieving its goal	• Government change • Policy • No clear plan • Vision • System • Structure • Control • Attitude • Slow Thai website • Don't know what customers want	• Governor and top management change • Budget system • Governor and top management change • Dysfunction • Attitude • Distant • Several actors • Lack of design, packing,	• Governor and top management change • Commitment • Dysfunction • Several actors • Vision • Infrastructure • Garbage, water • Integration • Cooperation	• Governor and top management change • Lack of continuously policy and budget • Product problems • Character of entrepreneurs • Several names • Budget stop • Several actors • Commitment • Oversupply of accommodation	• Distant • Communication • Products problems

Table 5.7 Barriers that affect clusters; Source: Author

Table 5.7 presents barriers that affected clusters starting from the national level, when the Government changes. All organisations at every level are affected when the Thai Government changes. In Thailand an important factor that makes clusters unsuccessful is that the Government changes frequently, consequently, top management in the public sector changes. This dramatically affects organisations around the country including at local level. When policies did not continue, all projects stopped. All organisations, both in the public and private sectors, wait for the new policy to be announced and then start from scratch again. All wait for the new signal keywords because these keywords are very important. If they want to obtain a budget, all organisations in both the public and private sector must link their proposals with the Government keywords. Additionally, there are other barriers such as policy. As the Director of Research and Development Division of Tourism said:

> *The significant barriers to implement this model in Thailand are the changes in Government, which means the policy is not continuous. Next are participants' attitudes, and commitment, leadership, and integration.*

In terms of educational policy that were barriers as Permanent Secretary of Tourism and Sports Ministry said:

> *The production plan, manpower plan and development plan have not gone in the same direction. These plans do not go together. The manufacturers only produce. This is difficult to solve because we left the institutions in a situation where they must help themselves. The simplest way is to sell academic. Even students do not come to learn and are able to finish a degree. This is difficult. It must count a new one. It goes a wrong way until cannot drag back. Now to build a university, they can do with only one bag. That is why it is not reach the quality of education. I think education reform at this time failed. People who get most are teachers and top management and let misfortune are parents and children.*

Empirical data shows that the leader of the Andaman cluster is the governor of Phuket. It is difficult in practice because the Phuket governor has no authority in the other four provinces. In addition, the leader of the private sector often changes. As the Deputy Director of the Research and Development Institute of Phuket Rajabhat University expressed as follows:

> *Phuket President of Association usually changes every two to three years. If the leader does not realize the importance of the policy of the education institutes, he will not cooperate and its policies will not proceed. Entrepreneurs are interested in how they can benefit more than in working together for the social benefit. (See Appendix 3.12 Question 4)*

In terms of key words, as mention earlier in chapter four that senior official of NESDB aimed at objectives not at names.

Another problem in Thailand is that when the public sector has a project, they use a budget allocated in January - officials are in a hurry to spend it all by August. This means that they work only eight months because they have to clear the budget and for four months the projects discontinue because there is no money left in the budget to continue the work. This is a major handicap of the Thai budget system. This is the problem of bureaucracy on a budget.

Another core problem is that every public agency related with a particular development proposes its own budget and then works to the same target. As the Assistant to the President of KU-CSC said:

> *Some villagers have attended the same training courses several times held by several Government bodies. The reason is that Government agencies receive a budget for running a course but then have to obtain sufficient numbers to fill it because the evaluation depends on the number of people who attended. It is only numbers that matter in evaluation. Villagers attend the courses because they may need Government help and if they have not attended a course they will not get help. At the same time, people who are doing valuable work cannot attend courses because they are too busy working.*

Beside the eight months budget, people have to spend time in meetings so they have less time to implement their budget. The President of POA said:

> *I do not want to just train villagers and give out certificates, but to have a continuing relationship with them. We need to follow up; not run a training course in the morning and give out certificates in the luxury hotel later that day. Weaving is one way to increase villagers' earnings. They get the entire benefit. We cannot make the people rich but we can help them reduce their expenses.*

In terms of policy and budget, the Vice-President of Chiang Mai Tourism Business Association said:

> *At some level, there was some budget support from PAO. But compared with the help from the local budget at Phuket and at Pattaya Samui, we received a very small amount. We got approximately a million. Chiang Mai should get much more, but every year, we get this rate.*

In terms of product problem, the length of stay in Chiang Mai is about two to three days but for Phuket is about seven to ten days. Besides, there are many accommodations approximately 50,000 rooms whilst the political unrest occurred and the Chiang Mai is the hometown of Thaksin so tourists were afraid to come to the area that protested. So it is oversupply in accommodation. Most entrepreneurs cut their prices to compete with each other.

Move-The big problem of Thai entrepreneurs is always that they organize the same events or sell the same products and services. As the Director of Marketing Research Division, TAT said:

> *Not only do we have the same type of festival but also they all occurred at the same time. Moreover, they are targeting the same tourists. This strategy is nonsensical. They must arrange different festivals.* (See Appendix 1.2 Question 30)

There is the problem of entrepreneur's aggregations in Chiang Mai because they have their own businesses and have their own opinions. As the Deputy Director of Chiang Mai Provincial Office of Tourism and Sports said

> *Chiang Mai is a big city. it is tough for the group. Co-operation seems to look good but I think its structure is fragile. So if we want to accomplish something we have to rely on the public sector to provide the budget and ask for cooperation. The province means the governor has a budget, and in addition the Province Administration Office has a budget. They take care of their own areas. Chiang Mai is a big area. It takes 5 hours to drive from the top of the north district to the bottom of the south district. This area is so big that power must be decentralized among 20 districts. Phuket has only three districts: Thalang, Muang so it cannot be compared.* (Appendix 2.6 Question 10)

The name of the cluster can make people confused because they use many names in one area such as Chiang Mai. At the beginning the cluster used the name **'**Chiang Mai Charm'. The name was changed which is depends on where the actors focus; this is confusing for people in Phuket.

In terms of technology, it can be used as a support, but the most important element in service is human. Since tourism is a sensitive issue with involve with several organisations there are many influential factors that can affect Phuket tourism cluster. As the Director of TAT: Phuket Office said:

> *Between 2008 -10, tourism in Phuket has increased dramatically and will continue to increase. There has an infrastructure in place to allow this to happen. Several organisations are making plans to grow approximately 10 per cent. Money has been allocated to build a new international airport but this will cause huge problems with infrastructure such as roads and pollution."*
> (See Appendix 3.3 Question 18)

As the city has grown rapidly, without direction; this resulted in massive problems with infrastructure such as roads and pollution.

Findings suggest that the public sector takes a lot of time on meeting empirical data fromSakon Nakhon Indigo Textile Case. One significant problem that Thailand must solve is its attitude towards quantity. As the Director of Marketing Research Division, TAT said:

> *The Government must look at the big picture, it must be farsighted. The present problem is that our attractions are bunched together in the big city. We need to spread out our tourists around the country. Also, we need to discourage the bottom end of the market such as backpackers, people paying very little for package holidays. In other word we need quality, not quantity. (See Appendix 1.2 Question 36)*

Empirical data shows that all Government and non-Government bodies lack integration and do not think systematically of the big picture.

g. Key Success Factors

'Key success factors' means those factors that influence the aims of a cluster such as leadership, trust, and mutual benefits.

Table 5.8 below shows several important Key Success Factor (KSF) of clusters. When compared, case studies at national and local level, findings show there are many similarities in leadership, vision, value-added, unique/differentiation, story, preserve local knowledge, knowledge, university support, attitude, integration, participation, mutual benefit, and innovation. Whilst different factors are social media, IT, Customers' needs mechanism such as meeting and CDA.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Key Success Factor (KSF)	Factors that influence aims of a cluster	• Leadership • Vision • Niche • Understanding/ attitude • Same goal • Integration • Participation • Knowledge • Mutual benefit • Value-added • Roots/identity • Innovation • Customers' needs • Trust	• Leadership • Vision • Niche • Trust • CDA • Mutual benefit • University support • Meeting • Not far from the zone • Attitude • Value-added • Story • identity • Preserve local knowledge • Innovation • IT	• Leadership • Vision • culture/Identity/story/niche-live museum • Preserve local knowledge • University support • Innovation	• Leadership • Vision • See the important of cluster • Understanding/ attitude • University – research • Informal relationship with university • Knowledge • Niche-cooking school/ hill tribe and green products • Value-added • Story- Kaosoi • Roots/identity • Innovation	• Share resources • Location • Unique/ niche • Alliance • Helping each other • Website • Informal relationship with university

Table 5.8 Key Success Factor; Source: Author

In terms of leadership, the empirical data shows that leadership plays a very important role not only for clusters but also as the key important person who pushes the organisation forward whether nationally or locally. Thus one influential factor that made the cluster successful is the leader of the cluster. The right leader is capable of leading the cluster so that it will to survive and grow. In terms of trust, as senior NESDB official remarked:

> *To have two clusters that work is better than having twenty two clusters that don't work. The cluster is about trust. Without trust there is no sharing of knowledge so the team does not work together and the cluster fails. (See Appendix 1.3/2 Question 18)*

In terms of vision, at the beginning, when KIAsia established the Edutainment Cluster the Vice President of Chiang Mai Tourism Business Association joined the cluster. When the budget was not allocated the situation became quiet. When the private sector made another proposal the actors changed and this time, because the leader was not trusted by the other participants, the cluster failed. The Vice President of Chiang Mai Tourism Business Association said:

The leader and the top management are of crucial importance. Without excellent leadership and vision how can you expect the team to succeed?
(Appendix 2.9 Question 20)

In terms of implementation in relation to the social dimension, Thailand uses technology to develop the country according to the national economic and social plan. As the Assistant to the President of KU-CSC said:

We have already lived through 10 national plans but they were only concerned with the economy and the social aspect was ignored. The plans were published but not acted upon. The new national plan 2011 talked about economics but now includes the social dimension.

We do not follow up on training courses and completely abandon the participants. The only indicator for success lies in the number of participants.

In the tourism industry, technology has become an increasingly influential factor in accessing tourists. However, there are some tourists who long for nature and would like to stay away from modern life. The niche market like homestays with tribal people living in the mountains is one example. The Deputy President of Tourism Business Association in Chiang Mai said:

If tourists are interested in learning how tribal people live, then they can come to Doi Ang Khang. We have a nature lodge where tourists stay and they can also do homestay in villages but they must live exactly as the local people do. I started this project through informal links with the university and the lecturers helped me. The provincial Government knew about my project but they do not give me financial assistance.

When a cluster is established, the president and CDA will be selected from its participants. The roles of president and CDA are important because they are the persons who move forward the cluster with clear and strong aims and coordinate participants regularly to encourage them to join together and cooperate in those activities that will increase their revenue. As the Assistant to the President of KU-CSC said:

The cluster must organize its committee as the first step. Then select two people from the cluster who have potential, and give then training. The CDA must be a local person or else live locally. We must ensure that he or she has a role to play and can coordinate the group.

In terms of mutual benefit, to persuade entrepreneurs to participate in the cluster is not an easy task. The saying "easier said than done" applies. They are unlikely to believe until they are convinced by results. So another key is the mutual benefit, so that when a cluster occurs the participants get the benefit. The benefit will influence others to join. As the Assistant to the President of KU-CSC said:

> *Although entrepreneurs understand what a cluster is, they are reluctant to join. But if the KU would obtain a large order for them, they would be anxious to participate. If their sales would increase by 10-205 they would run to us. We must make this happen and use our connections at the Departments.*
>
> *I am anxious to encourage the indigo collectives to combine so that they can produce 100 metres of cloth a month. At 100 Baht (£2) per metre they could earn £200 a month. I do not want them to work individually and sell only 20 metres at a time for very little money. By centralizing they can cut out the middleman. I see that the middleman can drive a luxury car whilst the farmers and weavers producing indigo fabric still take a bus.'*

Another success story is the Pechakaseam Textile Cluster as mentioned before. With help from the research institute, they are able to produce Nano yellow T-shirts at a high price for the premium market. This is the result of adding value to the product. There are several key influential success factors: such the leader, policy and Objectives. The objectives of private sector entrepreneurs are profit. However, universities are not profit-seeking organisations. People believe that universities are neutral and can help entrepreneurs at some point, so entrepreneurs and universities may do projects together for mutual benefits. However, it often happens that universities pay more or most of the expenses but entrepreneurs do not join the project when the time comes to sign a contract. As the Deputy Director of Research and Development Institute of Phuket Rajabhat University said:

> *Even though Rajabhat Phuket University will pay 70% of the marketing project with the Phuket Spa Association, such as Packaging and herbs, the local entrepreneurs are not willing to pay even 30%. Three months have passed since this idea was discussed, but nothing has happened.* (See Appendix 3.12 Question 15)

In terms of faith building, this is the crucial factor that can make a cluster successful. The Director of Sakon Nakhon Cooperative said:

> *If the leader of a cluster is thought to be untrustworthy by the other members, the other members will not support the leader and will sell their products individually. (See appendix 4.4, Question 2)*

The senior official of NESDB said:

> *The cluster is about trust, if we do not trust and do not have knowledge sharing, we cannot work together. If we do not work as a team, it will not work.*
> (See Appendix 1.3/2 Question 18)

Understanding how important the cluster is. The Director of Chiang Mai-TBA said:

> *Clusters are more important than ever if we don't have clusters how can we compete?*

Since the cluster takes time to develop, and it is the process not a project, so the public sector and supportive institutes should support clusters in the long term. The public sector at local level must recognise the importance of the cluster issue; this worked in the case of the Indigo Cluster even through the Government changed, the Indigo Cluster was supported continuously. But this cluster still has some problems.

One important factor that makes a cluster successful is to make participants see what the benefits of cluster are to them:

> *If each participant sees the importance of the cluster and then works together seriously to re-establish it will raise the level of management and service. Clusters certainly help to solve problems in the long run. If we can stick together and work seriously as a group we will succeed.*

In terms of Innovation, the director of Research Division of Tourism, TAT said:

> *Tourism in the future must be an inspiration. It must inspire. It must have activities or something that inspires. You need innovation to build this up. (See Appendix 1.2 Question 11)*

In terms of different products and different services, the Director of the Marketing Research Division of Tourism, TAT said:

> *Phang Nga, Krabi are too similar. There is no differentiation and they compete against each other. They must understand what their differences are and not copy each other. Provinces need to know themselves. (See Appendix 1.2 Question 35)*

> *Clusters that succeed include products within the group that are different. For instance, in the five provinces we should have five different packages each appropriate to the particular province. This would mean Ranong has Hot*

Springs. All the products can be sold together because they are located close to each other. Otherwise they will compete to death in price-cutting and not survive.

If SMEs pay attention and use the knowledge advice given by OSMEP, they can add more value to their products and services and differentiate from competitors.

Next is service. This means that the service must be of high quality. (See Appendix 3.13 Question 30)

5.5 Summary

Empirical data shows that all the clusters established by KIAsia declined, including Edutainment and the Indigo Textile Cluster, which was re-established by KU-CSC and renamed the Garment Cluster. Whereas the Phuket Tourism Cluster, which turned into the Andaman Cluster in order to cover five Andaman provinces, expanded so that the group now has a broad policy level and just selects target groups to help. On the other hand Hotel de Charm established by the private sector still exists and is expanding at a slow pace.

In terms of challenges, there are several external factors that impact on tourism clusters such as the world economy crisis, natural disasters, global tourism trends and tourist behaviour. Whereas internal significant factors in the country are: political unrest, and Government changes. However, for internal factors, each cluster has a different internal influential factor. Importantly, there are several major factors that made clusters unsuccessful. The first major problem is that Thai Government bodies target quantity not quality. As a result, their implementation is only superficial, whilst the clusters that come from local people take times to develop but are solidly based. The second reason is that TAT, a highly experienced Government body previously in charge of tourism only has been downgraded. As a result the staff is concerned with marketing and not with tourism in general. Moreover, the local level MOTS (previously TAT) is concerned mainly with sport. The third reason is that clusters established by international organisations do not take account of the needs of local people. A single top-down model used by the Government for all clusters is shown to be inappropriate. A further reason for failure is the selection of untrustworthy leaders. The clusters did not keep to a local identity; instead they

copied successful clusters outside their area. My findings show that there are several significant Key Success Factors (KSF) that make the cluster successful such as: leadership, niche, university support, cooperation, quality, networks, lifelong learning, trust, teamwork: each of these elements is needed to achieve mutual benefits for all parties.

CHAPTER SIX
ANALYSIS AND DISCUSSION ACROSS CASE COMPARISON: ANSWERING THE HOW QUESTION

6.1 Introduction

This chapter will answer the thesis research question of *"How to improve the University-Industry-Linkages (UILs) and How to enhance the competitiveness of tourism clusters through UILs"* by addressing the themes of Strategic Formulation, Strategic Implementation and Triple Helix effect across case studies.

I were focus upon my second research objective: to examine a possible model which would be applicable to improving University–Industry Linkages in Thailand in order to support successful tourism clustering. As in chapter six, the analysis and discussion of data is done across case studies for the sake of comparison and triangulation with literature. The different themes are analysed and discussed across cases and are compared to literature to confirm, extend or disagree.

The empirical research revealed some important emergent themes, which are analysed and discussed across case companies as well. These emergent themes are: Leadership and Strategic Entrepreneurship.

The thesis' research questions will be addressed through a cross case thematic analysis and discussion comprised of major categories of themes as identified during the research while adhering to the working conceptual framework. The thematic analyses are classified into three categories as follows.

This chapter is classified into five themes as follow:

6.2 Theme One: Strategic Formulation

- a. Strategies
- b. Vision
- c. Policy

6.3 Theme Two: Strategic Implementation of tourism clusters

a. Role of Actors

b. Structure of Organisation

c. Resources Allocations

6.4 Theme Three: Social Network of tourism clusters

a. Social Flow

b. Physical Flow

c. Knowledge Flow

d. Value Flow

6.5 Theme Four: Triple Helix effect

a. Interaction of University, Private Sector and Public Sector

b. University Industrial Linkages (UILs)

6.6 Theme Five: Emergent Themes:

a. Leadership

b. Strategic Entrepreneurship

6.2 Theme One: Strategic Formulation

In this section, strategic formulations such as strategies, vision, policies are analysed and discussed across cases and are compared to literature to confirm, extend or disagree with.

a) Strategies

I analysed and discussed how strategies of Government and non-Government bodies affected clusters.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Strategy	Plan formulated to achieve the desired goal.	• 11th national plan –Green • Keyword: cluster, OTOP, creative economy • Same products and events • Cutting price • Take volume • Partnership- Thai Airways, Thai Hotel Association. Movie- Hollywood	• Keyword: cluster, OTOP, creative economy • Garment Cluster-set goals, innovation objectives • Theeta Indigo- Quality	• Keyword: cluster, OTOP, creative economy • No long term plan • Many supplier – high competition • Cutting price • TAT—premium market • High quality spa product image	• Keyword: cluster, OTOP, creative economy • VP- CM- TBA- differentiat ion-Eco- tourism	• Differen- tiation

Table 6.1 strategies; Source: Author

Table 6.1 shows how strategies of Government and non-Governmental bodies affect clusters. The Thaksin Government used keywords such as competitiveness and clusters. When the Abhisit Government came into power the Government keywords were changed. As the Former Director of Competitiveness Division, NESDB said:

There are now no strategies to integrate. (See Appendix 1.4 Question 5)

However some policy makers tried to think of ways to make their old plan continue to work by linking with the new concept and responding to politicians at the same time. As I mentioned in chapter five and a Senior Official of NESDB talked about the why a strategy did not work as follows:

Is there still a committee dealing with competitiveness? Yes, the chairman is the Deputy Prime Minister but it is not as active as it was in the Thaksin era. The committee looks at economic indicators. We rank at 26 in terms of competitiveness around the world. However, we are standing still whilst Malaysia is going up. We aim to move from 25 to 24 in the year 2015. The committee does not study the factors that make us competitive and this is the problem.

And as the Vice-President of Chiang Mai Tourism Business Association said:

Sometimes we have to draw up two different strategies in one year because the governor changes. This wastes a lot of time for both the Government and non-Government bodies. (Appendix 2.9 Question 34)

NESDB analysed the strategic Human Resources Planning (HRP) in order to achieve the vision of nation. During the Thaksin era, NESDB analysed HRP in seven industries, one of them was tourism sector. However, the plan was not implemented. The Governmental bodies were unable to link together to accomplish the same vision; that is why gaps occurred and why graduates cannot respond to what employer want. Moreover, companies need to train more graduates.

> *I drew up a master plan dealing with the supply of graduates to both the private and public sectors. The graduates that the universities are sending out do not match with the requirements of the tourism industry. In the past no one asked the private sector what they required, so the applicants were not suitable because they had not received the right sort of training.*

In terms of strategy, the nation cannot just employ low cost strategy by cutting price - another way forward is using partnerships.

> *We should switch from being competitors to being partners. For example, people undergoing medical operations in Singapore should be sent to Thailand for 15 days to recover.*
>
> *We should have more new partnerships. We can promote the Thai film industry with festivals like Cannes. Movies that use Thai locations are promoting our tourism industry, but we must be very careful that the films do not give us a bad image. Otherwise foreign tourists will associate Thai beaches with prostitutes and drugs. (See Appendix 1.2 Question 7)*

In terms of the person who should take responsibility for the tourism master plan and implementation:

> *Who should be the person who implements the master plan? The Ministry is at the top. Each level in the hierarchy from village level upwards should follow the national plan. If there is no system and no regulations that must be followed, then nothing will be accomplished. Everything depends on the management. Participation is at the heart of every success story. (See Appendix 1.1 Question 15)*

Phuket does not have a long-term plan: there is no sustainability plan. There are some problems such as price-cutting because there are too many suppliers. Empirical data shows there is almost no communication between the parties. The Director of TAT-PK said:

> *Sometimes, there was a plan but, because there was a change of Government or person involved, nothing happened. The budget is controlled by the umbrella*

organisation and we do not take part in the discussions. (See Appendix 3.3 Question 31)

This is consistent with the President of Phuket Spa Association who wanted to see spas in Phuket in long term as explained:

> *Thai spa products should be high quality product. At present there are low grade products available in Phuket. These must be upgraded, otherwise our image is spoilt. (See Appendix 3.16 Question 33)*

In summary, strategies of Government and non-Governmental bodies affect clusters. The Thaksin Government used keywords such as competitiveness and clusters. Then when the Abhisit Government came into power the Government keywords were changed. If there is a vision for the nation HRP) must be aligned with its goals. During the Thaksin era, NESDB undertook HRP in seven industries to meet the market need. However, the plans were not implemented. The Governmental bodies lacked linkages necessary to accomplish its vision. This is why gaps still predominate whilst at the same time, graduates remain out of work. Similarly, despite investment in infrastructure and building, absence of regulation and planning have resulted in a poor quality and an unsustainable environment.

b) Vision

Here, I analyse and discuss how the vision of leaders in the public and private sectors, including universities, influenced clusters.

'Vision' in this study means the ability to imagine that a cluster could be developed in the future.

Table 6.2 below shows that different organisations have different visions concerning clusters both at national and local level among three entities; public, private sector and the university. There are several perspectives of vision. I have selected some crucial visions to discuss. The criteria are visions of policy makers at national level and vision of leaders of the clusters, the public and private sector and universities.

Findings show that Thailand lacks people who can control tourism at a strategic level, as the Director of Marketing Research Division of Tourism, TAT stated:

We must have a professionals attached to each area of the country who will concentrate on the big picture at the strategic level. This also applies to clusters. See Appendix 1.2 Question 33)

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Vision	The ability to imagine that a cluster could be developed in the future	• 11th national plan –Green • Detroit of Asia- Thaksin era • Quality tourism destination /take volume • Picture at strategic level • Community – a source of Learning • Vietnam Overtook • Quantity concentration • MICE – Singapore • Farsighted Government • Same goal	• Indigo Village - tourist attraction • Learning Centre/ village • Indigo-local knowledge preservation • OTOP- Indigo brand in shopping mall • Indigo-world class product	• Hub of World Marine Tourism • Growth without direction • Mass Product Destination • Beautiful South- generate huge revenue and the best in Thailand	• Thaksin era- Tourism City • Chiang Mai Charm: Adventure, Eco City • Trend- Niche	• Expand • Chiang Mai can sell for a long time • Destination for Thai people

Table 6.2 Vision; Source: Author

An in-depth interview with a policy maker at national level showed that she was assigned an additional six groups which meant that she did not have the time or energy to work on tourism. Then NESDB passed this task to TDRI but still use the NESDB framework.

At present tourism planning is all done at local level and this leads to imitation. If one area concentrates on elephants, so they are widely copied. It is the same with floating markets. The Ministry of Tourism needs to guide the overall strategy. (See Appendix 1.2 Question 35)

Thailand should have policy makers draw up a plan at the strategic level. The 11th national plan emphasised Green and vision, whilst the National Tourism Development Plan emphasised 'quality'. However, empirical data from the Indigo Textile Cluster case showed that the Ministry of Industry wanted to use an ISO standard and told the leader of Maeteeta Indigo group to use chemicals with the

indigo because they want all Indigo clothes to have the same standard. As the leader of Punna Indigo group said:

> *They do not understand that indigo is unique. It cannot be made to conform to the ISO standard by adding chemicals.*

According to Thailand's National Tourism Development Plan, Thailand has a vision in the years 2012-2016 to become a high quality tourism destination with tourism competitiveness at the international level, thus enabling the country to generate more income and distribute wealth on a sustainable basis (www.thailand.prd.go.th). Even Thailand's National Tourism Development Plan emphasised quality whilst in reality, Government bodies still focus on "quantity" because it is easier to evaluate and to report. They can obtain a higher budget for the following year because they obtain the budget yearly. Contrast with the quality, if the Government wish to assist in developing tourism clusters, it will take time because each cluster is a continuous process. So how can Government bodies report on '*quality*' progress? The vision of quality can be realised, if the Government accepts that it takes time to develop and changes the way it allocates the budget as well as the way it evaluates projects. Empirical data already presented shows that the budget system is a major problem in cluster development. A change in Government is a further major problem.

As the Director of Research Division of Tourism said:

> *Concentrating on volume is not wrong, but we must take quality into account. Price-cutting is self-defeating and leads to mass-market tourism, which is low on revenue. Entrepreneurs need to think what the customers want. Look at the boutique hotels – they are booked up three years in advance. They have three to eight rooms and they are full even though they are expensive.*

A senior NESDB official said:

> *The cluster is about trust. Without trust there is no sharing of knowledge so the team does not work together and the cluster fails. (See Appendix 1.3/2 Question 18)*

The Permanent Secretary of Tourism and Sports Ministry said:

> *University students studying tourism should be required to take outside work experience as part of their degree. The degree should not be wholly class centred. The local community should be a source of learning for the university and its students.*

As mentioned in Chapter Five, government policies made Phuket grow rapidly. A new airport has been built and a lot of new big building. However there are no regulations to control the new buildings. In addition many building were used as hotels, guesthouses or service apartments. Many of these are illegal; as a result we have environmental problems. So the province has grown without proper direction and they lack systematic management. As the Director TAT: PK office said:

> *Phuket must preserve its natural resources and stop pollution. There is no strategy.* (See Appendix 3.3 Question 17)

Director of TAT: Phuket Office said about future of Phuket tourism as follows.

> *Our vision is to be at the hub of world marine tourism. We want Phuket to attract the premium market.* (See Appendix 3.3 Question 18)

Contrast this with Deputy Director of Research and Development Institute at Phuket Rajabhut University said:

> *Phuket will not be a destination for the premium market. It will only serve the mass market.'*(See Appendix 3.16 Question 18)

On the other hand, Chiang Mai has different potentials but does not know how to position itself.

> *The city of Chiang Mai city is located in the mountain. We cannot sell sun, sea and sand like Phuket. We don't know how to sell ourselves. We have our local culture and nature. We need help from the university. They need to take a big part in our tourism industry. Without vision and help we are not going anywhere.*

However, without any clear direction, the city created new attractions. On the other hand, in relation to Sakon Nakhon, it is reported that:

> *In the Thaksin era we promoted Night Safaris and World Flora. Both of these were very expensive. But we are not promoting our own identity. We have a lot of history. There are mainly local stories that will attract tourists. (*Appendix 2.9 Question 79)

The MD of Crystal Restaurant said;

> *Foreign tourists do not know what Chiang Mai has to offer. We local people need to work seriously on the promotion of our city.* (Appendix 2.14 Question 34)

In sum, different organisations have different visions concerning clusters, because there are different visions in the different organisations at national and local level among the three entities; public, private sector and the university. My findings show that Thailand lacks people who manage tourism at a strategic level.

c) Policy

In this section I analyse and discuss how policies of Government and non-Governmental bodies including university have an effect on clusters.

'Policy' in this study means declared objectives that the Government wants to achieve.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm Cluster
Policy	Declared objectives that the Government want to achieve	• Thailand Competitiveness Initial (TCI) • Cluster Mapping	• Indigo Cluster • Garment Cluster • Indigo as tourism attraction	• Visiting Thailand-1985 • Phuket Tourism Cluster • Andaman Cluster	• Chiang Mai Charm	• OTOP Champion

Table 6.3 Policy; Source: Author

Table 6.3 shows how policies impacted on clusters. Government policy can make a huge impact on any province, as occurred in the case of Phuket. The Visiting Thailand policy has changed that city hugely. However, findings show that the city has grown too quickly without direction. Consequently, several problems occurred such as a lot new building, garbage on the beach, lack of drinking water. The President of POA said:

> *Right now foreigners want to learn about indigo dying so I want to promote Indigo village as tourist attraction. The main attraction is Punna village because it is near the city and has the best quality dye.*

In sum, policy impacts on clusters. Government policy can make a huge impact on any province as in the case of Phuket and the Visiting Thailand policy.

6.3 Theme Two: Strategic Implementation of tourism clusters

In this section, strategic implementation such as the roles of actors and the structures of organisations are analysed and discussed across cases, and are compared to the literature so as to confirm, extend or disagree.

a. The Role of Actors

Table 6.4 below shows role of actors at national level and local level. There are several actors at the national levelSinvolved with tourism clusters; NESDBE, Tourism and Sports Ministry (MOTS), Tourism Authority of Thailand (TAT) OSMEP, KIAsia.

Whilst actors at local level are involved with several organisations in both the public and private sectors such as the governors, Provincial Administration Office (PAO), Tourism Authority of Thailand (TAT): regional level, Tourism and Sports (MOTS) at provincial level, Commercial Affair Department, Community Development Department, Industrial Department, Cooperative Department, Chamber of Commerce. In terms of the role of Government, Porter (2009:261) argues that:

> *Government's most basic role in an economy is to achieve macroeconomic and political stability. It does this by establishing stable Government institutions, a consistent basic economic framework, and sound macroeconomic policies, including prudent Government finances and low inflation. Government's second role is to improve general microeconomic capacity of the economy by improving the efficiency and quality of the general purpose inputs to business identified in the diamond (an educated workforce, appropriate physical infrastructure, and accurate and timely economic information) and the institutions that provide them.*

I agree with the Porter. But in my view, the Government does not pay sufficient attention to the microeconomic and social dimensions. Nothing happens because there are no immediate results that can be measured.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Role of actors	Prescribed behaviour associated with particular organisation	• Public sector looked at macro using public finance system and the industry. • Thaksin was from the private sector -market-oriented, demand-oriented. • 10th plan, NESDB talk less clusters • OSMEP emphasise networking in SMEs • MOTS Ministry -the person who should push tourism cluster	• Public sector support-study trip abroad • If no OTOP or province does not organize events, will be difficult situation. • Province hire organizer not TAT to run events • TAT afraid to diminish or join with SAO • KU - coordinator,	• TAT - promote tourism emphasise on marketing. • Municipality mission - promote Phuket historical area. Organize activities such as vegetarian festival or Chinese New Year	• TBA-coordinator	• CAMT-CMU-consultant

Table 6.4 Role of actors; Source: Author

Empirical data from senior official of NESDB stated:

> *In the Thaksin era the strategy for national competitiveness was a new one and people did not understand either the concept or the way to manage business. Even now the same strategy is in use despite the language having changed. My wish is to formulate a new plan for the entire country, which would incorporate a new vision of the nation.*

Porter (2008, p. 263) states that not all clusters will succeed, of course, and upgrading in some clusters will reduce employment as firms move to more productive activities. These outcomes should be determined by market force, however, not by Government decisions. Porter thinks that advanced technology will produce unique products. This is not always true, especially in a small developing country like Thailand.

On some important theoretical points, I take issue with Porter's (1990) analysis, in particular his under-estimation of the importance of the public sector. Let me illustrate this with an example. At Nadee indigo village; Punna district, Sakon Nakhon, the leader of the Indigo group village upgraded the group's products to a niche market because when she went to Japan (with help from the public sector) and saw machines operated by a few people, she asked herself "how can I compete with these machines?" "High quality unique products" was the answer that she found. She sold her product at a high price and then other women in her village asked to join her group, which expanded. In addition, she encourages members to grow cotton themselves because she does not want to use cotton from factories. Outcomes definitely must be determined only by decisions made inside the cluster and not from Government decisions made outside. Many other examples illustrate the key importance of public-private partnering; a theme significantly absent from Porter's (1990) work.

The role of NESDB is to formulate the national plan and then translate it into action with a five-year timeframe. To obtain the budget and support from the Government, organisations both in the public and private sectors must follow the national plan, which has a framework and Government keywords. Even when the Government changed from PM Thaksin to PM Abhisit, the keyword 'cluster' was still used but less so, as the Project manager of OSMEP said:

> *I know that there have been meetings of the private and public sectors concerning clusters last year, but I have not seen any Minutes for this year. In any case the clusters may not include tourism. OSMEP are trying to identify SMEs that are using the national plan, but OSMEP is in Bangkok and the SMEs are not in communication with them.* (Appendix 1.5 Question 5)

The task of OSMEP is to promote SMEs. They use the master plan as a guideline. The master is produced every five years. As the Senior Operational Office, Competitiveness Project Division, OSMEP reported:

> *OSMEP works with four organisations: - public agents, state enterprises, the private sector and Government. We have a budget, which we give to the joint organisations to implement, but their own project must be in accordance with the national plan.* (See Appendix 1.5 Question 1)

The mission of OSMEP is to support the budget of the joint organisations that help SMEs. However OSMEP must do this in advance by setting a meeting with the joint organisations to formulate a plan for the year 2013 and then submit the proposal to the Budget Department. When the budget department allocates the funding, they will look at the projects, which are consistent with the plan. Each organisation carried out tasks according to their own mission. As the Senior Operational Office, Competitiveness Project Division, OSMEP stated:

> *This year the budget department approved the allocation of a budget of 200 million Baht for 15 projects for joint organisations to implement. We have to follow up how well the projects generate network development. The importance of the networks, as I told you, is a core factor in the master plan and the promoting plan if you look at the current website. (See Appendix 1.5 Question 1)*

One year clusters are a priority, so the Board concentrates on clusters. Another year it may be the 'creative economy' so the direction changes completely. Besides, in a practical way, tourism has a core organisation. So OSMEP does not propose budgets that overlap but will propose to fulfil some tasks that organisations are unable to fulfil. There are several comments in terms of tourism, which OSMEP makes. Finally, OSMEP gives importance to SMEs in the tourism sector. The Senior Operational Office, Competitiveness Project Division, OSMEP gave an example.

> *Our experts concentrated on Hot Springs and, in the past, we promoted them for several years. We encouraged local entrepreneurs to form clusters to develop this type of attraction. (*See Appendix 1.5 Question 1)

The OSMEP had branches in each province but they were closed in the year 2007 because the direction was not clear. The Senior Operational Office, Competitiveness Project Division, OSMEP states that:

> *We closed all the branches because they were too expensive to run and we found we could not fulfil our mission of helping SMEs to access entrepreneurs. There was no clear direction. (See Appendix 1.5 Question 8)*

In terms of health tourism in Ranong, OSMEP became involved but only to inspire them. They must continue to work by themselves. They cannot rely on only the public sector; if they hope to obtain a budget from the public sector they will fail

because they are not relevant to the national plan.   However, some members asked for increased budgets and demanded to know why this year OSMEP did not allocate budgets to support them.

This confirms Porter's (2008:263) opinion that

> *Government should reinforce and build on established and emerging clusters, rather than attempt to create entirely new ones.*

<div align="right">

(Porter, 2008:263)

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I agree with Porter (2009:274), individual departments or units of Government that impact on the cluster must be engaged and educated on the effect of regulations and policies and on the quality of Government services.

Since the Government has employed the cluster model to increase the competitiveness of the nation, every official of the units of Government who is involved with the cluster should have a clear understanding of how they work; otherwise they will definitely end up wasting huge sums from the Thai budget.

> *The Industry Ministry controls clusters all around the country including the Indigo and Hot Spring Clusters.* (See Appendix 1.4 Question 6)

In Sakon Nakhon, there are several actors involved with the Indigo Cluster. From the public sector there is the governor, plus the Provincial Administration Office (PAO), the Tourism Authority of Thailand (TAT), Tourism and Sports (MOTs), the Commercial Affairs Department, the Community Development Department, the Industrial Department and the Cooperative Department.

These Government agencies have periodically supported clusters depending on the national policy and the budget. Each will work only within their own scope such as TAT is the organisation that promotes tourism. Their emphasis is on marketing. In the past, they covered all areas, but now the Tourism Development Department is the organisation that takes responsibility for developing and attractions or making attraction more beautiful so a budget is allocated to this department. TAT now has the role of promoting tourism; marketing emphasises on PR and advertising: it is headquartered in Bangkok with a branch in each region.   Each branch provides

information. In terms of marketing, they promote Thai and foreign tourists to come to Phuket. Their main mission is to encourage Thai people in other areas to come to Phuket. There are more new routes such as Chiang Mai- Phuket, Udon-Phuket, and Ubon-Phuket, so they promote these by taking the private sector to join together to launch attractive packages. Phuket entrepreneurs meet Chiang Mai entrepreneurs and then see how they can do business. Typically they take hotel people, and then they meet tourism entrepreneurs or travel agencies. For example, a hotel will say "if you send me ten customers, I will give this rate for this month, or, we will give you that rate. This is what TAT does. Or Chiang Mai entrepreneurs may sell a package like Air Asia with Phuket accommodation. TAT will cooperate with tourism associations and hotel associations. They cooperate together to promote Phuket as a destination for Thai tourists. In the past they were mostly from Bangkok but now Thai people in other regions who have purchasing power will come if it is convenient; then TAT does PR and cooperates with other organisations by organizing activities such as Chinese New Year, Song Kran (Thai New Year), Loi Krathong and vegetarian festival.   TAT also organizes activates to attract more tourists.

However, the Provincial Tourism Committees focus mostly upon tourism solutions such as transport costs or tsunami rescue. Recently, they discussed how to make tourists aware that there is a warning system that helps when it happens. So every sector is involved with tourism because we are a tourism city. The municipality's mission is to make the city beautiful; promote Talang Street to be Phuket's historical area. They put electric wire underground in order to beautify the street and then organized activities such as the vegetarian festival or the Chinese New Year so that tourists can come and enjoy themselves.

In terms of the role of TAT, there are several events where different organisations cooperate with each other. In addition, they do road shows abroad; for example, TAT cooperates with associations in Phuket such as PAO. In terms of the role of PAO

> *PAO has a supporting role because they collect revenue of 1 per cent from local tax on room sales, which means a lot about 50-60 M (£1-1.2 M). This money is used for Phuket marketing in order to penetrate new markets. They*

will go to tourism events such as ITB at Berlin, which is the international tourism trade show.

The role of Chiang Mai Tourism Business Association is:

When we organized our events in the past, we concentrated only on trade. But this time we were divided into three sectors; seminars, trade, and road shows. This is the new way which has never happened before. Right now we are developing our organisation by operating in a different way and we are more efficient. (Appendix 2.9 Question77)

In terms of the role of MOTS at local level the cluster was established by KAsia so the MOTs were not involved and did not know about this cluster. In terms of the role of MOTs, it takes responsibility for the implementation at local level of the MOTs policies. As the Deputy of Director of Chiang Mai Provincial office of Tourism and Sports said:

We also have responsibility for provincial tasks in tourism areas in Chiang Mai, Lumpoon and Lumpang. We take part in the planning of provincial development for the whole group, integrating projects and managing the budget for many projects and managing the tourism of the province. This means that for every tourism project that belongs to us we need to integrate with many other organisations such as those that belong to the Nature Department. There are also some links with the Commercial Affairs Department because the products of tourism are of many varieties. (Appendix 2.9 Question 10)

In terms of graduates at Chiang Mai University, tourism was a minor course when since CMU opened 47 years ago, but we began a bachelor course in 2007. In terms of policy, the Head of the Tourism Department, CMU said:

Chiang Mai University ran a master degree course on tourism for many years but in 2007 the Board changed the level to a bachelor degree. Whilst the master degree graduates were outstanding, we do not know how good the new graduates will turn out to be. (Appendix 2.3 Question 5)

In terms of the academic service, the Director of Knowledge and Innovation Centre, College of Arts, Media, and Technology, CMU reports that:

It is a project I recently started. I have just signed the contract on the part of the Innovation Centre…. This would be like Technology Transfer of College of Arts, Media, and Technology. It works with the private sector and other

organisations in using resources such as lecturers to help the outside world.'(Appendix 2.2 Question 2)

CAMT has a clear policy. The college will act in areas of visual tourism. The budget was allocated by cooperation between Thailand and France. The Director of Knowledge and Innovation Centre, College of Arts, Media, and Technology, CMU stated:

> *It means we do not have to stay in the actual location such as Ayutthaya What this means for a group visiting the old town where there is nothing left but ruins, is that we create a three-dimensional model on a mobile phone. We also provide information about travel and organized packages, as well as creating new tourism packages. (*Appendix 2.2 Question 11)

In terms of budget, CAMT has been allocated the budget from many capital sources but a huge grant has been given from the EU budget. The Director of Knowledge and Innovation Centre, College of Arts, Media, and Technology, CMU said:

> *Most of the budget is allocated from the EU because it's a lot. It is a big budget. It was not a single budget but also applies to the lecturers who went to study and worked in the labs over there and then returned to develop tourism in Thailand.* (Appendix 2.2 Question 13)

At the beginning, CAMT-CMU was a consultant to the cluster and then acted as a CDA. It explained to entrepreneurs why it was important to join together as a cluster. And then we assisted in setting objectives. The Director of Knowledge and Innovation Centre, College of Arts, Media, and Technology, CMU states:

> *They did not have specific objectives for the cluster. We came together and had to analyse what were our objectives. What does the cluster expect? So the first thing is to let them see the benefit of the cluster, although the cluster will combine loosely, they know that if they share something in the cluster, then they will get something in return. As for the college itself, the consultant will help in trying to shape the framework.* (Appendix 2.2 Question 5)

When the university sends a representative to a meeting of a tourism cluster they should send the same person each time; that person should be senior enough to make decisions.

In summary, there are several actors at the national level involved with tourism clusters; NESDBE, Tourism and Sports Ministry (MOTS), Tourism Authority of Thailand (TAT) OSMEP, KIAsia. Whilst actors at the local level are involved several organisations from both public and private sectors such as the governors, Provincial Administration Office (PAO), Tourism Authority of Thailand (TAT): regional level, Tourism and Sports (MOTS) at provincial level, Commercial Affair Department, Community Development Department, Industrial Department, Cooperative Department, Chamber of Commerce.

The role of NESDB IS to formulate the national plan and then translate it into action with a five-year timeframe. To obtain the budget and support from the Government, organisations both in the public and private sectors must follow the national plan, which has a framework and the Government keywords. Even when the Government changed from PM Thaksin to PM Abhisit, the keyword 'cluster' was still used although less frequently.

The Government has significantly influenced and impacted on the birth and growth of clusters. Government should reinforce and build on established and emerging clusters, rather than attempt to create entirely new ones. Each actor should take it seriously, cooperate with others, make a commitment, and be a person who can make decisions.

From Porter's perspective, advance technology will produce unique products. This is not always true, especially in a small developing country like Thailand. Thailand never runs as fast as developed countries in terms of IT. The government could consider Thailand's strengths and bring them to the forefront with help from public and universities. The Government could pay attention to groups that have potential to develop and not waste money in establishing new clusters that operate for one year and then disappear.

Structure of Organisation

'Structure' in this study means employees were grouped hierarchically with line authority.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Structure	Employees were grouped hierarchically with line authority	• Cabinet Committee-2003every province except Bkk - use the integration management- • Governor is provincial CEO and formulate provincial strategy and group provincial strategies	• Dysfunction between TAT and MOTS • TAT: region located and focus Nakon Phanom • Budget system-MOTS: Sakon Nakhon is under Nong Kai	• Phuket host Andaman Cluster • The different ministries different cluster: Interior Ministry/ Andaman Cluster, MOTS/ 2Oceans Cluster • Interior Ministry allocates the budget to Andaman Cluster • OSMP takes care of the Andaman Cluster	Several actors	Hotel owner and alliances

Table 6.5 Structure of public & private sector; Source: Author

Table 6.5 shows the structure of public and private sectors in relation to tourism clusters. TAT was first under the PM's office and took responsibility for all areas of tourism; later it was the under MOTs, and its duties were reduced. TAT has the role in promoting tourism; marketing emphasises on PR, advertising. Head quarter is in Bangkok and branch in each region. Each branch will provide information. In term of marketing, they promote Thai and foreign tourists to come to Phuket.

In terms of the budget, empirical data is presented as to how the Government allocates the budget to implement clusters. The Permanent Secretary of Tourism and Sports said:

> *I think the best system for tourism for everyone in the country. If attractions belong to the locality, the people in that locality will take responsibility using their budget. It is not right to use the central budget. Attractions in the district are a district responsibility. Attractions in the province are the responsibility of the province. But for attractions over several provinces, the central Government should take responsibility. Phuket is an international tourist attraction. Phuket alone cannot handle it. The central Government must take responsibility directly. The central Government must help. (See Appendix 1.1 Question 16)*

When the Phuket cluster was established it was further expanded to cover five provinces called The Two Ocean Cluster because the policy makers thought that they could not look at Phuket alone. The thinking behind this was of the whole group because destinations are linked together so when tourists come, they travel all around this cluster. Whilst at the national levels, policy makers think strategically but in a practical way, at the local level, policy makers and participants still think and implement individually.

In summary, organisations taking responsibility for tourism such as TAT have been reduced in role to only marketing whilst MOTS take responsibility of development and attractions. There is dysfunction for instance, TAT region1 take care three provinces: Nakohn Panom, Sakon Nakhon, and Mudahan. However, MOTS: Sakon Nakhon office is under Nong Kai in terms of budget. Then cluster as the policy level, Phuket tourism cluster has expended to be Andaman Cluster, which is difficult to implement.

b. Resources Allocation

'Resources allocation' in this study means physical assets that the public sector supports especially financial support.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Resources Allocation	Physical assets that the public sector support especially financial support.	• 11th national plan	• Industrial Promotion Centre Region 5 (Khon Kaen) support	• Andaman Trade Show	• Meeting	• Meeting

Table 6.6 Resources Allocation; Source: Author

Table 6.6 shows how Government bodies give support in terms of resources. The Industrial Promotion Centre Region 5 (Khon Kaen) supported the cluster for the first year and will make a decision later if they see progress.

6.4 Theme Three: Social Network of tourism clusters

a. Social Flow

'Social flow ' in this study means the interaction among actors within and outside the cluster.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Social Flow	The interaction among actors within and outside the cluster	• 11th national plan	• TAT brainstorm – promote Esarn civilization Basin	• Andaman Trade Show	• Meeting	• Meeting

Table 6.7 Social Flow; Source: Author

In Table 6.7 I have selected some significant social flows that impact to tourism clusters. On 1 October 2011, Thailand started using the 11th National Plan year 2012-2016. There are six strategies: 1) strategy of promoting a just society; 2) strategy of developing human resources to promote a life-long learning society; 3) strategy of balancing between food and energy security; 4) strategy of creating a knowledge-based economy and enabling environment; 5) strategy of strengthening economic and security cooperation in the region; 6) strategy of managing natural resources and environment towards sustainability (NESDB, 2010). It took two years to formulate this national plan. The starting point was the National Economic and Social Development Board (NESDB) and then the ministries, and their departments. When the ministries approved; both public and private sectors in each region brainstormed the plan. They adjusted the plan several times.

Findings showed that social flow was the significant key on success of the cluster especially informal connection such as in the case of the VP of Chiang Mai Tourism Business Association. He started his projects by connecting with universities in informal way and then did projects together. When their projects were successful, then he did projects with universities in formal way. In addition, in the case of the

Orchid Cluster, the President of the Orchid Cluster continually looks for networks, so he can move the cluster forward. He organizes activities and an annual meeting. The leader of the cluster kept organizing activities and inviting participants from the private and public and universities outside and inside the cluster to come to share knowledge every month. The activities were being held at member's house. The cluster has movement, and more people are joining. Having identified the insect problem he started to do research with Kasetsart University. Mr Jul, a researcher, joined the cluster at the beginning and they carried out experiments together. finally, they can solve the insect problem and they still have cooperated all the time with product development.

There are several groups in Phuket. They have cooperated with each other for mutual benefits to some degree. For example, universities try to link with several associations to find out what entrepreneurs want, so that they can try to adjust their own curriculum. However, because of central regulations or the universities' policies this is more difficult to do than they expected. As the Director of TAT: Phuket Office said:

> *Local Universities ought to look at the market; at what the market wants.*
> *Sometimes they should meet and share information with entrepreneurs to know*
> *the trend of the market so they can produce graduates to respond to what the*
> *market wants. This is the thing that ought to happen in universities in a*
> *tourism city like Phuket.* (See Appendix 3.3 Question 12)

As the Vice-President of Chiang Mai Tourism Business Association reports that:

> *If we do not stick together as a group, and each person goes in a different*
> *direction, we will be in a difficult position.*

In terms of hospitality human resources, the private sector like TBA has contacted universities to tell them what kind of employees they want. As the Vice-President of the Tourism Business Association advises:

> *You ought to produce graduates in response to our needs. (Appendix 2.9*
> *Question 17)*

In the past, tourists found it difficult to find information, but now with the Internet they can search for as much information as they want, including comparing prices

and seeing the place and hotels. So entrepreneurs cannot hide information to tourists because the social networks will reveal everything. As the Vice-President of Tourism Business Association says:

> *Now that there was a World Wide Web the customer knows everything. Businesses which are not up to standard were cause complaints. (Appendix 2.9 Question 20)*

It took two years to formulate this national plan and it was adjusted several times, but when there is a change of Government the entire plan is abandoned. Findings show that Chiang Mai formulated a plan twice in some years, it then stopped.

b. Physical Flow

Physical flow in this study means change in tangible assets including the budget allocation to support the cluster.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Physical Flow	Change in tangible asset including the budget allocated	• Budget allocate to the Creative Economy	• No budget	• New international airport	• Budget stopped- cluster declined	• The Governme nt and U. supported

Table 6.8 Physical Flow; Source: Author

After the PM Thaksin era, on the tenth plan, the Abhisit Government used the keyword 'Creative Economy'. However, Prime Minister Abhisit still supported clusters through OSMEP controlled by The Industry Ministry. Clusters were part of the concept to emphasise SMEs. OSMEP has a training institute. It was written into the national plan that OSMEP takes responsibility for clusters; therefore, the Budget Department allocates budgets to this department. In 2007, they targeted to establish 22 clusters. Tourism clusters were taken care of by MOTS, but in order to obtain a budget, clusters such as The Health Tourism Cluster, The Hotel de Charm Cluster and Indigo Cluster had to apply to the Ministry of Industry. When OSMEP did not allocate the budget, the Health Tourism Cluster at Ranong disappeared. However, to

prevent overlapping; OSMEP attempted to support SMEs in the tourism industry only in those areas that MOTS does not; but sometimes this raises some difficulties as the project manager of OSMEP suggests:

> *We are attacked about tourism. They said the projects had already been covered by the Tourism and Sports Ministry. For example we did the route map. But we showed where you will find SMEs from which you can buy their products. What did they sell? We did not do the same as MOTS such as which direction should tourists take to see the waterfall. The maps have different is content, but people think "why do organisations repeat and overlap each other all the time?" If we do overlap, the Budget Department definitely will not allocate the budget. We emphasise at SMEs. (See Appendix 1.5 Question 5)*

The problem experienced by the chief of Tourism and Hotel Management Department, KU-CSC is that the public sector did not give priority to tourism.

> *At meetings, they say tourism is important, but when the time comes to allocate, the budget, most goes to other things. (See appendix 4.15 Question 5)*

The number of tourists in Phuket has increased dramatically. However, there is the airport problem because its capacity is 6.5 million people so the airport is very busy. To prepare for increasing tourists in the future, the Abhisit Government allocated a budget to expand the capacity of the Phuket airport. This project is at the design stage. Besides, more roads will be built.   As the President of Tourism Business Association said:

> *The present airport is now too small because its capacity is for 6.5 M tourist per year so we plan to expand to 12.5 M. It is in the process of building and will be finished by 2014. In addition, there are more roads. We are thinking about the environment so we are building a tunnel road and expanding roads to the airport. Even the water: we have accepted that it is not fast enough for the growth of the city because Phuket has 40,000 rooms, 700 hotels and a lot that are illegal. (See Appendix 3.3 Question 7)*

However, when they have more tourists and more roads, they have drawn up plans for what Phuket will be; how to control the growth of building, and how to manage the environment systematically and successfully.

> *Thousands of rooms were added in the year 2010 and 1000 rooms in the year 2011. (See Appendix 3.3 Question 8)*

In summary, the clusters were included in the concept emphasizing SMEs. It is written into the national plan that OSMEP takes responsibility for clusters; therefore, the Budget Department allocates budgets to this department. In this study, the Indigo Textile Cluster was under OSMEP whilst the Andaman Cluster was under the Interior Ministry. However, the national Government takes responsibility only for big projects such as Phuket International Airport, whilst the local level must take care of itself.

c. Knowledge Flows

Knowledge flow in this study means intellectual capital collectively helps to increase the competitive advantage of the cluster.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Knowledge Flow	Intellectual capital collectively helps to increase the competitive advantage of the cluster	• KU and Orchid Cluster	• RSKU, KU –CSC Product development • Learning centre • Tourism attraction • Indigo website	• PKRU & PSU support • Live museum-Old town community	• CMU& CMRU & Payup U.support • Hill tribe homstay projects	• CMU • Unique products & services

Table 6.9 Knowledge Flow; Source: Author

In terms of research and academic service, each lecturer and researcher works according to his or her individual interest. Findings show that the success of live museum at the Old town Community at Phuket, Hill tribe Homestay in Chiang Mai because the leaders of the group has connection with local universities in informal way which lead to knowledge support. For example VP of Chiang Mai Tourism Association told that his hill tribe homestay projects are successful because of universities support starting from inviting lecturers who he knows in person to give advice on homestay projects. So they gave advice to him and hill tribe people how to mange homestay, how to save environments and how to produce green products such as tea pillow. Similarly, universities in Sakon Nakhon can help the indigo village to be the learning centre and tourism attraction. As the Vice Governor of Sakon Nakhon Province argues that:

I said to lecturers of Rajamongkol University that Tamtao village should do as the Indigo village. But the lecturers want to do Mao (fruit). So I told them to have the Mao village. Demonstrate as we go aboard to see wine. Wine factory; they let us see at the beginning until we taste wine, right? I want this happen in the Indigo village. (See appendix 4.1 Question 3)

KU especially specializes in agriculture. We will support plant breeding that will make good indigo cloth and is suitable for the area. How can we grow and supply enough? Yesterday, I went to open the training course and asked "Do you have enough indigo?" They said "sometimes not enough." So I want KU to help in developing plants which are suitable for us. Comparing indigo with rice, in term of profit, indigo can grow faster and in one year can grow several crops so it generates a better income. (See appendix 4.1 Question 1)

In terms of quality**,** the Vice Governor of Sakon Nakhon Province says:

How can we produce good quality indigo whose colour does not fade, and without adding chemicals to make it last? When they sell, they should have a label giving washing advice. We must have someone to study how to make indigo cloth that does not fade. Sometimes, I bought very expensive cloth but after a while, the colour fades.

In terms of management, the Vice Governor of Sakon Nakhon Province says:

Most of the people who make indigo clothes are housewives and farmers who grow indigo when they have free time. They do not know how to manage. Then universities are capable of providing this knowledge. *The other worry concerns the accounting system. They need to be trained. They are not like a shop, which has a system. I want a development official to devise an accounting system so they will know how much profit they get. (See appendix 4.1 Question 1)*

However, there are different perspectives in term of marketing. The deputy governor does not worry because she thinks that some leaders are good at it, such as Maetheta group. Right now, the heads of groups do not have to weave. Their task is to get orders and find new designs. Whilst the leader of the Maetheta group still wants universities to help in searching the target group by using IT, because her products are unique, so it is difficult to find unique, customers too. The President of Province Administration Office needed help from academics, as he says:

I would like the university to help us think in a commercial way about products: bags, clothes, clothes roll. We need to follow a path to sell in the Central Department Stores in big cities. What is the path? The working unit is

me. Yes. Maybe design the logo. Designing clothing not the same as it was before. We should increase our standard to the international class.

In terms of product development, the president of PAO wants universities help in logo design. He wants professional packaging because today they use plastic bags. He mentioned that when we go to foreign countries we see nothing different from here but the packaging system. The president of PAO wants to build a brand for Indigo dye clothes to the brand that can sell in the department store such as in Chalernsri Central Plaza. He thinks that products like Arrow, Guylaros are similar. The President of Province Administration Office (PAO) said:

> *The story and the way we present the product can bring added value. These are things that academics and the university can help with.*

In terms of training, entrepreneurs often invite lecturers to be the trainers or consultants for their organisations. At the same time, one of the university missions is academic service. So there are mutual benefits. In addition, lecturers provide service without charge or charge at the public sector rate, which is cheap. As the Deputy Director of Research and Development Institute of Phuket Rachabhat University said:

> *Our role is to provide a professional service. Our service is cheaper than if the community has to hire private consultants.* (See Appendix 3.12 Question 13)

However, in terms of research and investment, there are practical difficulties for entrepreneurs, the universities and the public sector. It is hardly shared research or shared investment as counterpart fund except through an organisation or an association.

In terms of technology advantage, it can be used to help in distributing and sharing information and solving problems. As the President of Phuket Spa Association suggests that:

> *Chulalongkorn University has a website for parents called Kids.com where doctors reply every day. I think this can reduce the workload of doctors a lot because people who read can help themselves with basic problems. At the same time, kids do not have to go to a hospital in every case. I think this service is good and not too difficult to access. Technology can help, but the problem is that the public sector is not dynamic. We might have a project for a year but*

then, if the Government changes, sometimes they do not support us and we have to stop. (See Appendix 3.16 Question 32)

The linkages between entrepreneurs in the private sector and universities are informal. Between them they can exchange knowledge. Consequently, this leads to mutual benefits. However it is not easy for entrepreneurs to meet lecturers in universities except if they meet at a provincial meeting or at seminars or projects.

In terms of research, universities can support by conducting research to find the solution for entrepreneurs in a practical way, and then the private sector can make a proposal to the public sector so that it will happen. As the Vice President of Chiang Mai Tourism Business Association reports:

> *Yes we must join together to solve the problem. Boutique hotels want to be in the system but they cannot meet the conditions. Universities could help by doing research and making recommendations.* (Appendix 2.9 Question Q10)

In terms of website, when people search for travel via the Thai tourism website, they will be frustrated because it takes too long so they turn to other websites. Thai people still want the website to look beautiful and think this will bring tourists to come, however slow loading or difficult to navigate websites simply turn customers elsewhere.

> *Just look at the Vietnamese website and the Thai website and see the difference. Our website looks beautiful but takes time to access. The Vietnamese website is just like one sees in Europe, plain, easy, simple, but convenient. For us, we forget that although the host is in Thailand, our customers are abroad. When they open our website, it is very slow, so they lose patience and go to open other sites. The others don't emphasise the beauty. But we are addicted to beauty. We made it so beautiful that it is too heavy. We forgot the convenience that tourists expect. We don't think of what the consumers need. To open the Thai web one has to wait for a half an hour.* (Appendix 2.9 Question 86)

> *But in terms of how academics can help tourism, I was told by a lecturer that the trend of tourism is not the same as before. It will become more niche market, more special, and entrepreneurs must create a unique story about their products and services. After that, the lecturer went on to give ideas to several companies, including my company. We followed the advice and I changed my way from being a tour agent doing only sightseeing to focus on adventure and trekking. Now I can look to the future and we are surviving in the present world of free competition.* (Appendix 2.9 Question 1)

I see the cluster, as a mechanism to increase the group's potential for tourism. They are the cluster of knowledge, marketing, and management. (Appendix 2.9 Question 66)

In summary, my findings show that universities sourced knowledge in order to increase the competitiveness of tourism clusters via their mission: to produce graduates, research, and giving academic service. These cover many areas such as IT, websites, product development, production, marketing and packaging.

d. Value Flow

'Value flow' in this study means the worth of products and services added in order to meet or go beyond customers' expectations.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Value Flow	Worth of products and services added in order to meet or go beyond customers' expectation	• Creative Economy	• Preserve local knowledge in a story • Demonstration Village • Quality	• Creative Economy • Value-added	Niche market Stories/ Differentiation Value-added	High quality and unique products and services Premium market

Table 6.10 Value Flow; Source: Author

Table 6.10 presents the value flow of the cluster. I have selected some significant findings that impacted on the clusters to explain this concept. The creative economy is the way to take local knowledge to create and then generate more revenue in the area. One Vice Governor of Sakon Nakhon Province used to talk with the head of the Tumtao village about being the Indigo Village. She does not want people, to forget about this; the process of dyeing. Then, she told the Community Development Official to keep records about the whole process. Before the dyeing begins the people must carry out rituals. It is their local knowledge. The process of dying Indigo has a story. She wants people to know that the procedure of production is not easy. It is like when tourists go to see wine production; they see the vines and white or red wine. As the Vice Governor of Sakon Nakhon Province said:

When I went abroad I saw how they make wine and now I would like tourists to see how we make indigo. I said this to some lecturers of Rajamongkol

University but they said that they wanted to produce Mao (fruit) not indigo.
(See appendix 4.1 Question 1)

The Vice Governor wants to see universities support more in several areas such as packaging because the indigo groups still use plastic bags, so she would like to see value-added in indigo products. As she says:

> *We, as the public sector, support indigo production. Can Kasetsart University (KU) help us to understand how to reduce the cost of making indigo clothes? Which plants suit our geography? Does each indigo plant give the same quantity of indigo water? Also, KU can help us with packaging. Our packaging now is not beautiful. I want to invite experts to help us. This would add value. When we give souvenirs to people who we respect, there is a different feeling between beautiful packaging or a plastic bag. If we wrap indigo clothes beautifully they are good to give to older people. (See appendix 4.1 Question 12)*
> *Once I got a gift like in a traditional style bag. When I opened, it was beautiful and had details to explain that this bag was made from Kok plant and who had made it. It was sold at the Phupa shop that belongs to Princess Sirinthorn. The clothing that was inside came from Kusuman District which is in Sakon Nakhon.(See appendix 4.1 Question 13)*

Consistent with the President of PAO who would like to see the indigo story, he also wants to centralize all the indigo groups so as to ensure the same quality. As he said:

> *We lack a centralized system for production, quality, and market trends. Today they produce without a plan for the future. Indigo dyed clothes are only made in one country and we want to tell the stories and preserve the local knowledge of farmers who have overcome many challenges to do this work. (See appendix 4.2 Question 4)*

Thailand has a lot of competitive products in poor packaging and sells them at a cheap price. Thai snacks, for example, are delicious but are not wrapped in attractive packaging like Japanese snacks where the wrappers add value so they can be sold at a high price. During the Abhisit Government, they used the key word 'Creative Economy' so entrepreneurs can get benefits if they propose project that relates to the keyword. The President of Phuket Spa Association reports that:

> *The policy that this Government uses and is good is the creative economy. I think it is good because Thailand has a lot of know-how in how to make basic products but we do not develop them. For example we might have a very good product but, with bad packaging, it has very low value. (See Appendix 3.15 Question 32).*

Most of the people making food are small entrepreneurs. They have limited resources and do not have any knowledge of management and marketing. They will become sustainable if the public sector and universities support them.

In terms of value-added, there are several ways to proceed as the President of Phuket Spa Association argues:

> *This is one of the strategies that we must sell because spas add value to hotels. The cost to the hotel is not high and hotels can include the spa in a package instead of rooms. If tourists use the spa service once, there is a chance that they will do so again. For the rooms, you give 11 nights; they will stay only 11 nights and then go home. The challenge is how to make them use the spa service the first time and then chance that they will use the service again. It depends on the sales techniques. Some hotels think spas have a cost but rooms do not. It depends on the perspective in marketing.* (See Appendix 3.15 Question 20')
>
> *Actually, the spa issue was popular six to seven years ago and then disappeared, but now public organisations have begun to pay more attention because in their opinion, spas are big issues in the creative economy. It uses a high number of skilled workers and it has high added value and a lot of local skill and knowledge which means that we hardly use any foreign materials.* (See Appendix 3.15 Question 1)

Similarly, the value-added can be used for the whole cluster because each province in the Andaman cluster has their own character and potential. If the clusters join together and sell as one package, this makes their products and services more interesting. From the tourists' perspective, when travelling they think of the whole area; they do not think of each province separately so they plan their journey as the whole and this can save them money. If, for instance, you have variety on products and services like Phuket with its beaches and Pang-Nga with its mountains, tourists might plan to relax on the beach for a week and then go to climb the mountains for a few days. As the Director of TAT: Phuket Office said:

> *When tourists travel they do not think about the province separately but we do, because this is the way of Thai management. So TAT takes care of whole areas as one cluster. We see the big picture and when we support the whole group we save on the budget.* (See Appendix 3.3 Question 23)

Whilst TAT supports tourism, they do not support each province but take responsibility for the routes that link destinations to each other like Phuket, Pang-Nga and Krabi. These areas are linked to each other and have expanded to five provinces. So the cluster can create more variety of products to tourists. Instead of

only coming to Phuket for the beaches, they can go to Pang-Nga for the mountains. In addition, there are hot springs at Ranong: there is more variety and repeat tourists have new alternatives. As the Director of TAT: Phuket Office says:

> *So if we promote the whole cluster, we may for example, have flights between Phuket and Ranong so that when they fly to Ranong, they can do some activities and then can fly back to Phuket. We can add value for the tourism industry and make the tourist experience more convenient.* (See Appendix 3.16 Question 22)

Each destination has its own identity and culture such as Luangprabang where (for example) giving sticky rice to the monk can be the selling point. Thailand has many similar narratives to add value, however they are overlooked. As in the past, people compare Phuket with Bali's sea and beaches, yet Thailand cannot compete with Balinese culture. Phuket culture is unlike Bali because Bali is unique. Phuket Municipal has worked promoting old houses; our history does not stretch as far as Bali. A Singaporean TV series called Babayaya; airing on weekend at Thai PBS, is about Chinese people who have migrated to Malaya, including Phuket. Firms are shown promoting Thai local culture such as the way people eat and their way of life. The movies reflect the way people dress, then food and beliefs. Phuket has strong cultural links with Penung: Phuket is called Baba and Penung called Yaya. They try and promote this culture. Though Phuket cannot compare with Bali but we have culture that we are capable of promoting including that of the Chinese immigrants who came to work in mining. Also, Australian, Dutch and English people have worked in Phuket and many Chinese people fled from China to Thailand. These stories can be selling points.

In terms of hotels, entrepreneurs think that the location is the most important because it is the first thing that attracts tourists. However, service is very important too, because if they have a very beautiful hotel but employees do not provide good service, their guests will leave. So their employees must offer high quality service.

In terms of the research related to tourism, the Vice President of Chiang Mai Tourism Business Association was told that the trend of tourism is not the same as before. It will become more of a niche market. Entrepreneurs must adjust their

attitudes and make their products more special that is, more unique. As the Vice-President of Chiang Mai Tourism Business Association says

> *We talk about the word 'knowledge', but old generations don't even know this word. Right now the global community talks about deep knowledge but entrepreneurs in our country can only do one thing, price cutting. This issue I have tried to talk about with the university, the persons who have power in the province and tourism officials.* (Appendix 2.9 Question 1)

From the entrepreneurs' perspectives, universities have some potential, but if the Government would give support by allocating a budget for them to have a study trip, this can be useful.

In addition, the university gave advice to the Vice President of Chiang Mai Tourism Business Association, as a result, he realized that he must adjust his business from mass marketing to niche marketing in order to survive, he opened a cooking school, which has been successful. As he said:

> *First I opened the cooking school; today I think I am successful at it. Then I set up an adventure centre. There are bicycles, off-road bikes and a lot of equipment. I understand that I have a tour company that has more equipment than other's. (Appendix 2.9 Question 34)*

In summary, universities can help tourism clusters by adding worth to products and services in order to meet or go beyond customers' expectations. My findings show that the Thasin Government and Ahbisit Government used OTOP and creative economy to take local knowledge in order to create and add value to generate more revenue for Thai products and services such as the live museum at Phuket and Traditional North noodle rice in Chjang Mai. Each place has its own identity but how to bring this to show what they have. Like local people in the old town community in Phuket, They still dress traditional clothes, eat food and live in the Chino-Portuguese house as their grandparents used to do before. However, Universities helped local people to bring their own identity to present to tourists. The head of old town community started the old town community from the informal connection with local people and universities. Then universities taught them several things such as architect of their Chino-Portuguese house and how to present in English. In addition, local people was taught about their own local histories, food, dresses. These were taught to the young in own town community as well in order to prepare them to be

guides. Later, public sector allocated financial support for events. When tourists come, the head of old town community, local people both old and young will wear well-dressed traditional clothes and welcome tourists with traditional food and show around their Chino-Portuguese houses.

6.5 Theme Four: Triple Helix effect

In this section, I apply the Triple Helix model to analyse and discuss across cases and compare with literature to confirm, extend or disagree. Triple Helix effect is the impact of interaction among three entities: the public, the private sector and university towards the cluster.

a.   Interaction of University, Industry and the Public Sector

I analyse and discuss how the public and private sectors and the universities interact with each other to achieve their goals. Interaction between university, industry and the public sector means interpersonal action among three entities: university, industry and the public sector.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Interaction	Reciprocal action among participants within the cluster or outside the cluster.	• NESDB Plan • SMEs • Overlap • Cooperation btw university and TOMS • U. Specialize in producing graduates, curriculum • No integration • No strategy • Bangkok Tourism strategy • Spa Museum	• Garment and KU-CSC • Punna group and RSKU • Tamtao Group and KU-CSC	• PSU-MOU with Marriott • PSU and Hotel and TBA • Spa Association with RPKU • Lack of people who look at the big picture	• TBA and KIAsia • TAT and CN17	CMU

Table 6.11 Interaction among 3 bodies

Table 6.11 shows the interaction among three entities; private and public sector and the university. Findings present several integrations among the Government and non-Government bodies. I have selected some significant one for discussion.

When the Government changed from PM Thaksin to PM Abhisit, the Government paid less attention to the cluster issue. People talked less about it. Less integration occured. As the Former Director of Competitiveness Division, NESDB says:

> *There are now no strategies to integrate. (See Appendix 4 Question 5) However, TAT think of tourism in each area as a cluster and should integrate as a whole not separately. Because when tourists come to Phuket, they do not travel only in Phuket the destinations are spread around other provinces such as Kabi, Trung and Pang-Nga. So when organisations both public and private look at the picture, they do not see Phuket alone. They look at the whole group as the cluster but each province must differentiate itself from the other. Positioning must be different. However, they have to integrate in terms of logistic because tourists travel all around. How to make travel flow by land, air and sea? How to link to each other?*

As the Director of Marketing Research Division of Tourism, TAT reports:

> *We have to integrate the logistics of travel by land, air and sea. Tourists want to travel from one place to another.'*(Appendix 1.2 Question 35)

Besides integrating in terms of logistics; they should integrate with plans and festivals. The public sector looks at the private sector separately. In contrast with the private sector, they think all areas are related to tourism As the Vice President of Tourism Business Association suggests that:

> *We must communicate to the public sector that if tourists decrease everybody suffers. Now when I asked people in the public sector If there are no tourists, where do you get your revenue from? They continue to say that their revenue does not come from tourists but comes from restaurants.* (Appendix 2.9 Question 29)

In each province, there is a joint committee of the Government and private sectors to solve economic problems. In Chiang Mai, the Vice President of Tourism Business Association was the secretary. He said:

> *Tourism is the best revenue generator in Chiang Mai, so why can't the DIW have a meeting just about tourism? We need to discuss the direction of tourism. They need to send executives who have vision and can talk seriously, not*

inexperienced junior representatives. In the provincial meeting they asked me: "how many tourists will come this year?" "How much revenue will tourism generate approximately?" I probably could answer these questions approximately but they should be ashamed that they don't know. I asked them "how much support?" Now we try to build better connections and the relationship is getting better. Hopefully, the future will be better. (Appendix 2.9 Question 16)

Normally, when the province calls for a meeting, organisations from both public and private sectors will send their representatives to attend. Sometimes some organisations send young officials who cannot make a decision and send different people the next time, so the private sector thinks the public sector and university do not take the meeting seriously. As the Deputy Director of Chiang Mai Provincial of Office of Tourism and Sports reports:

> *No matter what the issue, every meeting has a representative from the university to attend committees such as engineering, tourism, research, and marketing.* (Appendix 2.9 Question 13)

In terms of integration between the tourism and sports ministry and universities, it seems there is less linkage. The Permanent Secretary the Ministry of Tourism and Sports argues that:

> *At this stage, cooperation between universities and ministry is not as good as it should be. Universities have expertise in producing graduates and curriculum management.* (See Appendix 1.1 Question 10)

He realized that the factors that make the tourism industry successful depend on planning and integration. However the difficult part is about participation. How to make all participants work together and see the same goal because tourism involves several organisations? How to form integration with all participants? The Permanent Secretary of MOTS points out:

> *Participation. This is the problem. This is difficult.* (See Appendix 1.1 Question 10)

In addition, the plan must be an integrated plan because integration must practise participation because tourism is not a single picture. In terms of Government, there are several sectors, and in the private sector, there are several sectors. He emphasises that:

> *It depends on the management style and the integration plan.   Participation is at the heart of every success story.* (See Appendix 1.1 Question 15)

Porter (2008:495), states that pioneering value chain innovation and addressing social constraints to competitiveness are powerful tools for creating economic and social value. At the same time, investments in competitiveness have the potential to reduce constraints on a company's value chain activities.   Marriott Hotels for example, provide 180 hours of paid classroom and on-the-job training to chronically unemployed job candidates. The company has combined this with support for local community service organisations, which identify, screen, and refer the candidates to Marriott.   The net result is both a major benefit to communities and a reduction in Marriott's cost of recruiting entry-level employees. Ninety per cent of those in the training program take jobs, a substantially higher retention rate than the norm.

Empirical data confirms the literature above by Porter (2008), in terms of integration between the university and industry. Findings show there are integrations between industry and the university. For example, in the case of Phuket: the Hospitality Faculty, Prince Song Kla University signed a MOU with Marriott on-the-job training for students. Another example is the president of Phuket Spa Association who was invited to teach at RPKU. In the Chiang Mai case, the Vice president of TBA was invited to teach at CMU.

More empirical data shows the integration between Government bodies and the university. As the Senior Operational Office, OSMEP said:

> *OSMEP has professionals to give advice but if OSMEP cannot help, OSMEP will coordinate with universities and invite lecturers to help.*

My findings also showed that Government and non-Government bodies at national level often asked for the local level to do the work. Finally the entity to help at local level is the university in that local area. However at national level, there is less cooperation between the Ministry and the university as the Permanent Secretary of Tourism and Sports Ministry.

This is confirmed in the literature by Porter (2008:275). Surprisingly often, cluster participants never meet, and there is little public or Government recognition of the clusters' significance to the local economy.

This study showed that there is less linkage between the Ministry and the universities. The Permanent Secretary of Tourism and Sports Ministry accepted the potential of universities. However, if there is cooperation between the MOTS, Higher Education Ministry, universities, industry, associations, this will benefit dramatically all the Governmental and non-Governmental bodies.

My study shows another finding on interaction among several groups at local level. The Indigo Textile Cluster was supported by OSMEP and then stopped. The new cluster called the Garment Cluster was established in 2011 by KU-CSC and the Industrial Ministry supported the budget. However, most are the same indigo groups. Moreover, making the indigo group into a the learning centre and attraction, as the president of PAO wants, has not occurred yet even though there are several actors involved but not TAT and MOTS. So there was no interaction among TAT, MOTs and the Indigo Cluster. The Chief of Tourism and Hotel Management Department, KU-CSC reports that:

> *The central person can be from the public or private sector, but they need to do it seriously. If they are from public sector, it can be easier to get a budget than if they are from private sector. The Private sector will do only the part from which they get benefits, for example tour agents will focus only on tours. They are not interested in other things. But if the central person is from the public sector, there are several departments and they can coordinate among them. (See appendix 4.15Question 5)*

In terms of readiness to support communities, the Assistant President of KU-CSC thought that the university is ready to support Indigo clothing, yet support is minimal because the university did not initiate the project. The university is capable of helping to meet the cluster's needs. Mrs T who is the Chief of Marketing Department , KU-CSC, helped because at that time we thought we could assist the group management taking products to the market, design in varieties styles. However, the university would not work on the dyeing because this technology was from RSU and there are a lot of RSU experts working in technology area. Mrs T takes care of transforming clothes. She does not design, rather she focuses on dyeing.

Right now, in order to develop a shared understanding among heads of several organisations, we use two ways. One way is where we have a meeting chaired by the governor. The other way is where we sign on MOU directly... The leader's vision is important. If they think academics are important they invite us to be an advisor. (See appendix 4.12 Question11)

My empirical data shows conflict of interest made the Sa paper-making Cluster unsuccessful. This confirms the literature Etzkowitz (2008:21): the movement across helices is sometimes viewed as creating conflicts of interest due to close association of roles in different spheres.

Porter (2008:279) advises early and on-going communication and discussion that will educate will cluster participants about competitiveness and help to shift mindsets. I disagree with Porter on the basis of my empirical findings. OSMEP once organized a meeting and then let experts explain how important the cluster is - following which nothing happened. OSMEP lacked on-going communication and after initiation added no value.

I do not agree with Porter (2008:225), that the productivity and prosperity of a location rests not on the industries in which its firms compete, but on how they compete. Firms can be more productive in any industry - shoes, agriculture, or semiconductor,- if they employ sophisticated methods, use advanced technology, and offer unique products and services. I argue, the way to compete does not always use advanced technology to create the unique product.

Empirical data comes from the Nadee indigo village; Punna district. Mrs P: the leader and her members have unique design products inspired by nature. As she said:

Once when I was driving and saw the sun set, I really appreciated how beautiful it was. So I stopped my car and drew the picture and decide to make the indigo with this design. Besides, I told the members of the group, most of whom are senior woman to look at nature. Once one aunty saw the stem and leaf of banana and now she can weave that pattern.

Her product is unique of high quality and has a story so she can sell products at a high price. When the Government promoted OTOP and the Sakon Nakhon governor asked the public and private sectors in the province for support, people started to wear indigo clothes every Friday. This situation made the indigo raw material more

expensive. Whilst other groups increased the price from 200 Baht to 300 Baht, she told that she still sells at the same price (at 1,500 Baht) because her product is unique with high quality and she had already set this high price a long time before.

However, she still needs help from Governmental and non-Governmental bodies such as raw materials, high quality indigo seed, and packaging. In terms of IT, she said there should be an Indigo website that is the centre of everything about indigo because she thinks her products are unique so her customers are unique too, so she thinkst a website can help her to find or access these unique customers. Importantly, she does not change the way of life of woman in the village; she lets them weave their indigo clothes when they have time after farming. She also encourages members to grow raw material by themselves such as cotton. If they do, she gives more money.

Whilst another indigo group, Tamtao village has a variety of products using natural colours, the group and KU-CSC use the lotus flower to produce the pink colour which they weave into scarves. Now, they are in the process of patenting. This is an example of innovation by local knowledge and the university.

Sakon Nakhon has several indigo villages under the umbrella "The Indigo Textile Cluster" and these villages are well known. Their products are unique and different from other groups. Similarly, the Andaman Cluster can make their products unique in the eyes of tourists by careful branding and marketing.

In the Andaman Cluster, there are several organisations such as the Tourism Business Association, Hotel Association, Spa Association, and Transports Cooperative. Members of these organisations are moving in and out all the time so it is difficult to measure where the boundary is. The tourism cluster is dynamic; yet though the boundary is not clear, tourists get more benefits if each province joins together and provides a variety of products and services: *The smaller the boundary, the greater the benefits*.

In order to differentiate, amongst entities, they must understand each other. Entrepreneurs must understand that developing themselves is important and that

change will inevitably occur inevitable. So they cannot continue to do the same as they did before. They must realize that they have to develop themselves in order to survive. As the President of Phuket Spa Association said:

> *'When we did the project with IMED; we talked to them a lot because they were in a rush and they pushed us to work hard because we only obtained the budget just before it closed. Sometimes we do not like to change, but the private sector must understand what the public sector does to help us. Second, the public sector must understand the business style of the private sector and how they do business. Both of us have different ways. We must tune into each other, must build understanding between us. The private sector must understand that the public sector has its own documents that they must use when proposing budget. At the same time, the public sector must understand that some documents are difficult to use by the private sector. Sometime, the private sector has its own documents but must use the public agent's documents.* (See Appendix 3.15 Question 24)

To summarise, entrepreneurs need discourse on how to integrate and differentiate: even if each has its own unique products and services, they can integrate to sell them as a package. Thus, Thailand can solve the problem whereby the public and private sectors organize and sell the same thing. Also, local communities can grow sustainably with help from three entities; the public sector, the private sector and the university.

In terms of interaction, as Etzkowitz (2008:46) states, Government, university, and the private sector play various roles, in different combinations, to assist firm-formation and growth in the US. Nevertheless, despite the decades-long existence of Government support for firm-formation, the concept of public venture capital is relatively unknown, and is even viewed as a contradiction in terms. Although this perception is changing, many technology entrepreneurs still cannot imagine that Government programs can provide funds that can help them start a firm and so do not apply.

I do not agree with some of Etzkowitz's (2008) arguments, for example my empirical data shows that the integration of the Government and private sectors and the university can affect local business greatly.

My empirical data above shows that unique products can be produced using local knowledge and this make local people proud of themselves that they preserve local

knowledge and create innovation. At the same time the local university can carry out its mission in relation to research and academic service on innovation. Thus findings extend in terms of role of cluster in the social dimension.

According to Porter (2008:226) the presence of sophisticated foreign firms often enhances the productivity of domestic firms and vice versa. Instead, I argue that in order to grow sustainably in the long-term, local business can use their home grown talents, natural resources, and local knowledge with support from the public sector and local universities to make unique products and services such as Maeteeta indigo group; Punna Subdistrict. To sum up, my findings presented several integrations among the Government and non-Government bodies. When the Government changed from PM Thaksin to PM Abhisit, the Government paid less attention to the cluster issue. People talked less about it. Less integration was made. However, TAT thinks of tourism in each area as a cluster, which should be integrated as a whole and not separately since when tourists come to Phuket they do not travel only in Phuket because the destinations are spread around other provinces such as Kabi, Trung and Pang-Nga. Organisations both in the public and private sectors concentrate on the big picture, they do not look at Phuket alone. They look at the whole group as one cluster, but each province must differentiate itself. Their positioning must be different. However, they have to integrate in terms of logistics because tourists travel all around. Findings show that there are integrations between industry and the university; for example, in Phuket the Hospitality Faculty, PSU signed MOU with Marriott Hotel on-the-job training for students. Another example is the president of Phuket-Spa Association who was invited to teach at RPKU. In the case of Chiang Mai the Vice president of TBA was invited to teach at CMU.

b. University Industrial Linkages (UILs)

I have analysed and discussed how the public and private sectors and universities interact with each other to achieve their goals.
The philosophy of the university is to provide knowledge and to serve society. As the Director of Research Institute at RPU said:

> *The philosophy of the university is to provide service to society. The university must provide service in knowledge or helping local communities besides teaching. (See Appendix 3.11 Question 1)*

I argue, both, the public sector and entrepreneurs do not think about what the university can do. The Government bodies and private sector think of the university only in term of producing graduates. They do not think about the whole system. Also, in terms of training, Government bodies and the private sector think only about short courses, not lifelong learning.

The Permanent Secretary of MOTS said:

> *If you want the university to play a role in support of the clusters, you must add a new mission for the university. Thailand uses the rule of law. We must think as a law-oriented legal system, otherwise it is impossible because law allocates the budget.*

The key economic actor is increasingly expected to be a cluster of firms emanating from, or at least closely associated with, a university or other knowledge-producing institution (Etzkowitz, 2008:29). The entrepreneurial University is driver of the triple helix: strong emphasis on wealth creation, as is now current in the UK, is only one direction for academic development. Universities may undertake business and social development goals simultaneously.

Producing Graduates

'Producing graduates' in this study means the academic process that the lecturers use to motivate students to learn. It is the first mission of the university including curriculum.

Table 6.12 below shows the first mission of the university in Thailand. My findings show that the clearest and the easiest point that universities cooperate with entrepreneurs is to send students to be trained and to get experience in their career. This is the clearest because entrepreneurs get the benefit. In terms of welfare, some employers pay students a salary whilst others provide transport or food. The season when the universities send students to be trained is the high season, so most entrepreneurs apply at that time.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Producing graduates	Academic process that the lecturers motivate students to learn. It is the first mission of university including curriculum	• University is core • University is vital of production of people, knowledge and technology	• Add Indigo course in local curriculum -Doi koi school, RSU: bachelor, master	• RPU-Marine curriculum but lack of lecturers, equipment and swimming pool • 5lecturers/ curriculum • Curriculum related to spa; Rangsit University-Oriental Medical courses and Thai Medical College in Abaibubet Hospital • HRD-entrepreneurs want student who ready to work • RPU-lectures teach 18-20 hrs so do not have time for doing research	• TBA Cooperate with universities	• Quality graduates • Service-minded students • Educational trip • Training courses for students • Experience • Language • Local history • Local issues Graduates-Good knowledge in tourism

Table 6.12 Teaching; Source: Author

to be trained is the high season, so most entrepreneurs apply at that time.

However, there are some problems about training; sometimes entrepreneurs do not give the correct tasks as agreed with the university. So universities have to solve this by sending a document containing what is the job description for the student. If there is no change, the university will call the student back. This happens less than five per cent of the time. Mostly they have made the mistake of taking too many students so the student's work is disorderly. Another issue is when the student is forced to work from 7am until 22.00-23.00. This is illegal; at induction, universities will provide information to students. If they have to work too hard or something else is wrong, the student must inform the university as soon as possible.

As the Deputy Director of Research and Development Institute of Phuket Rajabhat University said:

Besides sending students to be trained, I have not seen any cooperation. It is not the university's job to work to develop a unique city or to build an excellent centre in Phuket. This should be the role of the province because entrepreneurs tend to respect the provincial governor. (See Appendix 3.12 Question 24)

In terms of tourism human resources, there are enough lecturers for teaching but all are teaching at least 12 periods and for 7 days so they do not have time to do other activities such as research or academic service. If they want to do so they must find their own time. So it depends on the vision of province. Now the university wants to save cost. Now a lecturer teaches about 18-20 hours per week - a heavy workload. If we look at the national policy, nine universities chose to be research universities so they concentrate on research. The way the universities position themselves is important, as the Deputy Director of Research and Development Institute of Phuket Rajabhat University argues:

The Rajabhat University is not really for the community. They interpret the word 'for the social' as accepting all students who apply. Normally, a lecturer should not teach more than 12 hours, but in reality they teach 18-20 hours a week. Lecturers get only a maximum of 2 hours per week for doing research to count towards their performance, so it is not worth it.
All of this depends on university recruitment, and also on the vision of the university. There are 10 lecturers for 2 curriculums. If the university wants to open a Marine curriculum it must recruit new lecturers. (See Appendix 3.3 Question 10)

Recently, Phuket Rachabhat University would like to open a marine curriculum and they want people who can dive, but the owners of diving companies are 99% foreigners. They provide both equipment and a swimming pool. However the university does not have a budget to build a swimming pool. The governor proposed this project to the minister, but was refused. So if the university opens this curriculum, foreign firms will have to provide the diving pool, which must be 2.5 meters deep. As Deputy Director of Research and Development Institute of Phuket Rajabhat University said:

When we developed our Marine curriculum I was so surprised by the difference in foreign and Thai firms. The firms that helped are foreign firms, and they were very nice. They see the importance of HR development. The Thai firms want students to be good at everything. They just want benefits. How can students be good at everything? Entrepreneurs want students but do not want to invest. It is not like that. That is why firms have HR departments to develop employees' capacity. (See Appendix 3.12 Question 24)

My research shows that even though some Government bodies who supported the Phuket vision for a World Marine Hub and the PKRU wanted to open a Marine curriculum, they were not prepared to find more lecturers because, according to the regulations, if they open a new curriculum for a bachelor degree they must hire 5 lecturers. The university did not want to pay. It can be seen immediately that the public and private sectors and the university did not plan together to integrate and achieve their vision.

In addition, in terms of teaching, since the university focuses on quantity; the Permanent Secretary of MOTS said:

> *The university is the core. The university is the organisation that produces graduates who will be the leaders in tourism development. Tourism needs people who have knowledge and are competent at doing research. The university is vital in the production of people, production of knowledge, and technology. (*Appendix 1.1 Question 6)

Empirical data confirms Etzkowitz (2008:56-7) argument that universities are especially important to the creation of knowledge-based firms since they have people with many of the resources such as skills, time, and equipment to realize the initial stages of this strategy. In terms of organisational factors, university policies designed to (a) encourage faculty members and students to interact with industry, (b) give academic credit for promotion and award degrees for this work, and (c) provide clear guidelines delineating appropriate activities.

In terms of curriculum, as the Permanent Secretary of MOTS says:

> *Not all learning happens in the classroom. We need to integrate education into the curriculum. For example, if I want to know about birds, I go to see birds in the forest. Or, if I want to know about a farm, I go to learn in a farm. Not all subjects are learned in the class. We should build people eager to learn and build educational curiosity from their education. The school is the source of the learning process through the local curriculum; they will take great pride in their local area. If we make a community into a source of learning they will love their place. The Government does not require much investment, and it has good qualified people too. (Appendix 1.1 Question 7)*

A previous study by Munar and Montano (2009) shows that although Spain has many tourism degrees and a long tradition of tourism research, knowledge about how the Spanish tourism labour market judges the competence attained by graduates during their education is limited. To contribute to a broader understanding in this

area was one of the objectives of this study. The other was to critically discuss how the demands of the labour market should be used in the design of a tourism curriculum that meets the Bologna criteria.

A study by the Institute of Management Education for Thailand Foundation (2002) applied Porter's diamond model and found that the factor conditions that support competitiveness in Phuket tourism are: beautiful beach, good climate and location, and impressive Thai hospitality. However, the factor that obstructs is insufficient qualified human resources. Empirical data supports this literature. As the Permanent Secretary of MOTS reports:

> *The production plan, manpower plan and development plan have not gone in the same direction. These plans do not meld together. The manufacturers only produce.*

To summarise, my findings show that the clearest and the easiest point that universities cooperate with entrepreneurs is to send students to be trained to get experience in their career. This is the clearest because entrepreneurs gain benefit. In terms of welfare, some employers pay students a salary, others provide transport or food. However, there are some problems about training; sometimes entrepreneurs do not set appropriate tasks as agreed between the university and entrepreneur.

In terms of curriculum, my findings show that even some Government bodies need reminding about the Phuket vision as the World Marine Hub; the RPKU wants to open a Marine curriculum but do not want to hire more lecturers (regulation stipulate that new programmes must be covered by five lecturers) and the university claims it cannot afford the expense. It can be seen that the public and private sector and the university lack integration around a shared vision.

Research

'Research' in this study means investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Research	Investigation or experimentation aimed at the discovery and interpretation of facts. (Www.merriam-webster.com)	• MOTs-university as a key • Learn from the field	• Increase indigo trees/ acre • Product-Quality, better plant breeding, colour not fade, machine, reduce costs • RSU organized 1st Indigo seminar that made indigo well known • Innovation-KUCSC and Tamtao Indigo Village	• University is the source of researchers who are expertise • Krabi and RPU-coffee balm oil on spa • Smui and RPU-coconut • Chiang Mai Mae Pha Luang University-develop products • Innovation – spa product	• Innovation-Hill tribe Homestay • Value-added	• University should do research boutique hotel problems such as out of system

Table 6.13 Research; Source: Author

In Thailand there is a gap between research and practice. As the president of Northern Travel Federation, Chiang Mai and the Vice President of Chiang Mai Tourism Business Association has said, research has been kept on the shelf.

> *Since I have worked here, I have told top management that, no matter how hard we try we cannot catch up with the necessary research. I said that I would act as a coordinator. I will tell researchers what we are looking for. In Thailand, we have a lot of research units but they are operating individually. The most important marketing is to know our customers. (See Appendix 1.1 Question 50)*

More than 200 US universities currently maintain technology transfer offices to facilitate the commercialization of research. Patents and licenses based on academic discoveries contributed over 40 billion dollars to US economic research in 1999. These economic outcomes were based on disclosures of commercial potential in research findings that academic scientists made to their universities. (Etzkowitz, 2008:31)

Empirical data from the Sakon Nakhon, Chief of the Tamtao Village, shows that the group working with KU-CSC produced natural colours such as pink from the lotus flower. Local knowledge is transferred from generation to younger generations with the help of knowledge from its university; such that it helps local people to preserve their knowledge and to grow in a sustainable way. The budget from the Government

from the tax allocated to local universities should support the grassroots in each region to help them grow in a sustainable way. This can help support the economy of the village.

However, if researchers are forced to find the money to support their work, they will focus on big companies in big cities and ignore local and SMEs in small cities. Empirical data demonstrates this from the case-of CAMT-CMU that is the autonomous college that has to earn money to pay for itself. They must try to obtain big projects in order to survive.

Academic Service

'Academic service' in this study means services that the university provides to help communities such as courses, training courses and consultancy. It is the third mission of the university.

Theme	Description	National Level	Local Level			
			Sakon Nakhon Indigo Cluster	Phuket Tourism Cluster	Edutainment Cluster	Hotel de Charm
Academic service	Services that the university provides to help communities	KIAsia.	• Help to build a learning centre in a village • Local knowledge-story • Marketing-packaging, product development, brand building • Value-added: Consultancy • Cooridiator	• Creative Economy- RPU –spa programme • Short courses • Training • Consultancy	• CMU and Mae Jo U and TBA-Hill tribe homestay • CMU-Visual tourism-3D on mobile-provide information about travel, create new packages for Chiang Mai	Consultancy

Table 6.14 Academic Service; Source: Author

Table 6.14 shows that the third mission of the university in Thailand is academic service. I do not agree with Etzkowitz, (2008:35) who argues that a third mission of contributing to economic and social development through technology transfer is integrated into the university in various ways. Dissemination of academic knowledge takes place through patents as well as publication. Empirical data shows this third mission of supporting economic and social development is not occurring systematically in Thailand.

Etzkowitz (2002) concludes that as the academic entrepreneurial paradigm takes hold, interface capabilities spread throughout the university. Within academic departments and centres, faculty members and other technical personnel may be assigned special responsibility to assess the commercial salience of research findings and encourage interaction with external partners. For example, a faculty member in the Columbia University Medical School divides her time between traditional academic and technology transfer responsibilities. The success of incubation will ultimately be seen in the disappearance of the incubator as a separate entity in a remote or off-campus site. The university will play a more prominent role in society, through exchanging functions with industry and Government, and by creating the pre-conditions for regional economic and social development. The structure of the triple helix depicts the university as a regional innovation organizer.

The empirical data by Permanent Secretary of MOTS confirms Etzkowitz's (2002) view that adding a legal stipulation to the mission of universities, then discussing workload and appraisal performance, may be a way forward in Thailand. Thus the university trains organisations in incubators as well as individuals in classrooms. Moreover, as the university engages in technology transfer it becomes a source of new product development, which is, of course, a traditional industrial function. (Etzkowitz, 2008:10)

It is not only technology that the university is capable of transferring but also knowledge in terms of working together with local people. This may lead to new product development. Moreover, integration between them helps to grow regional sustainability. Empirical data from the Vice- President of CM-TBA illustrates some of the difficulties.

> *People don't understand knowledge so they set the question 'why they don't have customers?' The association does not look for them the province does not look for them. This means they get used to waiting. Even TAT was blamed for Chiang Mai lack of tourists on the grounds that TAT did not help enough.*

> *Currently, I am developing tourism at Pang, Mae Eye, Pok Cave. There are 22 villages; we took tourism bicycles there. There were many stories that the tribes didn't get revenue, there was no tourism etc. They wanted us to take the urban people to visit them. At first I went, privately, to ask at Chiang Mai*

University to speak with lecturers at the business faculty, which is providing homestay management. When the project became more effective, we got a high score from the homestay contest. Now, the university has supported the project officially.

This is the private sector specific between the university and me.
Villagers do agriculture as their main career and tourism as a secondary career. At Doi Pha Hom Ponk, right now, our homestays are already very successful because we take foreigners to learn about real life. Right now, Chiang Mai University helps with homestays, Mae Jo University will help with agriculture and we are talking to Fareast University about help with handicrafts. We are training local people in many things. Tourists who want to come must stay in the natural lodge, learn the way of life and live with the local people. When foreigners enter our areas we set the rules. If you come just to take photos, looking at them as products, we do not allow you to go. We teach the local people to do their own marketing, and the university helps us to think of new products and management.

The Permanent Secretary of the Tourism and Sports Ministry says:

But I have to admit that local people lack something. What do they lack? They lack academic knowledge, lack management skills, lack manpower. The central Government has to help them. We cannot build a house on their land; we cannot sweep the house for them. We have to tell them how to take care of their own homes. We must give them a standard. We should put academics in to train them

In terms of Innovation, Etzkowitz (2003) argues that innovation is increasingly based upon a Triple Helix of university-industry-Government interactions. The increased importance of knowledge and the role of the university in incubation of technology-based firms have given it a more prominent place in institutional arrangements. The entrepreneurial university takes a proactive stance in putting knowledge to use and in broadening the input into the creation of academic knowledge. Thus, it operates according to an interactive rather than a linear model of innovation. As firms raise their technological level, they move closer to an academic model, engaging in higher levels of training and in sharing of knowledge. Government acts as a public entrepreneur and venture capitalist in addition to its traditional regulatory role in setting the rules of the game. Moving beyond product development, innovation then becomes an endogenous process of "taking the role of the other", encouraging hybridization among the institutional spheres. The university can play industry's role, in assisting firm-formation and technology transfer, but not as a for-profit enterprise. (Etzkowitz, 2008:18)

This study expands the literature on technology transfer by investigating how universities can support industry in the Thai context; as data from the Deputy Director of the Research Centre-KU-CSC which would like to do more but is under-resourced confirms.

An enhanced university role in innovation also involves the creation of new business concepts. Some of them may derive from formal research, like biotechnology from recombinant DNA. However, like the Google search engine, they may also arise from informal interactions among colleagues that result in a new idea. It has taken a further step of creating organisational and educational innovations within the university and through collaboration with external groups, such as business angel networks, to put academic ideas with industrial potential into practice. (Etzkowitz, 2008:31)

I disagree with Etzkowitz (2008:31) who over-generalises his conclusions. In recent years universities have explored various ways to add value to early-stage university technologies by conducting marketing surveys, seeking development support, and embodying the technology in a firm. In terms of value-added, it does not necessarily only apply to advanced technology. Thai data shows value-adding stories such as selling Traditional North Rice Noodle. The owner of the restaurant added the story, and then sold at a higher price from 30 Baht (£0.60) to 120 Baht (£2.40). There are other cases such as Hill tribe homestay in the North.

In addition, Etzkowitz (2008:31) focuses on advanced technologies only when, in the Asian context, and perhaps historically in other countries, early university-industry clusters focus on low-tech businesses such as textiles, clothing, and leather goods, and only later on agglomerations of high-tech firms emerging from university laboratories and research centres at universities such as MIT and Stanford. These technology-based firm's strength and competitive edge derives from the engineering know-how of people who are integral to the firm, and upon the *subsequent transformation of this know-how into products or services for a market.* Such firms are often part of overarching virtual networks that transcend companies and infuse the individual firm with new sources of innovation.

I agree with Etzkowitz (2008:63) that in a triple helix economy, firms collaborate to develop standards and new products, often with academic partners and Government support. The empirical data confirms the literature in the case of the Indigo Cloths Cluster where, with help from Government bodies and the university, participants obtain benefits both directly and indirectly.

In terms of the role of the university towards the cluster, the Deputy Director of Research Centre, KU-CSC says:

> *KU can do act as a coordinator; bringing several organisations to join together and support each other. Then, in three to five years, we will phase out so that they can run by themselves. Then we will act as a consultant. (See appendix 4.13Question 16)*

In summary, the empirical data from the case of the Indigo Cloths Cluster illustrates that a triple helix can operate in Thailand, however it is likely to focus on intermediate technologies and is limited in its reach.

6.6   Theme Five: Emergent Themes:

From my findings, there is an emergent theme that I did not expect, and this factor has significantly impacted on the cluster. This theme is a strategic entrepreneurship, which plays a key role in making the cluster successful.

However, there are few studies on leadership and clusters. For example, a study by Elencov *et al* (2005) focused on the relationship of strategic leadership behaviours with executive innovation influence, and the moderating effects of a top management team's tenure, heterogeneity and social culture on that relationship in an international multi-cluster comparative study.

Surprisingly Porter does not discuss leadership and clusters. He has written briefly about the role of leadership in *On Competition* (2008) amounting to only one and a half pages out of 544. He states that:

> *In many companies, leadership has degenerated into orchestrating operational improvements and making deals. But the leader's role is broader and far more important. General management is more than the stewardship of individual*

functions. Its core is strategy: defining and communicating the company's unique position, making trade-offs, and forging fit among activities.

a. Strategic Entrepreneurship

Leadership has been neglected in discussion on regional clusters, while research on networks and clusters has barely studied leadership issues (Sydow 2011).

From my findings, leaders play an important role in the success of clusters or groups. Leaders such as the President of the Orchid Cluster, Vice President of the Chiang Mai Business Association, Mrs P, the chief of the Nadee indigo village; Punna district group, Mrs Y, chief of the Old Town Community are enthusiastic, are always open-minded and seek any opportunity to learn. They are willing to meet new people, have a passion about what they do and find any channel to improve their own competency. In their products and services, they try new ways and experiment to achieve their goals. They have vision and never give up. They are competitive advantage-seeking, analytical-thinking, and coordinators, willing to help individuals and groups, hardworking people who develope continuously. More importantly, leaders are trustworthy persons. All have similar characteristics and want to preserve their culture and way of life but they do not want to change the lives of local people. They want to defend local cultures, but engage in tourism as a second career. In addition, they would like to save environments: for example, Mrs P told her members to grow their own cotton and she would give them more money.

The President of the Orchid Cluster continually looks for networks, so he can move the cluster forward. He organizes activities and an annual meeting. The cluster has movement, and more people are joining. Having identified the insect problem he started to do research with Kasetsart University. Mr K, a researcher, joined the cluster at the beginning and they carried out experiments together. This is the competitive advantage of seeking to improve their products. It is the character of the president of the Orchid Cluster and his opportunity-seeking and advantage-seeking behaviour that has made him and the cluster successful. He is also seeks new markets, to develop products, and how to improve packaging. My findings support

the literature that states that strategic entrepreneurship involves simultaneous opportunity-seeking and advantage-seeking behaviour (Kuratko and Audretsch, 2009; Ireland, Hitt, and Sirmon, 2003).

In terms of leadership at national level, the empirical data shows that leadership plays a very important role not only in clusters but also as the key factor in pushing the organisation forward. As the Director of Marketing Research Division of the Tourism Authority of Thailand suggests:

> *It was the first time in my working life. The Prime Minister of Thailand called the head of the entire unit. Normally the chair is the Minister of Tourism. The PM asked what problems we had. What are the causes of your problems? How can we solve them? Who will solve them? The meeting took place at Chiang Mai. All the head people were present for a Power Point presentation. The Prime Minister was the Chairman. About Immigration Division, what problems are there? The PM knows know how to solve problems, and how many months it takes. At that time, the national problems were clear. It is my understanding that it was the first time to solve the problem likes this, seriously. H acted as though we are a private company. He followed-up just as we were part of his company. The budget department came and sat and calculated how much to allocate. The structure of the country must be organized this way to solve our problems; nobody is bigger than others. In terms of tourism, no organisation is not involved.*

In terms of vision, at the beginning when KAsia established this cluster the Vice President of Chiang Mai Tourism Business Association joined the cluster. When the budget was not allocated, the situation was quiet and then, when the private sector proposed its reinvigoration, the actors changed. But this time the leader was not transparent and participants had no confidence in him. Finally the cluster died.

In terms of implementation in relation to the social dimension, Thailand uses technology to lead and develop the country according to the national economic and social plan.

> *We think wealth will solve all problems and then the country will be successfully developed. Sometimes we ignore society. We write about it but do not develop society much. We use technology to develop the economy but ignore the social issues. The 10th national economic plan will end in the year 2012. From the year 2012; the leader of the country said that it is not only the economy that can help to solve the problems of the country; we must emphasise*

society as well. Our one example is that we provide training courses, but we only train. After training, what is next? The indicator is only the number of participants and how many times they attend, but we do not talk about outcomes, and we do not follow-up.

In summary, my findings show an absence of strategic leadership. At local level there are several organisations involved with tourism clusters but no core organisation to set the vision in relation to tourism. My findings indicate that strategic entrepreneurship plays the key role that makes a cluster successful, filling a gap in the literature not addressed by authors such as Porter.

The person who strategically leads the cluster should operate at the provincial level provided the Province gives clustering priority. If the Province gives importance, what areas will they support? How can the public sector help to support the development of service and make it quicker? Contexts and opportunities vary. However, if the Province does not offer strategic leadership then the cluster group must provide it itself.

6.7   Summary

When the Thaksin Government said they would support clusters, every Province was encouraged to established clusters. Then, when the Abhisit Government came into power the policy changed and people talked less about clusters. However, my findings from the empirical data in the private, public and the university sectors reveals that no matter which Government is in power tourism lacks overall strategic leadership. The multiplicity of organisations at a local level and their competing goals, make it difficult for local organisations to bind together around a shared agenda; a situation not helped by dramatic shifts in policies when Governments change.

I find that the Thai Government pays insufficient attention to the microeconomic and social dimensions of clustering, evidenced by the OSMEP's lack of commitment over time: clustering is a social process that takes time for trust-building and goal

negotiations; central Government seems to operate on a shorter timescale requiring unrealistic immediate results.

Moreover, the Government established 22 clusters in one year and then withdrew because the clusters had not arisen from the real needs of the private sector. People joined the clusters because money was available: when the projects ran out of the money, clusters declined. The alternative strategy is a long-term, bottom-up building of clusters, with the added advantage of helping to overcome recent social divisions in the country around a shared economic agenda, allowing the Government to add social equality as an important ingredient in the 11th National Plan.

However, Porter (2008:246-247) alternatively argues that in developing economies, a greater proportion of industries are locally based or are foreign subsidiaries serving the local market. Exporting industries tend to be resource or labour- intensive. Clusters in developing economies tend to be shallow and to rely primarily on foreign components, services, and technology. Firms in such locations must often vertically integrate, producing not only their own components but even back-up electricity as well. They must sometimes also build and operate not only physical infrastructure but their own schools and other services. The relatively competitive companies in developing economies tend to operate more like islands rather than as cluster participants.

I disagree with Porter (2008). If the Government would pay attention to the groups at local level, there are some groups that actually are micro clusters even though they are not described as clusters. As a senior official of NESDB states:

> *Rewrite-There are two keys of the cluster: one look in the physical that in the industry, usually it is supply chain. It requires people to supply things then it goes out of the car. Parts to be assembled into car, absolutely, they must have a production. It is sure. But the cluster did not look only that. It requires a horizontal linkages support supply chain is vertical linkage. Horizontal linkage has a relationship with others outside the group as well such as cooperation linkages means how to cooperate with the Government, association and educational institutions...Communication is limited, and linkages between existing firms and institutions a are not well.*

My findings present an alternative strategy to Porter's (2008) for developing country clustering. For example, the Maetheeta Indigo Group at Punna Village has strong vertical integration in the supply chain. Starting from upstream; they rely on their own raw materials. Since the leader encouraged members to grow cotton to save the environment, they grow their own indigo leaves, but if there is a shortage, they buy from other indigo groups. In terms of downstream, they have good relationship with customers. Even though their products are expensive they are all are unique and of good design and high quality, so customers are willing to pay. Horizontal integration is grounded in deep social relationships. The leader, Mrs P, has a good relationships with the public and private sector and universities because she is often invited to be a guest speaker or a trainer on indigo issues, especially the quality of indigo clothes.

My findings contradict Porter's hypothesis. The cluster at local level does not rely on foreign components. They can be strongly based upon local knowledge and help from local universities. When this happens, each village builds up from within. This is a sustainable core competency not reliant on FDI. Groups such as Maetheta indigo group, Tumtao indigo group, Tribal group, Old Town Community are models to which the Thai Government should pay attention. All of them have fought for several years and grown gradually. However, they need support from universities in many areas. From my research findings, the Indigo groups have local knowledge but need support from universities in many areas starting from upstream suppliers to downstream customers such as quality of indigo leaves, increasing productivity per acre, design, packaging, brand building, website, and how to access their target group. Findings showed that local public universities in terms of academic service could support all of these needs. In addition, my findings show that a rewrite-unit in university that turn to be autonomous unit which means has to survive by itself. This unit was busy as a consultant in large cities and striving to find funding from abroad to cover costs; ignoring the local level and social development. Even when they created innovative products these were not for local benefits.

I dispute Etzkowitz's (2008) argument that the interaction between university, industry, and Government is the key to innovation and growth in a knowledge-based economy. Etzkowitz (2008) emphasised that each *take the role of the other* in triple

helix interaction. The university takes the role of industry by stimulating the development of new firms from research, introducing *the capitalization of knowledge* as an academic goal: the triple helix draws attention to universities as a source of entrepreneurship and technology. However, his perspective concentrates on technologically-advanced innovations whereas my finding show that local universities supporting clusters such as the Orchid Cluster can also be successful. KU helped in terms of innovation by helping to produce new plant breeding. In addition, empirical evidence shows KU working with Tumtao indigo group, producing natural colour from lotus flowers which they are now in the process of patenting. These fill a gap in terms of academic service and innovation for social development that Etzkowitz overlooks.

I have therefore, identified a gap in the research literature that can be filled by local universities fulfilling their mission on academic service to help local communities in terms of innovation to create unique products and services for niché markets. This can also help to solve the problem of imitation between provinces in Thailand e.g. replicating successful vegetable eating festivals. Clustering in Thailand needs to operate within a clear strategic vision for the country's tourism sector, placing resources and energy at the disposal of local groups, who are allowed the time necessary to bond and create new tourist and official working closely with local universities.

6.8 Conclusion and final framework

To conclude, a summation of all themes and processes discussed in this research are presented in a final conceptual model (figure 6.1). The final model adds the emergent themes to the integration of the three strands of literature, which was presented in the initial theoretical model in chapter two.
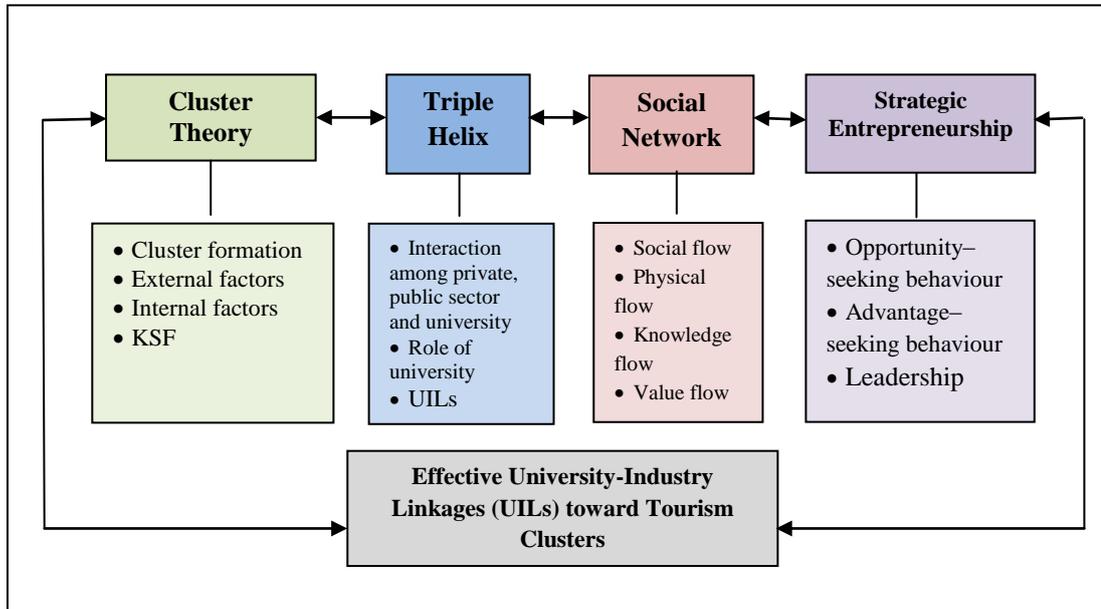
Figure 6.1 University Industry Linkages toward Tourism Cluster Model; Source: Author

The model has four components: Cluster Theory, Triple Helix Model, Social Network and Strategic Entrepreneurship. The cluster comprised of three entities: private and public sectors and universities. The framework starts from the formation of the cluster. Local government focuses on the potential of existing small groups. These local small business groups were born from the private sector and from its own real needs; in other words, from the bottom up.

In order to develop the cluster, the Triple Helix model was used in terms of interaction between these three entities. They work closely with each other. Local government bodies should take local small business seriously and make commitments to them because they are the grassroots of the country. The private sector thinks the public sector does not take it seriously. A big problem is that national and local government often changes, so the public sector often waits for the new government to give the signal. However, if there could be a written agreement between the three entities for economic and social development in the long run, and these plans could be in agreement with the national plan, the tourism development plan and the provincial plan, on-going projects would not be so easy to terminate. In addition, the government should motivate local government bodies to participate more. For

instance local government bodies such as Subdistrict Administrative Organisation (SAO) should participate more with universities and the private sector when they develop tourist attractions. According to the Triple Helix model, for example, I was told that in Nakhon Panom, hundreds of dinosaur footprints have been discovered on a local riverbed. The local government body subsequently built a WC and a cement parking lot on the site in order to encourage visitors. However, if the local university had been asked to cooperate with the government department, the tourism potential would have multiplied hugely. This is, after all an important historic site that requires academic input such as display boards showing how dinosaurs looked.

In terms of the role of the university, local public universities have a key role to play in rural development. Their missions should be balanced. Recently, because the government wants the public universities to be autonomous, universities have become self-reliant by creating more connections with the private sector. However, findings show that the universities have made connections with big companies that get support from abroad and so they have less time for local development. The government should reconsider its decision to make all public universities autonomous universities. Some are the core of the country's development. The findings showed that recently, lecturers have too big a teaching workload with the result that they do not have time for other missions. Consequently, they have fewer connections with local communities and the outside world. Policy makers at national level have stated that the local university should serve local communities, so universities should balance all their missions, putting an emphasis on local projects. In addition through control mechanisms such as appraisal of performance and quality assurance, universities should have incentive programs to encourage staff to do additional work such as research and academic service. These must be specified in local universities' missions. The government should have a policy of emphasizing the quality of graduates and motivate universities to balance all their missions.

Local public universities are dependent upon the government because of their budgets and because of legal regulations which state that they must carry out their missions as assigned and stated in terms of academic services and cooperation with the public and

private sectors. To utilize the intellectual capital of a university in all its missions, including academic service to support clusters, all these must be continuous processes, not just yearly projects. The framework can be used effectively if the government would adjust the way of evaluating performance by thinking in the long term.

In Thailand cluster formation was established by the government for use as a mechanism to increase the competitiveness of the nation. Findings revealed that most of these clusters declined because the government used the same pattern for every cluster; calling participants for a meeting, holding a workshop and then producing a report. When the government body left, and there was no more money, all the participants left. That was why the clusters' initiative established by the government failed.

CHAPTER SEVEN
CONCLUSION

The aim of this research, as stated in chapter one, was to enhance the understanding of the development of tourism in Thailand through integrating three strands of literature: cluster theory, the Triple Helix Model and Social Networks. This aim was to be achieved by answering the fundamental research questions – a) 'what are the influential factors affecting the Thai tourism clusters?' and b) 'How might University-Industry Linkages assist the success of such tourism clusters?' An important finding of this research is that strategic entrepreneurship theory was revealed in the behavior of all the case studies analyzed and discussed throughout the investigation. This chapter presents conclusions both of theoretical and empirical nature, recommendations, evaluation of the study and future research, all of which are derived from this study of the relationship between universities and industry featuring case studies of Thailand's tourism clusters.

7.1 Theoretical Contribution

This study used an integrated framework as the model for University-Industry Linkages (UILs) toward tourism clusters. The University- Industry Linkages provide support to enhance the competitiveness of Thai tourism clusters as illustrated in Figure 6.1 This research has a number of theoretical contributions, which I will discuss in details in the following sections

1. Although there is research about the impact of University-Industry Linkages in other sectors like automotive, textiles and cola industries, but there is limited research on the tourism cluster in Thailand. My research fills this gap by focussing on this important sector of Thai economy.

2. This research challenge the present understanding that to be innovative, developing economies must rely on foreign knowledge and FDIs. However, the findings indicate that innovation can be based on local knowledge with the help from local universities.

3. This research has highlighted lack of research on leadership and strategic entrepreneurship, particularly in the small business context.

4. Theoretical Contribution:

    The Research provides an enhanced (improved) theoretical framework by introducing a new component-Strategic Entrepreneurship that will increase/ improve our theoretical understanding of UIL impact on Cluster

First, my findings have addressed some gaps left by Porter (2008). As he mentioned, clusters in developing economies tend to be shallow and to rely primarily on foreign components, services, and technology to create innovation so that developing countries need FDI. Findings showed that the cluster at local level does not rely on foreign components. They can be strong by themselves drawing on their local knowledge and help from local universities. This happens in each village; building on its local knowledge and identity to meet a niche market. In addition, Porter (2008) stated that producing unique products comes from advanced technology through innovation. Advanced technology does not always build unique products. The findings showed that local people can use local knowledge that has been passed from generation to generation to produce unique products and services using natural resources from their villages. For instance, the study gave an example of Green Innovation of colour dye from lotus flowers used to dye material. This meets the global tourism trend in terms of environmental concern. This is the real core competency, and it does not rely on FDI but only on help from local universities.

So universities can help both vertical and horizontal integration with clusters that even policy makers at national level think is difficult because they think in macro terms but have no experience the at local level, especially in villages. Groups such as Maeteta Indigo Group, Tamtao Indigo Group, Tribal Group, and the Old Town Community should be paid attention by government and developed to be sustainable in the long run. All of them have fought for several years and grown gradually. However, they need support from universities in many areas. The Indigo groups need support from universities starting from upstream suppliers and going downstream customers in order to promote their local identity. Examples of this include supporting the quality of indigo leaves, increasing productivity per acre, design, packaging, brand building, website construction, establishing a learning centre. The

findings showed that all of these needs can be supported by local public universities in terms of academic service.

Both Lynch & Morrison (2007) argument together with Siriluk's table 2.1 is being elaborated to highlight the value of this table on p41.

I disagree with Lynch & Morrison (2007) agreed with Rosenfeld's argument (2001) Table 2.1 based on my empirical research findings as they emerge from my analysis so this is another theoretical contribution from your research. Findings show each area that the cluster located has its own identity like Sakon Nakhon Indigo Textile Cluster Case , they has local knowledge pas from generation to generations which is the specialized skills of natural dying and weaving skills. It is contrasted with views' of Lynch & Morrison and Rosenfeld on specialized feature that the cluster needed specialized services to a region and network allow firms to access specialized at the lower cost. In addition, the products are high quality hand made using local natural resource. The leader of Maeteeta Indigo group encourage members to grow their own cotton even she has to pay more than buying from factories but because she has a goal to produce 100 percent organic high quality products. So my research rejects these definition in terms of specialized and cooperation feature on Table 2.1 on p. 41

In addition, the cluster theory has not given adequate importance to SME leaders even though most of the businesses across the country are SMEs. The findings showed that strategic entrepreneurship played an important role as the key success factor (KSF) in clusters or groups. Strategic leadership is opportunity-seeking and advantage-seeking to create niche markets. They are enthusiastic, always keep an open mind and seek any way to learn new things. They look for opportunities, are willing to meet new people, have a passion about what they do, find any channel to improve their own competency and their products and services, as well as continue to find new ways to achieve their goals.

Regarding the barrier between UILs and tourism clusters, the findings showed that there are several barriers as follows

University

- Due to self–reliance, universities emphasise the recruitment of students in quantity with the result that lecturers have too big a workload with teaching, and do not have time to undertake other missions such as research and academic service.

- The university did not have sufficient budget to respond to local requests for particular subjects to be added to the curriculum requested by the tourism industry. For example, Phuket wanted to be the world marine hub and Rajabhut Phuket University wanted to open a marine curriculum but there was no budget to hire lecturers and invest in facilities such as a swimming pool for diving courses.

This illustrates how the stated objectives of the national plan, the local tourism plan and the universities' mission were not integrated with each other.

Private sector

- There are several private associations so it is difficult for them to cooperate and set out the same goals

- Entrepreneurs use only a price-cutting strategy

Public sector

- The government and top management of governmental bodies often changed

- The government body does not have a short and long term plan for tourism at national and local levels

- The national government invests only in mega projects such as an international airport. So they ignore the local level.

- Dysfunctional government structures and lack of commitment

- The Tourism Authority of Thailand has been given a reduced role to that of marketing.

- Most staff of the Tourism and Sport Ministry at provincial level are keen only on sport

In summary, my findings have filled gaps that Porter (2008) did not discuss since his focus was on clusters in developing economies that tend to rely on foreign contributions such as technology. These findings showed that the cluster at local level does not rely mainly on foreign components. They can be strong by themselves through their local knowledge, and with help from local universities and government support. Moreover, findings showed that successful clusters can occur at the local level, for example the Orchid Cluster, the Maeteta Indigo Group and the Tamtao Indigo Village Group. In terms of horizontal clustering, strategic entrepreneurs have developed their relationship well with universities. They have developed good relationships both within the cluster and with the private and public sectors. In terms of vertical clustering, they have worked closely and continuously with the university to develop from upstream suppliers to downstream customers by creating unique products and services and adding value or creating innovation.

7.2 Empirical Contribution

In terms of the empirical contribution, all four case studies showed evidence of greater understanding that key influential factors such as strategic leadership and help from universities have an effect on the Thai tourism clusters. This in turn contributed to improving the performance of tourism clusters. In addition, the results of this study make known the current dynamic of the relationships between the universities and the Thai tourism clusters.

This research uniquely developed a data-set from eighty personal, in-depth interviews from top management in the public and private sector and universities in different regions in Thailand. Accessing to these interviewees was extremely changing. Nobody did this before. This data-set can be used for further research.

Moreover, it is hoped that this study will assist in the strengthening linkages between the tourism industry and its universities. Importantly, the study will help to develop

economic growth through job creation and through enhancing skills and entrepreneurship activities at local level in a sustainable way.

7.3 Recommendations

There are recommendations for the public and the private sectors and universities.

7.3.1 Recommendations for the public sector

In terms of cluster formation, the national government was concerned only with quantity. For example, After Porter's visit to Thailand, the industrial Department allocated a budget to establish 22 clusters in one year. All of these clusters failed because they were instituted from the top-down and did not meet the real needs of the Thai people and entrepreneurs. The clusters previously studied by Porter were situated in Italian villages and had been growing for many years and, moreover, these clusters originated in the private sector.

In terms of strategy, national and local government bodies do not have a clear short and long term plans to develop tourism clusters in local areas, even though these are the grassroots of the country.

In terms of provincial cluster group policy, this is difficult to implement because the scope is too broad. For example, the Andaman Cluster covers five provinces. The government should select an existing group/cluster and develop such specific areas as spas. It is important that the groups they choose have a trustworthy leader.

In terms of the role of both the national and local government, the government body should support and not intervene; should give incentives and not restrict existing groups in local areas that have the potential for further development.

In terms of interaction between the three entities, the national and local government bodies should make a commitment and take their actions seriously. In addition, the government body should understand what the private sector needs and be prepared to

adjust themselves to fit into the rapidly changing circumstance that face it especially ASEAN Economic Community (AEC) in 2015.

In terms of strategic control, the government budget system should be adjusted to suit current circumstances. Importantly, the cluster is the process not the project. This means they take time to develop which means that budgeting should be adjusted to suit the particular circumstances of each cluster.

7.3.2 Recommendations for the private sector

The private sector does not recognise the potential of universities. They identify them only in terms of producing graduates whereas universities have a legal requirement to contribute to social development.

The private sector should cooperate with the public sector and universities to carry out both short and long term tourism development planning to match the needs of the tourism industry.

In terms of trust, tourism clusters can survive and grow if the members of the cluster trust in the leader. So transparency and a trustworthy leader are very important factors in making the cluster successful

In terms of strategy, entrepreneurs, especially in small businesses, must adjust themselves to the highly competitive world by changing the way they do business; they cannot use the price-cutting strategy anymore. They must realize that they have limited resources, so the way to survive is to join with others to share resources and produce unique products and services that are different from their competitors.

7.3.3 Recommendations for the university

Local universities are expected to serve tourism clusters as follows:

The first mission is to produce graduates

Tourism clusters expect universities to provide a suitable curriculum which will produce graduates qualified into meet their needs, produce graduates who are ready to work, produce graduates who can solve problems by themselves when they face

unexpected circumstances, and serve local market needs by launching curricula tailored to local circumstances.

The second mission is research

The university should ensure that lecturers' teaching workloads do not restrict research activities. Research should be encouraged that will help tourism clusters in many areas from upstream suppliers to downstream customers especially in creating innovation and making unique products and services.

The third mission is academic service

Tourism clusters expect universities to offer academic services in many areas such as training courses and consultancy such as law. The universities can help to create and support local clusters in terms of IT such as the indigo website, virtual tourism, finding unique customers, sharing information, online consultancy. In terms of marketing, the universities can help in marketing and especially the design and packaging of products. The universities should observe strict neutrality. Top management will undertake to give all necessary support to staff offering academic services to outside bodies. Staff should be evaluated on their contribution to community development and academic service when being considered for promotion.

7. 4 Evaluation of the Study

This section evaluates the theoretical and methodological contributions as follows:

7.4.1 Evaluation of Theoretical and Methodological Contributions

Theoretical contributions consist of new models, principles, concepts, or frameworks-for-thought, or important variations on those that already exist. These may be quantitative or qualitative in nature, but are always structured so as to be useful in the pursuit of future knowledge (Wobbrock, 2012).

In terms of analysis, the purpose of the analysis was to uncover the meaning of the question, to make explicit its presuppositions and thereby the implicit conceptions of

qualitative research it implies (Kvale and Brinkmann, 2009). In addition, Yin (2009) emphasizes that the analysis of case study evidence is one of the least developed and most difficult aspects of doing case studies. He also states that unlike statistical analysis, there are few fixed formulae to guide us; instead, much depends on an investigator's own style of rigorous empirical thinking along with the sufficient presentation of evidence and careful consideration of alternative interpretations. Thus, I selected developing a case description that is one of four analytic strategies presented by Yin (2009) for conducting case study analysis. As little is known about University-Industry Linkages between Thai tourism clusters and its universities, an exploratory study is appropriate at the preliminary stage of this study. Then the findings from the first stage will be used for the second stage. As Yin (2009) states a descriptive approach may help to identify the appropriate causal links to be analysed - even quantitatively.

The evaluation of the theoretical contributions in this thesis have enhanced understanding of tourism in Thailand through integrating three strands of literature for the first time in a comprehensive exploratory study**.**

The evaluation of the theoretical contributions of this thesis has enhanced understanding of tourism in Thailand through generating new concepts from emergent themes that were evident through the investigation and research process of this study, such as the leadership and strategic entrepreneurship strands.

I addition, this thesis contributes to integrating new theories together in new geographical areas.

This study demonstrated that it is possible for Thai tourism clusters to utilize the use of UILs together with the assistance of both private and public sectors.

In terms of methodological contributions, Wobbrock (2012:4) stated:

> *Methodological contributions are evaluated on the basis of the novelty and utility of the new or improved method. Demonstrating the utility of a method often requires empirical validation. Such a validation may be formal in nature*

(e.g., an experiment in which one of two groups uses the new method, while the other group uses an extant de facto method), or a case study (e.g., where the method is applied in a particular setting and outcomes are analysed and reported). The goal of validating a methodological contribution is to convince readers that the new method or method improvement is useful, valid, and reliable for its intended purpose. As the method is to be used by others, it must be described well enough to be employed by researchers or practitioners, including its pitfalls and shortcomings.

The gap addressed in the literature that so few empirical studies have examined, is the integration of Cluster Theory, Triple Helix Model, Social Networks, and Strategic Entrepreneurs.

The purpose of the empirical contribution in this thesis is to reveal insights and provide new data about UILs toward tourism clusters. Empirical methods used cases studies.

This study used a large number of interviews. Interviews were conducted face-to-face. Data was collected by in-depth interviews over a period of six months. I interviewed 80 participants in one pilot case study and four main case studies in three regions, together with the successful cluster in the central region. I interviewed three groups, most of them in top management in; 1) the public sector at national and local levels; 2) universities' participants; 3) the private sector. Each interview took between one and two hours and was tape-recorded. In addition to the eighty professionals listed above, I also interviewed 32 tourists at random.

Consequently, this study was a huge undertaking usually through questions that do not always capture the essence of rich qualitative work conducted in a previous survey.

7.4.2 Generalization in the Context of Other Developing Countries

The model generated in this thesis can be used in other developing country contexts; only if other developing countries through highlighting their own competencies, adopt the support of their local universities as has been the case in Thailand. They cannot compete with a big country such as China. They cannot compete in mass production by using low cost labour. This model could be replicated in other developing countries, provided all the factors are similar, and there is a high chance

that the clusters will survive and grow. This position concurs with Porter's studies where he states that clusters are usually takes time to be born and survive for many years to gain the real competitive advantage.

7.4.3 Limitations

There are some limitations in this study such as time and budget. Porter (2008) stated that the geographic scope of a cluster can range from a single city or state to a country, or even a network of neighbouring countries. In Thailand the government established clusters at the regional level such as the Phuket Tourism Cluster that became the Andaman Cluster. Consequently, the scope of that cluster covers five provinces making it difficult to find a boundary. Also, there are several, both public and private sector, participants involved. However, I used Cluster Mapping to select my sample frame and it pointed me to the participants in the Phuket Tourism Cluster. When I went there I found that there were additional participants, such as OSM Andaman, and that this government body took responsibility for the Andaman Cluster. As Stake (1995) stated, "The case is complex, and the time we have for examining its complexity is short." I had a limited time and budget so I chose to interview only those participants from Phuket. Additionally, three other clusters had similar complexities during data gathering and interviews as discussed in Chapter Three. Due to limited time and money, I was unable to cover every area. However, Cluster Theory and the Triple Helix Model, Social Network and Strategic Entrepreneur and Leadership models can be applied to other areas such as agriculture in any future research.

7.5 Future Research

This study investigates the nature and character of the tourism cluster and the linkages between tourism clusters and their universities, and is aimed at creating a model applicable to improving University-Industry Linkages in Thailand. Its purpose is to enhance the competitiveness of tourism clusters. This study has contributed to a better understanding of the interaction among the public and private sectors and the universities to benefit tourism clusters in Thailand. Successful tourism clusters are essentially dependent on many factors including several actors both in government

and non-government bodies. My findings show that strategic entrepreneurship is the essential key success factor. In light of such an important factor, further studies that investigate the role of local universities, local government, and strategic entrepreneurship with strategic leadership are advisable

Work in the area of the interaction of the public and private sectors with the universities has tended to be exploratory until now. I hope to apply this University-Industry Linkages (UILs) model to the tourism clusters in Sakon Nakhon Province. This will hopefully give a greater insight into the practicalities of cluster competitiveness.

Kasetsart University, Sakon Nakhon Campus can apply this study to develop the "Stars surround the Moon" Project which concerns rural development, local strategic leadership, local strategic entrepreneurship, Green Innovation and Green Innovative products development. Local universities can help to develop rural areas by helping develop local knowledge.

One possible future research project is to help the Indigo Cluster which to be a as a learning centre and a tourism attraction. Also the university can help to build the website as the centre of indigo information within and outside the cluster. This website demonstrates the way of life of local farmers in Sakon Nakhon Province.

Findings demonstrate that for the Maeteeta Indigo Village group, the Old Town Community and the Hill Tribal Homestay Groups, the leaders did not change the way that local people live their lives. Tourism is their second occupation and they both serve their environment and preserve their culture. For example, the Old Town Community still lives in Chino-Portuguese houses and has ordinary lives but when tourists come, the leader and the house owners will welcome them and explain the history of the house and their ancestors who came from the China. This case study should set an example to other areas so that they can develop their own community into a lifelong learning centre both for their own community and visitors.

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APPENDIX

Appendix 1-4: List of Interviews and Excerpt from Interviews

A.NATIONAL LEVEL

Appendix 1.1: Permanent Secretary of Tourism and Sport Ministry
Appendix 1.2: Marketing Director of Tourism Authority of Thailand (TAT)
Appendix 1 3: Senior Official, National Economic and Social   Development Board (NESDB))
Appendix 1.4: Former Director of Strategies Integration and formulation for National Economic and Social Development Board
Appendix 1.5: OSMEP
Appendix 1.6: Senior Official of Kenan Institute Asia (KIAsia)
Appendix 1.7: President of Orchid Cluster

B. LOCAL LEVEL

Chiang Mai
Appendix 2.1: Dean College of Arts, Media, and Technology, CMU
Appendix 2.2: Director of Knowledge and Innovation Center, College of Arts, Media, and Technology, CMU
Appendix 2.3: Chief of Tourism Department-CMU and the Tourism Professor
Appendix 2.4: Payap University
Appendix 2.5: Tourism lecturer at Rajamangala University of Technology Lanna
Appendix 2.6: Deputy Director of Tourism and Sports Office: Chiang Mai.
Appendix 2.7: Director of Tourism Authority of Thailand: Chiang Mai office
Appendix 2.8: President of Tourism Federation Association: North 17: Chiang Mai Office
Appendix 2.9: Vice-President of Tourism Business Association
Appendix 2.10: President of Hotel De Charm cluster and MD of Sukuntara
Appendix 2.11: GM of Bann Num Ping boutique hotel
Appendix 2.12: GM of Jatuporn Tour
Appendix 2.13: GM of Peak Adventure Tour
Appendix 2.14: GM of Crystal Restaurant
Appendix 2.15: CEO of Chida Spa

Phuket
Appendix 3.1 OSM Andaman
Appendix 3.2 Director of Phuket Provincial Office of Tourism and Sports
Appendix 3.3 Director of TAT, Phuket office
Appendix 3.4 Mayor
Prince Songkla University
Appendix 3.5 Dean of hospitality faculty
Appendix 3.6 Assistant Dean (administrative)

Some Excerpts from Interviews

1. Interviews with Permanent Secretary Ministry of Tourism and Sports

Q1: In your opinion, what do you think about the role of the university?

A: A university is not only for teaching but also for doing research so as to develop knowledge of how to teach. We should not teach from an instruction book but teach from the research that we have done. In addition, social services in no matter what dimension need a university because the university relies on society. The preservation of our art and culture is one of the core goals of our country. Moreover our university should be prime source of knowledge regarding both arts and culture. We rely on our universities to stand up for the social good. But I do not know what has gone wrong. They are lacking in social trust and faith. They have turned into an academic market. These days, universities pay less attention to society, very few actually do, right? In the past, even high school students, these are students. Right now, it is an academic market that sells degrees. It does not change anything. I was worried. Like developed countries, If he or she goes to the university that has all parts of body to develop social and develop the nation, he or she has a sense of elegance. Is it true, I don't know?

Q2: Do we focus on the wrong direction? We emphasise quantity because the universities have to be self-reliant. I have just come back from Chiang Mai. Right now, hotels are hiring Burmese because they can speak several languages. How do we prepare?

A: The production plan, manpower plan and development plan have not gone in the same direction. These plans do not go together. The manufacturers only produce.

Q3: How do we solve this?

A: Difficult because we left the institution in a direction that must be self-sufficient. The simplest way is to sell academic. Even students do not come to learn and are able to finish a degree. This is difficult. It must count a new one. It goes a long way until cannot drag back. That is why it is not reach the quality of education.

Q4: How to solve?

A: I think education reform at this time failed. People who get most are teachers and top management and les fortune are parents and children.

Q5: How to solve?

A: severely because people in education sector look at their own interests rather than the interests of the country and society. Quality of graduates, today, is not good. Graduates who worked here and out do not work even light or hard works. Graduates with a master's degree almost do nothing people who I use every day. Therefore, we need to focus on quality rather than quantity. Quantity is ok such as Ramkamhang University, which it maintains such a standard. Ramkamhang University. Open University especially law. It is the number one to be the judge. OK, we can increase the amount but do not decrease quality. It is different from the past; potential of the brain and other things are very good. No filtering and freely refined too much.

Q6: So do you think the university can support the tourism industry or not?

A: It is the core. The University is the organisation that produces graduates who will be the leader in tourism development. Tourism needs person who are competent at doing +research and source for university records. The university created the concept and is the primary source to give the direction of tradition and culture from local to national level. Thus, the university is vital in the production of people, production of knowledge, technology and a belief in academic to be occurred.

Q7: So how can we link between the university and tourism?

A: Means the university must be the real source of knowledge. Need to integrate education into the curriculum such as I want to know about birds, go to see birds in forest, or want to know about a farm, go to learn in a farm. It does not learn all subjects in the class. The hotel is in the school, the factory in school in order to pass. It is not the real core of tasks. Therefore, build a man eager to learn from and build educational curiosity from an education, education process. The school is the source of the learning process. The local curriculum, they will take great pride in their local area. They will love in his place. If we make a community to be source of learning, the government does not require much investment, and it will has good qualified people too.

Q8: How do you implement plan from NESDB to ministry and then to action plan?

A: The NESDB is as the path that they travel to Chiang Mai; direction, why go there what for? Set the direction that what to do in Chiang Mai. When we know the goal, we explore our capital. What we have? Do we have the resources to travel to Chiang

Mai? Human resource is the basic, materials while we are away, what we will do; preparing for materials, technologies. Prepare all everything altogether. The development plans will tell that it is going to build what it needs to do. Therefore, taking the national plan to implement means to objectives analysis, goal analysis and results are expected to get it clear. Provide a clear implementation plan, and prepare manpower. The plan is clear, it will work fast. But it must have resources: cars, human resource, petrol, equipment and materials to perform.

Q9: How to prepare?

A: To prepare especially group-related tourism. We have 32 courses. We have a strong competency base to make to good standard of ASEAN. Instead, we will fear they influx, if we prepare well, we may go outside. Thinking in terms of advantages, although many countries around our country speak English well but in competitiveness, many not compete with us. It depends on our competency. Our courses are prepared.

Q10: 32 courses from universities.

A: By the Ministry by co-competency as well as the international competency of the course.

Q11: In your opinion, how is the cooperation between universities and the Ministry?

A: At this stage, it is not as much as they should. Higher education institution has expertise in this regard. We have not yet cooperated as much as it should. Coordination is on-going because we have to admit that specializes in graduates producing program, curriculum management, the universities have expertise.

Q12: Factors that make tourism industry successful"?

A: Factors that make tourism industry successful depends on planning and integration as factors that will lead to success. Participation…

Q13: Quite difficult because like Phuket started from tourism cluster and then expended to 3 provinces and now to 5 provinces.

A: This is the problem. This is difficult. Planning, studies, analysis, foundation information based on well-researched analysis… In addition, the plan must be integrated plan because integration must have the practice of participatory because tourism is not the only one factor. It is not a single picture. In term of government,

there are several sectors and the private sector, there are several sectors. They must go together. This is one factor. The plan to integrate the whole…

Q14: How to do?

A: Not difficult at all. If people are thinking in the same direction and do the same, the same goal, it is not difficult.

Q15: Who should be the place to push this?

A: The Ministry. They need to go down to see to mediate; the villages must have the district's administration to take care. The district must have province to take are, the province must have Department to take care. Departments, the Ministry takes care all sectors and make the Department take care of the province. How to make the province to see the districts there are structures, regulations if we work systematically, being in good order occurs. If we do not have a system and regulation, being in good order will not happen. We can create their star Therefore, we have national tourism development plan because the plan is the core, and the integration plan is the plan of participation.

Q16: I attended the seminar of 5 provinces. The age of the governor who is the host is a hindrance.

A. If we have a clear plan. It is up to the administration. I was younger, but I am in highest positions. Look at the Prime Minister Abhisit, the President Obama, right? It depends on management, integration plan. Participation is the heart of every success story. Thailand; if each creates a star for its own, do different activities, cannot survive. In our life live with many people. The organisation cannot stay alone either. The failure of the project, it broke the nation. Projects must rely on justice. Don't build different star. Why build a road, to public traffic back and forth and to the occupation develop to tourism. It must be used together to make a living as a highway transportation. So that is why the Department of Highway built it but which road will be built first. I think the best system for tourism for everyone in the country. If attractions belong to local, it is the duty of the people their take responsibility using the budget there to take responsibility. It is not right to use the central budget. Attraction in the district is a district responsibility. Attractions in the province are the responsibility of the province. But the attraction between the provinces are responsible, the central will take responsibility. Phuket is an

international tourist attraction. Phuket alone cannot handle. The central government must take responsibility directly. The central government must help. Otherwise it goes bad. But I have to admit that local lack they have resources, what do they lack? Lack of academic, lack of management, lack of manpower, the central government has to help them. We cannot build a house on their land. We cannot sweep the house, for them. We have to tell him how to take care of your home. The good way is like this. They do not what to do. Giving a standard... Principle must be likes this. Put academic. Still cannot do, must train. Those are limitations of local

Means lack of academic, lack of manpower but not just put people who lack competency.

Practice in the real field is important factor because tourism is capability. Tourism is not a theory. Performance skills are therefore welcome skill, hospitality skill, they need to work in the field. So curriculum, of course must add capacity means that the university and the curriculum must have a practical part. And assessment to evaluate the performance of real work practice and must have the R and D as well.

Q17: Yes, we have. It is one of four missions of the university; to meet the locals.

A: We must think we want to develop country or local. The cluster division of the province for tourism, if the framework, it can fulfil. If not, have to add another mission to the university. There is not only a province but look at the entire cluster. The frame or area, or scope of work involved, it makes sense responsibility. It happens to all participants and resources we have. If we work full duty or If the university looks after the cluster, it must add a mission of the university. The cluster means the same culture; we must look at the root. It is the rule of law. It is the law. When think, must think as a system, as a law-oriented, legal system otherwise impossible because the budget is allocated by law. The manpower was given the responsibility by law. It's official fix. The government is a major fix. If a government manages by 360 degrees, it manages all dimension of management. The way to manage people on the earth to be happy is managing security and mentally happiness.

2. Interviews with the Director of Marketing Research Division of Tourism Authority of Thailand.

Q1: Could you please explain the whole picture first?

A: That is really an overview is that it does not separate. We are separated into two parts. One is that foreigners come to Thailand. The other is Thai travel Thailand. Now, if the real number of foreign tourists has not decreased. Even there are several things have occurred. We often say that politics are not stagnant. Most of it is that politics are not stagnant. But now I see. I need to tell you more deeply that TAT is 51 years after the first year is the year 1960. From 1960, and all over 50 years, some interesting things were found. Is that we look at foreign tourists, there were only 6-7 times that foreign tourists came to Thailand less. I mean that the number of foreigners visiting Thailand, fallen in the past 50 years only 6-7 times in the past. Then we will see that it was caused by external factors that made tourists decreased. The economic crisis around the world, the problem of fuel oil, oil price, or that problems in the Gulf War, or the bird flu problem. Everything is a problem of external factors. These external factors we cannot manage. Now that the issue of conflict within our own country, now in the last 3 years, it's quite clear that it turns out that it is the cause of the people, what they call for it, start out as a factor in the decision that I should have a trip to Thailand or not. This was an issue. But ultimately, this time it's looking like it was a fair while to find that the foreigners themselves. They understand; Bangkok is in chaotic means all of Thailand is chaotic too. In the past, it was chaotic, Phuket, but it does not matter so can come to Phuket. Samui is okay. To talk about Phuket because it is the International Airport to fly to Phuket. Now I do not see the country but it looks like the city such as New York, Paris. When asked about Paris, how fashionable it is. They do not ask about France. They do not look anything like this is what is so big. They look at small but it is undeniable that people are afraid. It turns out that this is a problem. But overall, we take a look at the numbers. It does not decrease but it may be increased but not much as the international market. But if I want to know other markets; Malaysia, Japan,

China, Korea, we can see the line of market with numbers. But ultimately, our main customers are top ten still in Asia, top five are Asia.

Situation would not be too bad. But that worry is the country's internal politics. In term of Thai travel in Thailand, Thai people will travel or not, it depends on the economy. It does not decrease. We do not have the numbers of the Thai people abroad. However, we assume a rough estimate; increase. The trip overseas both long and short trip; now people go to Ubon and then Laos, or go to Mukdahan then Laos and Vietnam, or go to Chiang Rai and then China. Nation State began being not clear. What it is called; tourism is unbound; travelling without frame and unboundary. It has started with the technology, a lot. Tourism unbound. Boundary is no longer. This is a common situation. The Thai travel in the country itself, it would mainly be a matter of economics. This would help format it. To answer that if the economy is not good, people will not travel. This is a common situation. Instantly, pull the low market to come. Good at marketing. But premium market won't involve with low market. Actually, it is very different. If like this, I go somewhere else.

Q2: I took a taxi once. The taxi driver said. Scandinavian tourists said if Russian comes, I won't come.

A: That is. The premium market, they have high loyalty. I do not why they worry. What are the concerns? The concern is about wanting a high number. Then again, one thing that is entrepreneurs must manually adjust them self. Like Chiang Mai that is over supply; the oversupply of rooms. It likes a competition so it started out as a mass. This would be a 300 or 500 room hotel; seeing the market suddenly arose. Like fly into the fire like a bug. I want to be big. Now, the problem started; cutting price. You charge 2,500; I charge 1,800 and other charge 1,500 or 1,200. Used to hire graduates with bachelor degree, now hire Myanmar who do not speak Thai. They started competing like this. Quality is reduced. Competition with the price; cutting price- killing each other… Lecturer, try to gradually look into it. People who really look at the real situation understand will catch the right market. The people who understand the tourists' behaviour of people who really understand that now what trend it is. They will 3 or 8 hotel rooms. These hotels are fully booked three years in advance. It's tiny but full for 3 years in advance.

Q3: Boutique Hotel is full.

A: Yes, it is, People won't stay at 5 stars. People who are very rich, I know that they have the money to spend but rich people boast to each other. For example staying at hotels like Imperial Hotel, imagine this. They would say sheets are the same colour. TV is the same size. However, for the boutique, they are not interested in star rating 5 stars or not. Don't have to give me a rating. I am just like this. Boutique design is completed different, eight rooms, eight sized beds, eight colours baskets, eight towels. Do not complain. You do not adapt. How can I help? I just told that right now what the kind of tourist visitors are. I always say to people where ever I go, I have acted as humble younger not act as a customer. I go to pay respect to them not to ask for money. You are worried a lot and then Oh! You invited Phuket, Samui to teach. I do not agree. Let's talk a little, that is, Chiang Mai; I gave a lecture to entrepreneurs. I do not know what. They gathered a small group no, quite large. I spoke directly and showed a number on the PowerPoint; the numbers of tourists in Chiang Mai the last five years, we projected that the number of tourists has not increased much, less than 1 per cent. Because the base is large, if it increased, it was not shaking, right? If a small increase to 100 per cent, if one person came, it was 100 per cent; excited. I said that it increased but a little bit. The base is large. And then I said OK to see the numbers, then I said a little bit is OK. The average stay is the same so just OK, but the average occupancy is good it sounds ...Suddenly; TAT told that the average stays the same. Last year, they stayed like this 1 or 2 days. It does not excite. The average cost per person when look at the number of previous years, a little more I said OK, and the they said how it can be okay. I told that you need to understand it has new players coming into your field. You must be playing old games. I told that you, if it is a ball, you have to play like Sedan. They would be to chop leg trick. You cannot stand to play it. You have to play with the brain. You need to understand that you are the old players, you must play smart. You pretend to chop leg against the throw race to Pai, Mae Hong Son, they are new as they are, it has always a new play coming but they do not have experience. We just need to know that where our position are. Why I have to stay at Chai Mai many nights? I will stay only 1 night and then go to Lamphun, Mae Hong Son. Then they will undercut each other and I was OK, and then what we want to make them pay? Eight hundred and get excellent while the eight hundred baht at Chiang Mai's hotels. For Mae Hong

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Son, it is two thousand four. Marketing, you have to look at your competitors. I do not know what it is now in the field that is coming; Pai, Mae Hong Son, and Nan. Ok, what you want to be? Calm down. Want to do mass. So sell mass market. Sell of Eco or culture. Know our customers. When it is time we look at friends like Phuket, We do not have to excite to see whatever fights are full. But we gradually see people walking down from the plane that who is coming. If they are not who we want it, if you do not want this, you tell that you do not want this type. Do not have t do marketing. Our position is clear. Don't want impolite just say so. We made the top market ran out. We must make it clear; Want to target mass so mass.

Q4: To know how to manage and then in your opinion, how will the future of the tourism be?

A: Thailand can go. But it's tiring. It's so competitive. People would fight to the death. Do you have tactic? Do you have a strategy to fight? Do you put the strategy clear? Oh! we say that Vietnam overtook . Yes, definitely, it overtook. Go to see how they planned. The government; when the time they looked at his plan to use. They told anyone making a commercial with them, they will divide his land or give, I don't know cheap or expensive, try to follow, to build, to make a living from it for ten years, suppose fifty, it will be the government. They have incentives. They do not do pure tourism so do as parallel. They know the game very well. Or even look gradually at Singapore Infrastructures, superstructure to the utmost degree to penetrate the MICE market; meeting, convention. When we look, we should look for.

Q5: a partner.

A: Partnership. To switch from competitors to partners. Like medical issues. For example, Singapore has medical technologies at a very high tech. It does not matter. If we shake hands with them, is that operation will be there but come for recovery time is interchangeable. Assuming the full five days for operating and another fifteen days for recovery. If we fight with technology, probably just tired but Singapore is clear when they invaded. Lecturer, try to see that really strange case occurs like the adjacent side legs, adjacent the head, Singapore arrives first. It means they are ready. When we look at crisis, I wrote articles about the crisis.

That was it. Whether it is the subject of the movie. What's the movie about the music. May be the subject of music. It is good to have it.

3. Interviews with the Senior Official of NESDB

Q1: Please tell me about tourism cluster.

A: Phuket tourism, I did with the team of Porter. And then did the study in the topic 'Thailand Competitiveness'. The approach, here was the NESDB with SASIN. At that time, I was with the team as well. At that time, we focused over all. Tourism was the 1 of 5 as well. However, the NESDB will do overall. SASIN team was divided into five groups; did in each subject. NESDB did all over Thailand Competitiveness. I and Mr Y were at the all over the picture. I have to write my own. It's quite a lot of it. 80 per cent is me. It is my own. After that, I did a lot about clusters.

Q2: Thank you so much.

A: When the cluster faces challenge its ability to compete. How they deal with it? How they manage? How they solve the problem is variety of forms call institution Modality (in her academic word) if technical side, mean there are several forms. It means the government leads. The second is the private join together; the third is the association leads, the private association leads. The core party who figures in solutions may be a government partnership with private. Public-private partnership has several types, other private investors. Who run? Private invest and the government. Many forms I try to understand what conditions this phenomenon occurred. Because the way the cluster makes a decision using role of private sector based. It has a lot of factors such as the private sector is not strong without a strong private sector in cluster. There is therefore no leadership. So finally under condition, this must let the government solve the problem. In some very strong association so the association will lead. Then the association help to deal with the government and help to deal with various people in solving problems. There are several condition factors in solving problems. There are several condition factors and their relationship and actors in the cluster: there are public, private sectors, educational institutions. Key actors: public, private, educational institutes, and associations. I would like to

know that these 4 actors if there is normal time and no problem occurs, how they interact to each other.

Q3: I would like to know the interaction between them. In the past, clusters were established and then why they were silent. How did the clusters happen in Thailand?

A: It must accept that clusters were occurred y the government who initiated at Thaksin era; brought clusters in. When the government said the government will support clusters so every province, every government agencies, Industry Promotion Department, every departments, every ministry, every province, and every governor established the clusters in every province. I hate this word a lot "clusters establishing.

Q4: It seems that each province has clusters.

A: Even the Federation of Thai Industries established ten years to establish more than 10 clusters. In term of Industry Board, they are divided into sub-industry; vehicle. Automotive parts, steel, something like this. They went to establish that and this cluster. The cluster is not the committee. The cluster cannot be established. It happens from the basic of the cluster which is the trust to share to work together. They work as a team. The cluster in Mr K's perspective, the cluster have to have location, must located in area, must concentrated in the same area because he has the perspective of Economic geographic; means look in area; must group together so that can lead to share resources; having efficiency, having economy of scale. It is the traditional economic science. Mr S went to the trip with me to Harvard to meet Professor Porter. There were five people who met with Porter. Today, even Porter also admitted that he wrote this theory since 1990 or 1989. In that time, globalisation did not had much impact. IT has not the width of this size. It did not have a network of this size. So here now, the cluster does not define how many kilometres away. It must be concentrated. How concentrated? One province or district to another? Or both. Or the whole country? He accepted, the cluster, now because it has globalisation, it has IT development, advanced IT so it is not necessary to be near each other. How they will work together? There are 2 keys of the cluster: one look in the physical that in the industry, usually it is supply chain, right? It requires people to supply things then it goes out of the car. Parts to be assembled into car, absolutely, they must have a production. But the cluster did not look only that. But that requires a horizontal linkages support supply chain is vertical linkages. Horizontal linkage has

a relationship with others outside the group as well such as cooperation linkages means how to co with the government. Or how to co with association? Or how to co with educational institutions? Co with communities? Cooperation like have shared direction that say want to develop this area about industry to be the main. The direction of development that I will go this direction, everyone come to support. The other factors: the association, government or education, are the supporter not the main but has the direction in supporting. So they must understand the same view. So I called cooperation linkages and product linkages. It has two parts. Some people Look only productions linkages. There are in the Eastern automotive industry, Here, Toyota opened. This looked far too much in area. Looking at the concentration. Of course, if it does not operate then how it can produce. Production linkages definitely grow. So I have a feeling that the people who understand the vehicle cluster or other cluster. They are only production. That is the issue of the interface linkages. However, it is beyond.

Q5: And then how you see the cooperation between governments?

A: The government was the person who pushed, and tried to set so all of people followed to establish. I just went to Cholburi, It has wooden furniture industries here. It can be the cluster. This is a major automotive technology. Top of the major auto parts company. The Industry Promotion Department want to promote SMEs and how they can be promoted to major. Since their role is to promote SME's and there are a lot of wooden SME's. They called for a meeting. We need to set the cluster. Come for the meeting. Register as a group. Of course, definitely, it did not work. However, it is fortunate for them that one group worked. But I will tell you why it worked, but these were events that occurred in many provinces across the country, said the province called, seemed more potential in their Economic perspective that this exported a lot. This generated a lot of revenue for the province; the main products of the province. So the province called companies to talk that we will establish the cluster. Do MOU or whatever. We say that we already join as a cluster. This group this cluster started asking for the budget request for the government to help. The Promotion Department provides funds to help each group to imagine that how much money, don't know, I have a project like this. Within one year to two years, three years, If pass the evaluation, they get help of the following year. This is another one.

The cluster is not a project. The cluster is the process. *It is wrong support.* . A look at this project when run out of money, they leave.

Q6: Yes, so when there is no money, they are quiet.

A: Yes, because they were set in. They did not work. Right now I do not call it the cluster. I don't count it the cluster at all. The key word of the cluster, I may send, actually I just present about the cluster to people in NESDB to listen. The keyword of the cluster is that the cluster cannot be established. It is not a committee. It is a process; it is not the project that has to develop a continuous process. Some clusters have developed for more than a hundred years such as the Italian cluster which they called industrial district. In the past they looked at an area of concentration. They think it is about subject of a community. It is more about based – Community. Industrial district. In my feeling is community-based cluster of the community in that area; every house in that area know all each other. To undertake something like an activity, like the hand-made leather village. This village makes shoes. And another is that each of the cluster, it is unique. It has its own unique. Assume that the can be developed along this, it does not necessary to copy others and follow them, and then it will work. Because everyone has the different problem. The composition of cluster, people involved are not the same. It's a different character. But we will just copy his solution. It's another way of implementing. This did not work. So each has its own cluster. This is the other one that when the government pushed by taking only one pattern, one method, mass and use with all. The cluster must come to work together and have a vision, vision, do strategies together; call for the meeting, conducting the meeting, organizing the seminar in a hotel, workshop, come out to hire consultants. Hotel de Charm, whatever, all of these pass this process. Call on everyone who involve. Lecturers said that help each other to think about strategies, problems analysis, do SWOT. It came out as one strategic book. From now on, everyone looks in this way. Setting the cluster agent. They called the Cluster Development Agent (CDA). But I did not say that CDA is not good. But I, again, told that CDA cannot suddenly set. Sometimes it happened by itself. It will shine on its own. In my opinion, I think CDA is important. But the way that the government set CDA is wrong by telling that this people talk most so seem this person would be the best. So take him or her to be a CDA. Train them to speak and them to be CDA.

4. Interview with the Former Director of Strategies Integration and formulation for National Economic and Social Development Board

Q1: Please tell me about strategies integration and formulation department?

A: The Strategies Integration and formulation Division was established from the government who wanted us to be the Detroit of Asia including Logistic issue. The cluster is the one of the strategies that we use Michael E. Porter's following model. I have wondered how clusters have affected.

Q2: Why?

The cluster is the one of strategies that we use- Michael E. Porter's model until now. From the beginning of clusters from my reading and interpretation, actually, a cluster starts by itself. The government, the policy makers help a little bit. I never saw a cluster that the government supported work, and so I would like you to go to talk with the NESDB senior official who is the cluster expert. She knows better because actually- does the cluster work or not? Even Michael- he has studied the cluster that already exists for more than ten years. I have never seen clusters that the government established work. Maybe the reason it does not work because 1) the theory mistakes. Flaw of theory; 2) it means implementing mistook. It means I can say certainly our implementation lack of continue. We did it superficiality. That is to say our public policy runs superficiality. For example in 1 year, we will run how many clusters. The cluster takes more than 10 years to generate. Once one ministry or NESDB, the way to measure how it success? How many can success? So it is the expectation on the untrue foundation on the real untrue process. I don't think the government can run and makes clusters work except the government put money more to stimulate except the cluster run by itself and we put the knowledge even so as Michael; he studied the cluster that already remain for more than 10 years. It can easily say the established cluster by the government I have never seen. Now look this way. The easy concept of cluster is the integration both vertical and horizontal. It is very difficult. Here is supply chain, is it right? I do logistic after I did competitiveness. We have pushed logistic issue for 7 years. 5 years in strategies. The things we want is supply chain

and competitiveness. The things we compete is the competition on the whole line; finish at retail start at production. Even this we cannot integrate.

Q3: Why can't we integrate?

A: It is about relationship management. Supply chain is about relationship. I do not think business persons have lessons or much wisdom to work this out. Our strategies are now to plan the target of supply chain integration but the way to look at the supply chain integration maybe is too far. In the pat we looked at logistic efficiency. For last 5-6 years. Logistic is not a cluster, logistic is a small part of a cluster. Even logistic was not born. Supply chains just the vertical. Ok the horizontal is happened. I've never seen the real one.

5. Interviews with the Senior Official of KIAsia

Q1: How did the clusters begin?

A: The clusters were begun about eight or nine years ago .For Kenan, we have funding from the USAID. I was in this program. It was called TCI (Thailand Competitiveness Initiative). The program promoted a variety of clusters and inspired knowledge about clusters. After giving knowledge, try to compare the TDA, and to talk to various groups that we might called GAP: Western Region of Nakon Phatom.that export the safety of vegetables to Tosco in the UK. Then they are grouped together to be the upstream and then link to KU-KPS for training on packaging? These are things that they do. And then the group of orchids, Ratchaburi orchid cluster, we were talking in several stages, in the past. We have done several clusters. Some are successful and some failed. As I look I was in this program. But we do not focus much on tourism. 1. Why? When this project launched, I did it about the last 4 years about clusters. Later, I focus on agricultural industries such as cattle fattening at Ponyangkham. Kamphaeng Saen. The project was paid from the funds of the Ministry of Commerce of the FTA in order to remedy this group of people. Thailand, Australia, New Zealand tax on imported beef so now, it as if when signed, those farmers who raise cattle fattening. Beef cattle suffer. Then the project had to

set up to treatment this group in order to fund this project. I help this project both at the first phase, and then the second phase. What did I do? There are two Cooperatives joined together for the first phase which are Ponyangkham and KPS beef. I trained CDA. And then I will do a variety of strategies. In order to convince consumers to have confidence that the beef is safe, we implement until to downstream to the consumer. We can check via the website through the SMS. Now in the second phase, it turns out that became larger scope by dividing into five main scopes. It operated for almost nine months; starting from recharge to find the channel to send out beef both chilled and frozen beef and cattle life. The second is giving the knowledge of the cluster. However, for the KPS and Ponyangkham will be extended to the upstream of it, this is a matter of the cluster. The third is the system of traceability. They implement all four cooperatives. However, KPS and Ponyangkham implement at the upstream of it while at Nong Sueng thought about at the downstream first. The fourth is training about the knowledge to cooperative both members and committee, about four-five things. The first is in the IT business skills. The second one is the brand building and professional services. The third one is about GIP; agricultural practice. There are five scopes; here is mainly that we do in this phase. We did for the main host. Nine months ago we went through it. We took the route of Hanoi for studying. Then we took them to open booth at the Thailand Trade Exhibition in Hanoi on last October. The four cooperatives grouped together to rent one booth. They called the booth Thai premium Beef. Then they went from the Hanoi to Hanming by car, seeing how the logistics is. Actually, going to Hainan is a good opportunity. But there is a problem which is our beef. Other countries try to discourage by accusing that we are not the country free from foot-mouth disease but actually, the cattle are killed everyday life. I just returned from Mukdahan last week. Earlier this year, exported 80,000; killed on the Thailand- Laos Bridge. Now we have a problem. Cattle hardly go out now because the appreciated baht. This is the problem to find out. This is an issue of appreciated Baht. Here, I would like to tell that because I have a chance to form the leather cluster. The leather cluster was the first cluster that I did about the year 2005 which receiving the budget from the Department of Industrial Promotion. The group will focus on the leather tannery in the settlement of the 30th km. and the groups who produce, the dialysis bags, shoes,

come to gather as a group. This is the first cluster project that I did. Also, I received the budget from the OSMEP through the Industry Council for training CDA for a group of leather as the main. This is the project in the second year, as the result, I met an expert; I work at the upstream from leather first. Then I did for OSMEP. Then went to see the group as an official; the group made beef and then extended to three years later. This is the thing I started, I did for 4 years. For my cluster unit, I highlighted the industry. The other duty, we do for the Ministry of Industry. We did for total 3 years. For the second year, I trained Industrial Provincial officials; seven people per province. All seventy-five provinces across the country, I have trained about forty provinces. Training takes about three-four days. What is in the process of doing, something is very similar to the NESDB to update. But it was as if we have the Diamond model that was like a check list. Let people to do the Survey. Then I evaluated it. It was not exactly as much of it. It will give more accurate information. The do a strategic plan; suppose it is your province, you are the industrial director. How will you develop the cluster? Then you present to me. I did forty provinces. This is in the second phase. The first phase took them to observe activities in Japan which I did not go or do. I just finished the third phase. I trained as the same but a staff of industrial promotion. They called the promotion head of each province This was done for each province and has just completed seventy five provinces last October; trained for three days. The first day, invited the Indian experts. I also went to be trained in India. Training at Fortune then invited two people per province; one hundred and fifty people came to listen. Training CDA about how to. These two days it was about conflict resolution, how it conflict violate with the cluster. In the afternoon, took them to the study trip to see the industrial cluster such as Ratchaburi cluster, leather cluster. The two-day trip is divided into four groups. The study trips were different in each version. In determining when you do it, you will see the clear picture. We take care of image and this is what we do.

Q2: What obstacles have you experienced?

A: they are two aspects; that is about the procedure of the industrial promotion department; they will allocate the layered budget, for example, the leather, the first year budget is not to exceed one million and nine hundred thousand Baht. For three years, the first year to form the cluster. When you can form okay, the second year,

the budget will be down to only about four hundred thousand Baht. For the third year, the budget decrease to just two hundred thousand Baht. Ii is not continuous. All have not known yet about the cluster, but it is finished and then gradually decreased. But we understand that they have a somewhat limited budget. This is the one thing that happened. It is that the budget is not continuous. I have a lot of burden for the last previous years. The project was short. If the budget was approved in September. And then the budget will be received in February and then almost project, money is not enough; nearly cannot do anything. Then it has TOR. Regardless of no matter how many cluster use the TOR, when finishing the first year, for clearing, they will do one of two, three, four, five and save the one lump sum for the shared purchase and sale of various activities and then finished. Something likes this. This is the view that the private sector look that the budget is not continued. However, how does the view of the government look? The public sector might think that. I already gave. How can I carry you all the time? This is the view of the public sector. So here, for the clusters, we can survey to look at it in Thailand. The real clear, there are a few and that it is really that I can I think is the Ratchaburi orchid and GPA Nakon Phathom. This is the thing that was seen. The Ratchaburi Orchid Cluster is successful because their main leaders push for business and make personal sacrifices. This cluster took up to eight years to develop and finally succeeded. The government put a little money and see the quick results. It is not possible. And then they will fight to each other. This is one of problems as I told. Secondly, when they receive the budget, they dispute, for example, I did the leather group. At first I received a expert to help me, we wanted it to be the knowledge sharing; Opening the leather S and M's house. At first, I opened the shoe factory; members took me there. The owner has the small shoe factory at Petchkasem; a few small rooms. How the people who open receive benefits? Their friend will tell the owner that the problems can be solved. .After that, the bag factory quickly opened and then I opened the next issue. However, the local contacts did not open. Our SME are narrow-minded people, for others, we want to see but when others want to see us, we do not allow them to see, skimp on it, and we think this is superb, it is really excellent. Actually, It is what it is really amazing, it's not. To share this, they help each other.

Q3: This is means that we share Information. We share resources.

A: This was I opened it in a cooperative in what I did. There is somewhere that is not fair, not fair is that I want to see all of other people out, but I do not really want other people to see mine. Actually, in the matter of the cluster, I told them not to open all. What the know-how is you kept it, it is ok. But what we called share and then cause benefits, please do it. The concept of the cluster, I went to study in India about four to five days that they held. There are all Indians in the class. There are few words that they say do not cooperate at the time of competing. That's it; the definition. Competition; I went to see the depth definition, white competition. This's just enough, I told them 'What you close if anyone comes to take it's not fair, right?' So you close, don't tell anybody. But as you work together here, this collaboration is beneficial to do, please do it. These were things that I experienced a lot. That can really be happened. It can really be used in Thailand. At the time I trained for the Provincial Industrial Department; the training in the second year. I invited the cluster to talk. I saw several clusters that people came to tell me so I invited speakers to come, for example, pork sausage cluster, if you think about sausage; around the base of the root Ya Mo, there is a lot of sausage shops. It did not work at the first time, everybody closed. Then there was one entrepreneur of them inspired. So they told that instead of buying yourself a little, not anymore so they grouped altogether and purchased orders in a cartridge. It means they grouped to buy when they grouped to buy so power was more. This is clear, and then the recipes are different. You just keep it. What to cooperate and cause benefits, do go together. Korat pork cluster is successful. The cluster has the five common unity; that are united in the mind. You have to come with your heart and with some sacrifice. Next, united to buy, united to buy, you don' have to pay, you buy and distribute later, United to buy, united to sell like the leather cluster. The project had a little budget. We rent a booth at Bang-Na for the Bangkok International Fashion and Furniture. The booth size is about a six-square-meter site. I had the budget about 100,000. So I said OK, this was free for anyone to come to do; here's money to decorate the booth. Then help each other to get orders in. This person was good at English; took and distributed to another one. If you did not do here and then paid some fee for the cluster. . Doing things together is just to sell it together Just now, united to purchase and sell and then co-production. Like the yellow T- shirt, it was OK that the big plant will give orders to small

factories. Producing a yellow T-shirt to keep up with time, this is cooperating, then to co-create an innovation. We cooperate we need to have this happen. According to the cluster, when it groups together if it does not have an innovation, it does not work. You have to have differentiation. I was trying to say here is that when they do like Ponyangkham here. We are trying to build like a traceability system. It is one kind of innovation to make participants in terms of ensuring more in the safety food. Five united, to be successful, do five united and you don't have no problems in cases of conflict.

Q4: How about if they sell the same products?

A: Yes. So they have to discuss to make it clear. Sometimes I find it difficult. That is to talk among three, four people. Actually, I'd really like to make it as a cooperative group, for example, when we go aboard, we should sell in a single brand. Then there is the person who is older, is the head to tell who will sell in which group. We let them compete. We did not say that we prevent to compete. You must compete if you do not compete, you are not strong. The concept is good. But something, you want to do, and want to perform together. Actually, to sell together, in the boots may be sold as a package. *The cluster that was succeeded is that the products in the group are different.* Otherwise, they compete to death in price.

Q5: So their products should be different?

A: They should be different. Otherwise it will not survive. The head can control.

Q6: The leader must be good.

A: The leader must be very good. The leader is a selfless dedication. This is the success of the cluster. And the core of it is, there is one word, I continuously described, Private Lead, Government Support. The government do not behave as they know all everything that what to do. The government should listen to the questions in variety of efficiency, what they want. Then the government allocates the budget to support. This is the private lead and the government just only support. We tried to establish perhaps it did not work. It was a break away.

Q7: In addition to the leader and private lead, what else those make the cluster successful? A: The University. Like the case of GPA cluster at Nakon Phatom. We trained how to do the organic farming; training farmers. In term of university,

lecturers also can obtain academic benefits and support private sector as well. . The Group's private sector support as well. Some parts went through the real grassroots. (Please explain more).The university is very important work. Private lead means use business to drive the cluster. You join together, you waste time to come to eat, it does not mean the shared table. For entrepreneur, time is very valuable. It must have benefits. Benefits are essential. This is the business lead. When businesses join together, it must have something better. United to buy, and then what we will we do. How to share? For example, the orchids cluster in Thailand, Mr Su, the owner, right now; he sent a bouquet of orchids, cut flowers in a box to America. When they open and found only one snail so all were totally burned; losing hundred thousand. He did not know what to do so he went to talk to a professor at KU-KPS. We talked and trained, he began OK. We organized to see the park and invited a professor from the university to give us knowledge. Professors also enjoyed because of research problems as well. Then someone comes in here were happy as well because they learned something new and had a chance to visit the local orchard. This was the roaming meeting and then we had a meeting before noon. Some were hungry, then about 1 or 2 we ate. We are Thai , actually, we have a big face, when our friends come, then we have a big Chinese feast. It is a burden to one another. Instead of using a little technique and then at Ratchaburi, they went hand in hand with teachers to teach student biology. When they graduate, they go to work about the orchid, the agricultural industry. This is important. The university must create the innovation and then solves the current problem of SME's. Then producing graduates and answer to problem. This is what things that want from the university. In term of financial institutions, it didn't quite work. The government will build, they called what, energy environmental, means create the atmosphere to make it become the clustering; atmosphere conducive to competition, this is what the government must do to make things easy; one stop service. In term of regulations, don't make it too much. Can do it without pay under the table? But it's hard because money under the table, then the behavior is really long. The government must create an innovation that is like this. The university creates an innovation. And then about people who are in the part of political sector, it is necessary. If they can come to join, it's special privilege. And then, when we develop in term of business or core business, we must look that which

blocks that is weak so in each block that is weak must go to help both in terms of variety of knowledge.

6. Interview with Director of Tourism Authority of Thailand: Chiang Mai office

Q1: Please tell me about TAT's policy?

A: We support PR Marketing. Sometimes people think we are experts in tourism. I don't know if it is true or not maybe because we are the organisation. You possibly know we take care of the whole area: Development, PR, and Marketing. But now we have the new Ministry of Tourism and Sports so they are separated and each takes part a section of the work to do.

Q2: So what about the current situation of Chiang Mai tourism?

A: The current situation, especially in Chiang Mai and the areas I take responsibility for Chiang Mai Lumpoon, Lumpang?

Q3: Yes.

A: The current situation is not as good as it ought to be. One or two years ago maybe the political problem.

Q4: Yes

A: Chiang Mai has become politicized. We accept that this has affected us in our PR work, news issues consume us. I do not want talk much about this. But ok. When it on the news. People do not want to come to Chiang Mai. They are afraid something will happen. But actually, there are not such huge problems as people think.

Q5; Yes

A: That's it. 70% of our tourists are Thai. When the current situation happened it was peak season and the airport was closed. The protest was held in April, and the other 30 % were foreign tourists. So it continued

But if compared with last year, it is not so bad.

Q6 How many percent decreased?

A: We cannot tell exactly, but approximately 5%-7 % I believe that at this level we can handle things.

The number comes from the Development Department. But we know the number of people who book hotels and we use this information to analyze and the private sector collaborate at some level. But if you ask about the true number, they are afraid of tax so they told us at first a low number but as I know by sampling such as try to book

the room for friends. So we see that for boutique hotels or hotels that do not have many rooms, the rate of booking is nearly full for the coming new year.

Q7: 80%？

A: I think more than that. But the mass hotels that have 200-300 rooms still need to fill up. Right now, I estimate about 70% but because Thai people book in advance only one week ahead , I think the rate will go up to a satisfactory level. I cannot be sure, but we believe if it does decrease it should not be by more than 5%. At this level, it is ok.

Q8: As regards the problems that you mentioned, we have both the political and PR problems. How can we solve these problems?

A: For the political problem, there is no solution to solution.

Q9: Because it is a national problem?

A: Yes. But we give the number and PR. Even the politic problem, We are giving information. The tourists can travel without problems. Now we are doing

Q10: How about other problems?

A: Chiang Mai is the second biggest tourism city. We were awarded from travel magazine. Chiang Mai is the second most living place in the world. In the past Phuket came to learn from us but now we learn from Phuket. The rate of growth is lower than Phuket's because of many problems; the first one I believe concerns tourism products. Our type of tourism is different from Phuket which is for nature and for relaxation. The length of stay with us is shorter than in Phuket. So people stay 2-3 days but they stay 7-10 days at Phuket. This is the problem. So we have to think about how to expand the length of stay, this is of utmost importance. The rate is different; Phuket is sun, sea, and sand, but we are culture. The rate is different - 70:30 Thai: Foreign tourists, but for Phuket 70:30 Foreign: Thai tourists. So I think it is a Product problem. As regards the location problem, the position is that we are located up north and we think we are the gateway to Indochina. We are, therefore, in the group of Laos, South of China, and Burma. For Phuket, they get the sea and they get Singapore. Then there are the Europeans who want to avoid the winter time to bask in the sun. The first one is the Product problem. Next is the problem of entrepreneurs aggregation means private sector. Because we are a big city, so everybody has a big ego. It is a big city, it is tough for this Aggregation seems to

look good but, I think its structure is fragile. So if we want to accomplish something we must rely on the public sector to provide the budget and ask for cooperation. Chiang Mai the organisation that comes to help the province does not mention. The province means the governor has the budget, besides, Province Administration Office has budget too. They take care of their own areas. Chiang Mai is a big area. From the top of the north district to the bottom of the south district: 400 Kms and takes five hours to drive. This area is so big that power must be decentralized (distribute) among 20 districts. Phuket has only 3 districts: Thalang, Muang. So cannot compare. So why the public sector means government) help. 400kms 5 hrs drive and have minor tribes so budget distribute to other parts cannot only for tourism so the private sector think why the public sector (government) does not help. Ask why PAO does not help but PAO must think about helping make a living. That is why I understand. Chiang Mai is different from Phuket. That is clear. In Phuket, the revenue is from tourism. So decision making and other things are fast and immediate. For us, we are like a giant, hard to move. In the private sector, each person has self-confidence. So marketing is slow as we are so large.

Q11: How to create coordination?

A: Means we do as we can. TAT is the central organisation and it is our duty to link. If we know they cannot handle something, we try to help. We help as we can. We put in people, and energy to help and support. I am like the glue that makes things work successfully.

Q12: In your opinion, can the university support the tourism industry?

A: Now the university and we coordinate all the time. As educational institutes, they are sources of knowledge. They have academic know-how. We use both public and private universities. Sometimes universities are willing to coordinate with us but sometimes it is outside their remit and they do not have sufficient budget. If they have the budget they will come.

Q13: So, if they get a budget from the government through the province will they come?

A: Yes. No matter whatever it is about cluster or the province, every task has a representative from the university to attend committees such as engineering, tourism, research, and marketing.

Q14: Do the academics come as requested by the entrepreneurs?

A: It is in the form of committees. If we want this, the head must be the governor.

Q15: The form is formal and order top-down?

A: Yes, yes. Ask for coordinating.

Q16: I would like to ask about clusters; here there are two clusters; one is an edutainment cluster which does not exist anymore; however the other one still exists and is called Hotel de Charm.

A: Yes. Hotel de Charm is the boutique hotel. They group together for joint promotion and marketing but at the same time they are competitors.

Q17: There are two clusters. How about the other one? I show him the report from NESDB about the clusters. These cluster happened after the financial crisis. The edutainment cluster does not exist anymore.

A: Disappeared. As I said the private sector always makes it look good at first. I came to this quite recently so they were already established before I came. As regards to associations, there are many. As I told you, there are many associations such as Chiang Mai Tourism Business Association, The Association of Northern Tourism Federation Chiang Mai, Guide Association, and Hotel Association. Besides, there is the Jungle Tour Association. Each has its own character. But for Hotel de Charm, it is ok. They are associated because they would like to reduce costs of promotion. It works better, for example N17 means north in 17 provinces. So these Tourism Associations join together. Their objectives are the same. Their members may belong to the same group. Their activities are the same. The only difference is who is strong. But all, I think, cannot be as strong as Phuket.

Q18: Yes. I attended the seminar.

A: Yes. Their unity is not as strong as Phuket's. As we said, in the past they come to see us, but now we go to see Phuket. The province admitted this. So is the name they created. The name is very beautiful: Edutainment.

Q20: So the problem lies in the entrepreneur aggregation?

A: Everybody has intention, but there are other factors. I think they have good intentions but there are several factors.

7. Interviews with Vice President of Tourism Business Association

Q39: How about the association, how many members does the association have?

A: 200 plus.

Q40: In the past, did the association get support from the public sector?

A: At some level, there was some budget support from PAO. But when compared with the help from local Budget at Phuket and at Pattaya Samui, we got a very small amount. We got approximately a million. But the next year Chiang Mai announced on tourism, Chiang Mai should get much more but every year, we get this rate. If I don't have these products, I will stop, lecturer. In my work, the tasks are separated very clearly. Volunteer foreigners were hired for some tasks such as adventure knowledge and management because I have very little knowledge of how to manage professionally. I hired them only for some tasks because I don't have money to hire for all the necessary tasks. For eoouhrbs, we take from some tribes. Before going for a tour, I request the customers to sign some documents of about 7-8 pages; this requires meetings, brief which is not the behavior of the northern people at all. We must manage systematically. The northern people hardly work systematically. Mine is the only company which requests that customers must sign a document before going on the tour. It is not the case that if you have money and you can go: you must pass this system first: you must listen for the information from the guide first. If you act outside the rules, you must take responsibility of yourself. You cannot complain to us later.

Q41: But it is the right thing because foreigners want to have a certain standard.

A: At first, they were frightened that this system would not happen in Chiang Mai but together with their familiar with system very much, it was easier so they were ok.

Q42: You managed very well. How about other entrepreneurs in the association? What problems did they face?

A: It depends on the satisfaction of each person. For the insurance, some companies do, some don't. Some have accessories, some don't. Such as parachute for rafting, some don't have.

Q43: So how does the association take responsibility because it reflects on the reputation of the association as a whole?

A: The association sets the standard but, because of freedom, there are no laws to support us. We discussed. But if you act outside the set of international rules, we might somewhat block you. You don't miss, if you miss, we can attack you according to the condition.

Q44: You mean that you supervise but only don't go outside the rules. We don't have the laws to support. And then what is the agreement that joint?

A: There are the agreement MOU with entrepreneurs but it rarely works, for instance, on price cutting. It inspects receipts. But these receipts can be falsified. They wrote 3000 but collected money for guests a thousand.

Q45: How about communication within the association?

A: We use both the Internet and telephone.

Q46: How often do you have a meeting?

A: Once per 3-4 months

Q47: what are the most common problems that the association experienced?

A: People don't understand knowledge so they set the question 'why they don't have customers?' The association does not look for them the province does not look for them mean they are get used to waiting then they get. Even TAT had a hit (attack) question that lack of tourists because TAT did not help enough. Come to help me this task a bit. This is a new thing that I do in my organisation. I understand that nobody has done this before. This is the place that I develop my specific tourism at Doi Ang Khang. I went to the field and work more on specific task. This group is a nature lodge and volunteer at product at Doi Ang Khang. We went to the fieldwork, and then we let students come to help. This, we are tourism that we separated ourselves to be specific. Everybody will receive the question that how to do, how to develop, develop our own product and develop local people as well. I used to be successful in forest tourism at Mae Smeng, Mae Tang, Doi Chiang Dao. Currently, I went to develop at Pang, Mae Eye, Pok Cave. There are 22 villages; we took tourism bicycles there. There are many stories that the tribes didn't get revenue, no tourism enter etc. They want us to take the urban people to visit them and we want them as well.

Q48: Did the universities support you?

A: Personally, at first I went to ask at Chiang Mai University with lecturers at the business faculty which is providing homestay management. I went privately. But when it is more effective, more responses then get high score from the home stay contest. Right now, the university is the organisation.

Q49: At first you went informal and now, formal.

A: Rating is very high from the Thai homestay contest. From the homestay standard part, we get the highest score, even our brand cannot compete with Mae Slong. But from the field inspection of the central academic committee, our score is high. When our score is high instantly, the university is coming as the formal large group.

Q50: At that time, who did you contact?

A: Mrs. T. I helped to do research with the lecturer in issue on the winter fruits or went to help about Hemp which is the queen project that will take it to make clothes apparel. I myself know the areas very well so the lecturer asked me to help. As the result, when I asked the lecturer, she could not refuse me. Sometimes I supported the fare, the lecturer help me to develop the homestay. Right now, about the agriculture, I went to sign MOU with the university that is good at agriculture. Let us develop together so my works is different from others. When we went to do fieldwork, we shared, help each other suggest, help to comment, summarize together.

Q51: How about the support from the province?

A: The province agreed. This is the private sector specific between me and the university. But I told the province to know and they said it is good but they didn't allocate the budget to support by some means. For all of my works, it went well at some level so I prepare myself to be ready. The group that help me right now, the works was separated to be several parts; one group went to help the community tourism at Sun Pang Tong; the other group starts working at Sun Sai Mae Jo District, they will do the farmer university; went to bay lands and then make in agriculture, then take tourists to enter and involve. The revenue from agriculture might not well enough. But we made in agriculture but we will make an earning from tourism. But tourism is not the main behavior only secondary. But we should get money from tourism; doing homestay, making cottages, hovels at the end of village. Let them do agriculture and we take foreigners to learn; like Farmer University. If we do for

tourism, there is experiment garden. This is fake. But this we will make it real. At Doi Pha Hom Ponk, right now, our homestay are already very successful. There is agriculture that we went to do agro tourism. We will have the learning center. When foreigners enter to the field, they must pay for learning; let them see and learn everything, we will take local people who will learn with us, and then they will be the person who continues to work in agriculture, in the way of life, in hand craft. Right now, Chiang Mai University help in homestay, the help in agriculture will from Mae Jo (University), and hand craft is going to talk with Fareast (University)

Q52: So the universities have helped you?

A: Yes. Both Chiang Mai (University) and Mae Jo (University) are willing to take people to help and go to do fieldwork and may also try to find funding. We are training local people in many things. Tourists who want to come must stay in the natural lodge, learn the way of life, and stay with nature. I expect that the person who experiences local life there when they return to normal daily life, will have learned from the experience and will apply it in stopping a climate change by not accelerating the deployment of natural resources too much. We set the question our lodge should be really natural lodge; no electricity, no chemical. To clean clothes, we use local fruits or shampoo or soap, we will find local materials for customers, it means we don't use chemical things; pillow and bed maybe use tea; use more natural light. No electricity.

Q53: Are the universities involved in helping to think of new products and management?

A: This one, foreigners must learn, we build the areas that foreigners learn, charge for learning. These days, when foreigners enter to our areas, we set the rule that you must go to our field, you must pay for the accommodation, and you must hire the local people to teach you. For instance, teach you how to collect tea. But if you come to just take their photos; looking at them as products, like that we won't allow you to go up. With the local people, we teach them to do their own marketing.

Q54: We must establish an understanding with the community as well.

A: We must establish the rule like this. That is you must not rely totally on us. You must find your own customers. Whoever goes up (the mountain) must do under the rules, I must also stay under the rules as well.. Must use the local car to go up there,

it is the adventure way. The way is rough to enter. Local car must be managed; must have a queue. They have management such as for the fare which is 2000 baht for going up. That is 1000 baht for the owner; 50 baht for people who do soldering; 30 baht for the village's project. Similar to homestay, assume you collect 150 baht; it will go to the person who manages 20 baht, 30 baht goes to the village's funding; you get 100 baht. Whoever comes and goes must be under this rule. It is the agreement that we established, then having the committee to supervise unless having the tour company go to see the product or the person who takes entrepreneurs to see, we are flexible because it is the promotion in PR, marketing. But if they are tourists, we use this rule because if we collect from the person who wants to monitor activities, then they are not in mood already. If they don't go, we don't have a chance to sell because it is about marketing.

Q55: So tourists are a part of the community; spending their life as a part of the village by using the frame that tourists must learn and be involve.

A: There are 2 groups go up; if they want to just take photos, we don't allow them to go up. This behavior we cannot control in other areas because it happened long times a go. But in this area we are just beginning so we can set the new rule before tourists are allowed to go up.

Q56: Trends have changed. The new generation is willing to pay for living in a village and helping the community.

A: This trend is the need of consumers. Tour operators must adapt. Like me in the past, I only did trekking. Ten years ago, I had the chance to be accustomed to villagers, so I added that resource. This is the new venture that I will continue to develop. I am keen on cooking, so I went to see the local materials: I saw how to apply this to what to cook for foreigners. The way to cook in some local areas, sometimes it maybe not favor for foreign customers to eat because of the taste, for some local dishes, they don't use fire. So we must go to the field in local area to see what else we have; and what else we can use. We try to do this. What does it work? We give to local villagers ideas such as tea spicy salad, top tea tempura. The things that we have in the local area, we need to do research, and talk more. We must go to the field more often to collect data. Whatever we get, we give to the villagers. Right now, the government supports them to plant tea which make them have a good

income at some level, but the current environment such as competition, exploit labor, harassment, and not static price. These days, it rarely good, we will change to move tourism to mountain areas.

Q57: Europeans like to have tea a lot. The current trend is changing to a mix between tea and herbs.

A: We have a goal to make tea responsible to melting fat, and help to reduce pressure.

Q58: Actually, there are a lot of herbs in our home. It should go well.

A: We have naturally accommodated but we do not have knowledge of herbs. They are effective. Like me, do trekking for a long time, we will see the result of the good health; people who eat well, they will trek, their body will be healthy. But there is a group that has problems, that is Americans who have big upper bodies but their ankles are small. When they walk and leave a little slip, their bones break. But people who eat food like Chinese or Asian or Europeans don't have problems like Americans. These days, we have problems with Americans who trek more than with other nations. Suppose they walk on the big stone, then slip, that is a problem.

Q59: How can we manage and prepare?

A: We have a meeting at adventure center, lecturer. We have to prepare in case accidents happen.

Q60: What are the important factors you think will make the cluster successful?

A: I am not sure what factors that will make the cluster successful. But I think if each person sees the importance of the cluster, and then works together as the cluster seriously and intentionally. I think the cluster will be born, and then it will raise the level of better management or service. If we turn back to the cluster seriously, does not the cluster loosen Not in a perfunctory manner

Q61: Means you must do it seriously and cooperate seriously as well?

A: Also the university come to locate problems, not self-problems, then make it finish but locate the problems, that is how it will happen.

Q62: So do the clusters should help to solve problems in the long run?

A: Certainly. Before the cluster, we just like this. Like Vietnam Singapore, The south (of Thailand) or Malaysia, when they expanded tourism, their teams said the similar thing. If we do not stick together as a group, and each person goes in a different

direction, we will be in difficult position. In the past, it was different. If we open a market; if we announce we have one product; if have 3 hotels; it will show that our city hasn't the potential and preparedness. If in the very old dimension, we may see this is good because we don't have many competitors but at present, it is not like that. They must be seen in a different way. Once they look carefully, they will see that your city has only 3 tour companies. This means your city does not have a high standard. It is the same with our golf, we have 3 courses; the score on golf was low. Today we have more than 10 courses, our ratings have gone up. This shows that people have more preparedness, their vision has changed. We might think having a small number is good, we don't have much competition, but this if we have many will show that our city has preparedness.

Q63: We must have many and everybody must give importance, and then work together, and cooperation.

A: For tourists opening a brochure about Chiang Mai when they see one rental car and 5 hotels. What do they think? But when they open it and see 15 golf courses, 50 hotels, tour operators, hundreds of entrepreneurs. People will say Whoa (Wow)! This city is very well prepared.

Q64: This mean that there must be a variety to choose from?

A: It means that if they want to come, they want preparedness. Then, if in the future, more foreign entrepreneurs come; the Thai entrepreneurs should have to join and work together more.

Q65: The more foreigners, the more we join together.

A: The cluster is more necessary. If we don't have the cluster, then how can we compete with them?

Q66: So you see the cluster, as a mechanism to increase the group's potential for tourism?

A: Yes. They are the cluster of knowledge, marketing, and management.

Q67: My model is about a knowledge–based unit that will support the cluster. What do you think?

A: Good. They must have base of knowledge, must have creative, marketing, and management.

Q68: Who will be the head who will push this to happen?

A: We, who are the entrepreneurs, will push for it to happen, but the head should come from the academic section. The association should take the role of inspiring at the beginning, but the head should be the educational institute.

Q69: One thing that still confuses me is about the name of the cluster. Do they have a formal name? Because according to the documents of KIAsia, they use the name 'Educational Tour, then, from the mapping project report, they used the name' Edutainment. So what name do they use 'Ecotourism' or 'Educational Tourism', or 'Edutainment'?

A: In the past we used the name Chiang Mai Charm. It depends on where we focus. But for the big picture in the past, we use the big problem in overall picture that our home to be agenda. So we used Chiang Mai Charm but the deep mission, then we separated into adventure, eco etc. We separated into sectors. KAsia, where did they do it?

Q70: KIAsia established 152 clusters all around the country. There were 2 clusters in Chiang Mai; one is Hotel de Charm, the other one is Edutainment. If the vision or the name is not clear, it makes people confused.

A: Hotel de Charm is separated from the agenda.

Q71: Did they make a formal announcement, clearly written by the participants?

A: Yes, they did. You should ask for the document from KIAsia. There were two persons who worked with KIAsia: one was Johnnie and the other was me who coordinated with KIAsia all the time.

Q72: I saw the name of Confederation of Tourism Northern 17 provinces.

A: This is the variable. At the end the Confederation Association associated, and then it became the network.

Q73: So, when the Confederation Association associated, it turned into be the network.

A: The reason is we became established and then told the province that we wanted the cluster was that we wanted to join to engraft. At that time, about 2-3 years before they set the budget to be approved, the Confederation Association joined with the province. In the meantime, we had some mission (can't remember what mission) so we didn't attend the meeting. Therefore, they appointed the Confederation

Association to join with the university which is not the same group. Where it was before, Chiang Mai University (CMU) will be the unit that takes control of academic matters and they will rotate to be the province consultant. And then the new governor came, and then wrote strategies with this group. The governor was rotated; this group was rotated as well. The Chiang Mai strategy was changed often. It was new beginning frequently. The group of lecturers circulated to be the consultant. The new group came and put the self into.

Q74: How can we make the plan successful if the plan lack of continuing? So if we have the vision of Chiang Mai which we have already discussed and studied, our vision will be like this so we do only this point clearly.

A: Who is going to be the head because the governor changes. Who else can obstruct. Some year, we do the strategy 2 times. Sometimes we wasted a lot of time to do strategy. We wasted time on this process many time, and then must analyze. Finally, must take to criticize, take NGO join to comment strategy. Strategy, it is not easy to acquire.

Q75: Yes. That is why I see that after brainstorming session over the entire province, the governor can then change the agreements.

A: It happens like this every time. And Chiang Mai is the area that will change frequently because it is the path of politicians; because Chiang Mai is the major city – a city that welcomes visitors. The government changes often, as odes the governor.

Q76: This is the problem at the national level.

A: For example, in Pattaya, they do things the right way. They have a specific local law on zoning so that it is a special administrative region. Pattaya city, it is not up with the big rule. They separated the zone so that this zone is foreigners, that zone is tourists. They manage their zoning. But for us, we have only one rule. Foreigners cannot have night life after midnight or 1 am. We didn't do zoning and we didn't specify that we are a tourism city. A tourism city should have some more rights. Suppose we rule that we don't sell alcohol. Tourists when they come want to relax want to enjoy themselves. As we see in Pattaya, Patpong, and Phuket, tourists come for eating and drinking. Some people on the way to Pattaya, Phuket, something may be ethical but it is in a special administrative region so we compromise. If want to answer the tourism question, sometimes it must build the rule like this but we use

one rule. I do not know. I spoke like this. Some people may think that people who work in tourism area talk only for their own advantage. When they talked like this; we lodge in the throat. I can't argue anymore. But if you ask 'Do we want the money from foreigners?' Money will be circulated in our society. I understand that there are 2 kinds of money; in term of new money that suppose enter about 10,000 million; this is the full value 10,000 million. But the money that circulates from the left pocket to the right pocket has a value of less than 10,000 million. It is the same circulating. It circulates to the system of tax that is ok. I don't know. I didn't study economics. I give an example, if we gamble, we gather to gamble about 10 people; everybody has 100,000. Today I win everyone loses, I get nearly 100,000. I cover all my expenses and have some left over. Tomorrow, I play, and others win. When you obtain money from tourism or export, it is new money that enters. It is not much but it is new money to add to the kingdom.

At this time, DIW will have a meeting on 17, I receive the tasks that will propose to the province about depth marketing that the result of doing marketing or not doing, how the different, and why we have to do it?

It must be clear because there will be different results before and after we do it. But it has one disadvantage. That is that we don't have academics to collect the effectiveness of the clear number. I don't know what happened. Like we did Chiang Mai Forum, this year is the 6th year, for the 7th year, we invited foreign entrepreneurs come to visit, come to trade. If you ask whether it is effective or not, the entrepreneurs were happy: I say that we have new partners. But if asked for numbers, nobody collected the data. We used to organize big events at an international level. People came from all around the world; such as Bier came last year up to 700-800. We sent information to the universities that to take students come to see but nobody came. That is things that we did, we want people to engraft so we want them to study to inspect activities first. Come to study and learn but there was Naresuen (University0 that we paid so they came. Nearly hold in arm to come. I don't understand why the universities are hardly interested. The came very little.

Q77: Actually, lecturers should bring their students. They should come to see benefits and see what the current situation is and gain knowledge

A: When we organized our events in the past, we organized only about trade. But this time we were organized into 3 sectors; seminar, trade, and road show. This is the work of the association that thinks in the new way that has never happened before to separate to be 3 sectors. In the past, we invited to trade only, it was less efficient but right now we have developed by changing to do different variety styles.

Q78: So in your opinion, the universities should still have a small role to play in the tourism industry in Chiang Mai?

A: Personally, I have received cooperation from universities. But in the whole picture, entrepreneurs have received little cooperation from universities

Q79: Do you think the universities have the potential to support the local tourism industry?

A: Today, they have at some level that it should have although it is not on top form. If want to be top form, I use to set the question ask PAO to take the budget to support lecturers who work in tourism areas to go to make a study trip abroad, then, analyze together. In the past, in era of PM Thaksin boomed, he tries to develop Chiang Mai to be tourism city; he invited these people to make a study trip but we turned to put modernity into us. We didn't study. We went to see Hong Kong, We went to see Singapore, we forgot to look at ourselves. We must look at thing that like us; examine, and then use that to develop ourselves - new things such as Night Safari, World Flora, try to make an easy comparison. There is a mango tree in Australia, aged 100 years old. There was a lot of promotion to see this mango tree. But in our home, there are a lot of hundreds-years old trees. We have a lot of stories. How can Singapore stories compete with us? They don't have any. But we bring what we weak to compete with them. We are going to follow. Actually, we must use our competency; we have a lot. Ask that Holy want our country? Singapore wants our country? If ask now, can swop, they are willing to swop. They pay more for us thousand million, hundred thousand million, they will pay (means they really want) if they can swop.

Q80: Because they have human capital so they can do but if we swop, we will be worse.

A: We didn't do our homework on things that we are good at. Like Vegas, and other cities that developed their tourism by preserving their churches. They didn't destroy

the buildings that are very old. They said you must improve inside but outside you must not change. Inside you can do anything to make things more comfortable, but outside don't dismantle anything. We should go to see like that not us to go to see Hong Kong. Like this, how many tens years that we follow them? For example, at Dubai, if they didn't make mistakes with their finances, I think it would have worked very well that they built the new city.

Dubai tried to be a tourism city, but it doesn't have the story, nothing. So they built a new city. But we have our own. We don't compete with Dubai, we must make it outstanding. The stories that we have are of tremendous value. Why do we have to build a new city to compete with them? If the could buy, they would definitely buy our country.

Q81: How about the current situation whereby the government and the province give support by allocating a budget to this network and then the university participates; turning from a cluster into a network? Right now, what activities does it have?

A: Right now, everything is stopped. But there is one thick book launched. I received it about 6-7 years ago. The reason why that it finished was because there is no option to continue that how it will be, and then nobody will be the core person so it became silent. The turning point is we did cluster but we didn't continue, we didn't run. When we didn't have the core person to continue it became distorted because we knew about the cluster before. We know the objectives before.

Q82: But you want to have the cluster; would like the cluster to recover?

A: Certainly. Because that is the one question that makes us can stand (mean survive)

Q83: So you think the tourism cluster should be one thing that will help to solve the problem of sustainable tourism?

A: Yes. Look at this. I got the form of work starting at Dubai. They wrote the project, they designed, actually, Thais did it. They did it at Gad Suen Kaew; using 50-60 people to do before they went to build over there. They rent the big room to stay together. Thai people were in the team but the head is not Thai. But the persons who did the basic are all Thai. It took 2 years in project planning, all designs, and then they took this frame to propose all around the world asking where do you want to invest?

One thing that Dubai has is desert area, and then road show to sell the project. Do you want to invest in hotels? Do you want to invest in hospitals? Do you want to invest in restaurants? Who want to invest in what? Dubai only developed its infrastructure. Other projects came from all that engrafted. This, I took the idea. I went to see it's structure that how they did it, how to engraft. I knew one guy inside.

Q84: I think we are not inferior to other nations, but how can we join together and make it happen?

A: The persons who thought are Thai; most of materials are from Thailand. But we didn't joint together to do something for our country.

Q85: We must look at ourselves a lot, must build understanding together, and then, in your opinion, how will we cooperate - because it seems we each do different things?

A: The nature of Thai people may be that they are not good at teamwork. Look at sports in single sports, we do well; badminton, weightlifting. But if football, it is rarely good. I am familiar with Singapore; they have homework that the question must answer as the team. It is more remarkable, we are Thai but we are less patriotic than the Singapore are. There are 3 different races living in Singapore, but they can stimulate all 3 races to love their country. They behave differently from us. They teach their kids and teenagers that if they have free time, they should search for learning centers. So kids with computers will search out information to find where there seminars are taking place. We push them but they don't want to go. Singaporean kids also were accustomed that when they attend a seminar they would sit in front, listen, and participate in the seminar. For us, our kids will sit at the back in the seminar, leaving seats at the front to punish the people who come late. We must use the potential of the universities more than this.

Q86: So you think the universities or educational institutes ought to cultivate children from a young age so as to change the way that they learn.

A: Right now, whatever city opens tourism, we always append it. Look at Vietnam, it open duo long after us but its tourism is booming. It overtakes us by far. Just look at its web and our web to see the difference. Our web still puts the emotion beautiful so much technique, but for Vietnam is just like Europe, plain easy, simple but convenient. For us, we forgot that the host is in Thailand, our customers are abroad. When they open our web, it is opened very slowly so they went to open others. For

other, they don't emphasise the beauty. For us, we addict to the beauty. Take our emotion be important. Make it beautiful until it is too heavy. We forget the convenience that tourist's expect. We don't think of what the consumers need. To open the Thai web one has to wait for a half an hour.

Q87: My work is about the potential of the universities in supporting tourism. Do you have some more advice about the cluster and how to make cooperation happen?

A: I want your research be made available to the public sectors so that they can see its value. It should go into details and point up the issues to make it effective. It should point out how it benefits the economy. Don't let it remain as an academic work but let it be recognized by the people in power.

Q88: Why don't we have the link from theory to real practical?

A: Actually, we deceive ourselves. We understand that research is good, but do only we have, it is not for public use. Let them know as well. That type of research you want and I want as well. We want both sides. If only you know about this research but we don't know, how can it happen in a practical way? But if we participate from the beginning when it is effective, so we can share its use. We must have an action plan, not only a master plan, but mostly we plan a lot but plan and then go quiet.

Q89: My idea is just like yours, because of the things that we do to help local entrepreneurs, then homestay. After the harvest, farmers will have more revenue. They may weave clothes, they may do their farms or do other work but we will bring tourists. Actually, I believe in something like your project because I think each area has its own unique selling point.

A: I have a problem, which concerns the persons who cooperate but don't understand our concept, or maybe they think our work is too complicated. We must do fieldwork; go through hardship, stay with villagers, take their knowledge and put it onto paper, then translate it into English to ensure results. So many procedures more than the society does. Doing this is extremely important because if thesis no goal, it will go nowhere. Then only one side of academic, it is not enough, it must have entrepreneurs to develop as well to make it happen in a practical way. We decide on the question that we want answered and we have this condition: Do the entrepreneurs agree? Some entrepreneurs may see 10, we can't hope for 100. If in this concept and then this 10 people push it to happen. Then a little more, this way, it will be a

product that is stronger such as at Pai, Mae Hong Sorn. Over there, it started like this. The public sectors didn't come to support to make it happen. It happened from the group of local entrepreneurs. Right now, Pai is very strong because Pai is the one area that people must go to. As regards the trekking, the government doesn't promote it but our trekking is ranked number one of one thousand of 1000 that people must come to see. And the well-known trekking must be only Chiang Mai.

8. Interviews with the Deputy Director of Tourism and Sports Office: Chiang Mai. Time 15.00 PM Interviewed 1 hour

Q1: How long have you been working in this city?

A: For 2 years, and I would like to find a way of going back.

Q2: Don't you like Chiang Mai?

A: My home town is over there. And then here, there is a lot work. I don't have time to go back home for weekends or even overnight. The director goes out for meeting all the time. A lot of meeting... Suddenly for ministry once for the province so there are a lot of meeting... At Nakon Phanom, it was we did not have to work all the time. But here there are meetings nearly every day. Once private sector the, public sector. Especially this is about tourism.

Q3: How about the current situation in Chiang Mai?

A: I think it is better. From the information I have received from hotel bookings. A written report has not been sent to me yet, but I found this only from talking to them.

Q4: Oh, it is that informal?

A: It is better since the New Year. For New Year, they are fully booked .It is different from last year. Last year there were problems. Elephant showing,guide, the foreign tourists; all the areas that use activities for foreign tourists faced problems.. The elephant showing center came to protest in front of the bureaucratic center, there was no foreign tourists. No activities over there. They have only a few Thai tourists. The customers of the elephant showing center and adventure are foreign tourists. So when these tourists stop coming, they faced problems instantly, so they appealed to me. It became a national problem.

Q5: It is the external environment that we cannot control?

A: Yes

Q6: So you think this external environment factor has impacted on us dramatically?

A: Yes, very much. I think that foreign tourists come for adventure, jungle experience, trekking, and rafting.

Q7: So these are the activities that foreign tourists come to Chiang Mai for?

A: Most come for these. For all these activities, I see these as our main revenue. For example, the Elephant village at Me Tang, during the low season, almost 300 foreign tourists went there. Only for this one area. We are not talking about other place where they have the same activities. I was told by the Subdistrict Administration Chairman (SAC) that almost 300 foreign tourists come during the low season and 500 people during the high season. So the impact caused the foreign tourists to disappear.

Q8: You mean an external factor is the economy of foreign tourists?

A: No. I mean the politics in our own country. As for economy of foreign tourists, I don't think they have problems. It was the protests especially at Chiang Mai that affected us at that time.

Q9: So now the situation is better?

A: Yes, the situation is better. Now tourists are coming. Hotels continue to be fully booked. From the end of last year until now, the hotels are fully booked. According to the information I received from the hotel and people who do activities, the situation is better. I don't know how much better.

Q10: How about the role of the department?

A: Actually, we are rep. of the Ministry. We implement policies. We also responsibility for provincial tasks in tourism areas in Chiang Mai and the group(meaning Lumpoon and Lumpang as well.). We take part in the planning of provincial development of the whole group, instigating projects and managing the budget for many projects. We take responsibility of the tourism of the province. This means that for every tourism project that belongs to us we need to integrate with many other organisations such as the Nature Resources department. There are also some in the Commercial Affairs Department because the products of tourism are of wide variety.

Q11: So several industries are involved? (Prob)

A: Yes. It depends. If it is relevant to the Commercial Affairs, they depend on Ministry of Commercial Affairs. If they are about health, they depend on Health Care Department. For us, most of the activities take place all the year around which we coordinate with Chiang Mai Chamber of Commerce (CMCC) or Chiang Mai Tourism Business Association (CMTBA). There are new activities such as sports that we would like to promote to attract people to come for the low season. There is a loophole at the low season. How to attract people to come here?

Q12: So who you coordinate with?

A: TAT, PAO, CMTBA and CMCC

Q13: Sounds many organisations (sounds good but seems difficult to implement so I ask) but when the time comes for action how do you integrate?

A: As a first step, we start on planning. The rep. from Chiang Mai University also takes part. It depends on whose organisation is the proposer. Each organisation proposes its own projects.

Q14: Do you have this meeting every month or is it a yearly meeting??

A: It is a yearly meeting. But it is not only one time. Right now we are working on next year's plan. We have joint meetings since mostly there are huge projects. This activity belongs to one organisation, that project belongs to another organisation. All will help each other. Then all have many activities.

Q15: So they are one project but have many subprojects?

A: Yes.

Q16: So it depends on who are the secretaries?

A: Yes.

Q17: Who is the host?

A: I am. Mostly I cooperate with CMCC, CMTBA. Some big projects may depend on the Commercial Affairs Department. We integrate because it continue like Commercial Affairs, their products relate to tourism so tourism products, they will take it and work within their group. And about the tourism village, this we develop with the Community Development Department (CD). Q18: How about the budget?

A: In the case of tourism activities, the budget will be allocated to us. It may be driven by CMTBA or CMC.

Q19: But the budget is yours?

A: Yes. But it is driven by the private sector. When they implement they ask for money from us, but we monitor their implement action. We must take care to make sure they will follow the government regulations - what one can do, and what one cannot do.

Q20: How about the university? In your opinion, do you think the university can support the tourism industry?

A: You mean your university?

Q21: No. My research is about the local university in that particular area.

A: Well. Here there are 7 universities; all are participating in village for example, we have each university take responsibility for its own area. They will help villagers about knowledge. It depends on what we agree together. We ask universities to come, here and ask , then which areas they will help.

Q22: Do you establish them as the committee?

A: Yes. We do.

Q23: Do you set out the agreement in writing?

A: Ur... Yes we do.

Q24: Because there are projects do you have to have a committee on how to use the budget?

 A: Yes we do. Such as which university will take care of what area. For example, not long ago, there was the Standard of Tourism project which belongs to the province. I cannot 5-6 standards which each university for one standard. So they will take responsibility for the whole process of training with courses such as tourism community or homestay or restaurant entrepreneurs so about the standard of restaurant.

Q25: Are there any problems because they are many groups?

A: Yes, especially about the budget. The way to propose for budget, they do not understand each other. Previously organisations use their own ways to ask for a budget, but here they must do it my way. My formula, which has to follow government regulations, can cause problems. For the private sector, the problem occurs because we have so many procedures. But sometimes they produce just one receipt. If we continue this way we die. We must monitor everything from the

beginning. Even with the universities we have the same process and still have some problems. For example, lecturers who are academics and do not know about budget regulation, so obstacles occur.

9. GM of Bann Num Ping Boutique Hotel

Q1: How did you start this business?

A: OK. We wanted to do something like this and we looked first in the South and then we came to the North. We decided to come to the North because I like the North more than the South and the people are different. In the South, you have the beach but in the North, there are many things to see. We looked for properties to rent for so we think we can do this business. But in the meantime half a year, it's very difficult. Our circumstance, we have a nice place but people don't know about it. It is important thing right now is that we go for the advertising in magazines and so on so that people will know about us. The second thing is that in CM, there is too much accommodation.

Q2: You think there is an oversupply?

A: Yes, absolutely, absolutely. According to the list, there are more than 300 and many guest-houses they are not even not registered. I hear thee may be around 600, so I think there are not enough tourists is not enough for these places. So the bigger ones with 40 or 50 rooms are finding it very tough. You know, to fill. If you have 10 or 15 rooms, you have a chance. Take time until the tourists come.

Q3; So you analyzed the situation before you chose the number of rooms?

A: I didn't have any real knowledge about this at that time, but one thing was clear to me: I wanted to be in control myself. I wanted the place to be like a homestay for our customers just like they live in their own homes. With 50 rooms you cannot do this need more staff and do not even have a chance to talk to customers because there is too much going on. With 13 rooms it is much easier to do everything ourselves.

Q4: So you can take care of your customers more easily?

A: Sure. Sure. Sometimes I pick them up at the airport, send them to some places so we can talk during driving, during lunch or dinner which gives them a good feeling.

And we try and really put support into our service. This is the most important factor, and it should be not only for us but for everyone.

Q5: So the key Success Factor, you think, is the service?

A: Yes.

Q6: Beside service, what are the other key success factors?

A: The location. But you know you have different kind of customers. Some want to stay in the city, because it is easy to get around. Then the backpacker: they want everything to be cheap and only need a place to sleep. And you have the package holidays as in our place. Sometimes people stay in the city for 3 days and then come here for 3 days

Q7: Really?

A: Because they don't like the city.

Q8: So your target group is those people who come to relax?

A: Yes, absolutely. Here the groups of people are different. Sometimes, they don't go out for the dinner. They eat here because they like this atmosphere. You know they enjoy it.

Q9: It is a very nice and very beautiful place.

A: This week, we have visitors from Oman, they like here very much.

Q10: Most of your customers are Middle Eastern?

A: No. Not altogether.

Q11: A mix?

A: Yes. Since we took over in the period from September until January 95% are Thais

Q12: 95% are Thais?

A: Yes. It is until 15 of January, and after that it is 89% foreigners. It changed completely. I think there are 2 reasons; first of all, Thai people don't have as much holiday as European and outside countries. Christmas is not important, but New Year is important, so they keep their money and spend all during this time. Europeans and outside countries are different because, if they come to Thailand, they stay longer because they have to fly here so must arrange everything in advance. I have not advertised outside this country before, but now I am advertising outside the country. Now we have 2 lines of booking until December. You know something like this. It

hasn't happened before. This is a big change for us because Thai culture and outside countries are totally different. Ha! Because Thai customers call 4 o'clock in the morning from nearby and ask 'Do you have rooms?' This is the Thai style. They do not plan in advance. Europeans and outside countries have to book in advance. I don't talk about backpackers but the normal people, family, they booking in advance. Everything's done before they start. This is the big difference.

Q13: Thai culture and western culture are different.

A: totally different.

Q14: So now you're fully booked?

A: No. This place is not well known. 2 things; the Thai culture, one neighbor does not known what is happening on the opposite side of the fence. You know. They take care of themselves. I know this because I have stayed a long time in Thailand. If the opposite side start moving the garden and I want to know what's going on, but Thai people, when you ask say they don't know. I don't know. I don't know why, maybe it is the culture. No, it's in the nature.

Q15: So you think advertising is important to this business?

A: The best advertising is word-of-mouth. But they have to come in first If they come to stay in Chiang Mai they will come to stay here again because it is a very nice place and everybody is very happy. They talk to other people. This takes time. One speaks and 1000 listen.

Q16: So you think word-of-mouth is the best?

A: Yes. Also we have had a homepage for last year. Mrs. L has a homepage which is very nice but it can't be used for selling because it does not focus on the important point. As for the Thai, they look for nice pictures of the rooms. But for foreigners, it is very important that they see inside the room itself, and the bath room,. They get the feeling they're buying. Europeans want to see what they Will get for their money. I travelled a lot for many years. Always important, when I booked the hotel, I asked to see everything available for a particular price. Some hotels are very new and sometimes they don't understand. Then the mix pictures; photos of bath rooms and everything are mix up. You do not see what you will get for the price you are paying. This isn't good. This must be changed. If I go somewhere at night in the city, I don't care, there is no need for a homepage. You get what you pay for. It is very important.

If people come here and want to pay 200 baht (about 4 pounds) they cannot expect a place like this. It is very clear. When I tell the price they say it's expensive. You get what you pay for. If I want to pay 200 baht, I will get a room and water. That's it. If I want a booking for 200 baht, I don't expect a shower and bath.

Q17: How many rooms do you have?

A: 13 rooms

Q18: How about situation right now?

A: Very quiet. It is too quiet, in my opinion. The flooding in the South; people are not in the mood. Next week is Songkran (Thai New Year) even the Thai are not asking in advance. Nobody phones, no email, nothing. I do not believe this.

Q19: It's very quiet.

A: Too quiet. The questions you know. There are too many hotels so nobody can be full. Now we see something has happened in Japan. If I live in Europe, why should I go anywhere near Japan. I'm happy to stay far away. You understand? Interesting, we were getting in one week, a lot of requests from Denmark, Germany, and Switzerland for between October and December. After what happened in Japan, there are no requests anymore. Zero…

Q20: Maybe they think of Chernobyl.

A: If you live in Germany, you have no choice but you live far away, so why would I go too close? For what reason? You understand?

Q21: So it is a problem.

A: It can be a problem for the future also. One is also important, if you go 2 years back, 2 years and a half back, holidays in Thailand were cheaper by 20% The Baht is too strong.

Q22: Too strong for foreigners.

A: Nobody know why the economy and so on. Even the dollar is weaker, the baht is too strong.

Q23: So currency is important?

A: Yes.

Q24: So now external factors have had a major influence..

A: Sure. And I haven't talked about the closing of the airport and The 'Red'. I'm not even talking about it. I'm too scared. See. They are starting something again. I'm

really afraid of this thing because how many times they have learned economy? They lost money they closed the airport. This time I'm taking a different approach. German businessmen who have just arrived in Bangkok but cannot leave for the next step of their journey so they take one week for a holiday. You know they must follow their schedule. Next time they come even they changed the hotel because it is not far from Hyatt Hotel so I cannot pick you up because I don't know I can move or not so means very inconvenient for them. If this country continues like this, why they should come? They buy 2 million pairs of shoes. So they are big customers. You know. They imported the shoes from Thailand. Every year get less and less. Before, when customers came, they enjoyed Bangkok very much. When you have long night life, it is nice than Vietnam and China. But now we have 2 times working already. Something starts out again. Maybe we cannot sell shoes again. They cannot send shoes to their customers.

Q25: Shut down their factories?

A: I am very scared about this. You know business is moving to other countries already. And… the Baht is too strong. It makes the shoes more expensive. It is not only hotels. They lose 15% - that is a lot. Pay more for nothing extra. This is important.

Q26: So what do you see in the future, what do you think is the future of Chiang Mai tourism?

A: Very difficult. I'm talking now about foreigner. People would like to go for the nice weather and for the beach. Holidays for foreigners, are now coming from the South. Then they stay here 3 or 4 days maximum or they go afterward to the South for 10 days. So it means that the South is getting the largest slice from tourism. They're getting 70% for the high season; the North's getting 30%. Forget about Bangkok because they stay only1 or 2 days. If you compare the South and with the North, they take 70% and we take only 30% . On the other hand, you have tourism for the whole year in the South because there is no rain season, but in the North, July is the rain season. For Europeans, on holiday, if it rains you can do more here. Now you see what is going on Krabi and Samui Island. I must tell you one thing. If I wanted to go on holiday I would not go there because they damaged but how they recover, how fast they can do. I'm not go. If other countries no problems, why I

should go? So I think the tourism industry has been damaged by closing the airport. You cannot recover completely. It may be after 10 years or so quickly because people can't get back to their jobs. This is so and so on. Nobody likes this.

Q27: You still have hopes because you still do business/

A: Yes, I'm starting a business but I am started to think very much about whether to continue or not. There are very high costs every month. When I see the returns, getting smaller and smaller, then I started to think about what to do. You understand. I do not need to lose money. No need. Absolutely and I don't understand. They are building new hotels whilst another has to close. With our kind of special place with its special service and with our size, 10-20 rooms, nice areas with the good service. It can work out. But we need time to get established. We need time, but time is money, so the question is really what is going on all around us? Nobody knew about Japan before this. Nobody knew about the floods in the South. Anything can happen. But it is a very tough time. It is a really tough time. And I think many people are thinking about what to do. I don't know why people open so many guesthouses. They make 30 and then 31. They think they can make money, but it's impossible. It is too many accommodations.

Q28: the tourists in Chiang Mai.

A: Sure. Sure. I am not talking about the South. I don't know if it is the same story or not.

Q29: I went to the South, there were a lot of tourists but most tourists came from Russia. They spend less.

A: Yes, everything must become cheaper because people don't want to spend much money.

Q30: Even they expanded more hotels but they get less.

A: Everything goes down because they have more rooms.

Q31: Yes, it was. You join the cluster?

A: Yes, because of the previous owner joined.

Q32: Have you met others in the group?

A: No. No.

Q33: So don't you think it is good to have friends or share costs?

A: Yes, sure. It's ok. This is a philosophy. Some people speak well of this. For me, I think there is no need because it is not about helping each other. If you create something like this, you have to share something not only the cost of homepage. In my opinion, you have to share advertising or share something like this.

Q34: Share information

A: Yes, but I never get in touch with them. One of them and opposite side and nobody get touch with us. It is may be with Mrs. L but not with us.

Q35: So do you think it's good?

A: It can be good, but as it is now, it's useless. It's a logo and there is nothing in it for me. It's not very helpful. If you want it to work, you must meet many times, and share information. Share advertising as a group and not everyone but they do it by themselves. No of our guests come from this. The guests come through our advertising, our performance, our homepage. This is where the people come from. We have the search machine booking on and Expedia because this is worldwide. The maximum we can do. Now we have started advertising in restaurants. More people come here to see regular and for the rooms, no need the restaurant for itself.

Q36: Has the public sector support ted you?

A: No. We do everything by ourselves. There is no help for something like this.

Q37: How about the university?

A: Ok. We had some professors come here on the opening. Everybody said it's nice. All is trees. Maybe this takes time. Nice place and so on but there is not only nice place but so on so on but not directly.

Q38: In your opinion, does the university can support the tourism industry?

A: How can they support it? Only by one thing: advertising. I don't know whether the university can do such thing. In Chiang Mai, advertising is very important so that people come to Chiang Mai. It's a very good luck to have a lot of activities in Chiang Mai, but in other areas you cannot. I came to Thailand 22 years ago. Several time a year, and live nearly 3 years permanently in Thailand but never came to Chiang Mai. I don't like the beach. For me, myself, I don't like the beach, I don't need the beach. I never came to Chiang Mai. People said Chiang Mai is nice. Why different? Not really the point. Maybe they didn't give me the correct point. Maybe I could not catch the point. Maybe it isn't necessary to come here. When I came to

Chiang Mai with my son, I really liked this area which is very green. I don't need air-conditioning. This is a new experience. Chiang Mai is very difference from Bangkok; office, car, home without air-conditioning is impossible. But here there is no need. Sometimes a little bit but sometimes no. It's best for the health, so we decided to come to the North not the South.

How do you know Mrs. L?

I was looking on the Internet for somewhere to rent. I went to a broker and the broker had this place on his list. We looked at 10 places and then we came here. We decided to go for this place.

Q39: What is the reason you are in this business?

A: Yes, because it is part of pre-retirement. We have a nice location. It's not big. It could be the next job after retirement for 5 years or more because of my sons. They don't want to stay in Germany. They can come here and take over. This is the reason I decided to come here to do business. But I didn't expect this business to be so hard. Not the work but the financial part. It's getting so hard.

Q40: And about the situation.

A: Yes, exactly.

Q41: Do you still have a hope?

A: Yes. I still have hope. We like this place. We want to continue. You're going but not sure can catch up or not. You must see something.

Q42: The sign.

A: Something's growing. If this coming. It's ok. I do not expect.

10. Interview with GM r of Crystal Restaurant CM: Time 10.00 am

Q1: Please tell me about how you started business?

A: The owners are Bangkokian but they have a house in Chiang Mai. Actually, their concept is wanted to be Lanna, Thainess but they serve Western food. Sometimes it looks contradictory. The style of this restaurant is that they want foreigners or tourists to come and see that there are still restaurants like this that have a Thai atmosphere but serve real western food. Actually, we can make western style but it is

contradicted with Lanna because when foreigners come, they want to see Thainess both garden, all also decorated with Thai flowers which smell beautiful. Some people disagree with this but we think they are harmony.

Q2: Is it difficult to find a chef because the food is in western style?

A: At first it was quite difficult, but then it fell into place because the company provides welfare - many things to make chef develop themselves. At first it was difficult because we just opened the restaurant in Chiang Mai. It is a risk to work here but when they come and received good welfare, received good care, good environment so they have their own development, and then there are courses to train the chefs.

Q3: Your chefs are Thai. Are they from the local area?

A: Both from the local area and Bangkok.

Q4: How many employees do you have, here?

A: There are 10 employees, right now in the kitchen but altogether approximately 20 people. If you include with the office, there are about 26 and all are Thai. Foreigners gave a compliment that here is excellent. If you ask whether we look like western style, then maybe not; our skill may be quite different. But if you ask us whether we are doing well, then yes, we do well, so it is what we are proud of.

Q5: What are they impressed by?

A: The overall picture of the restaurant; partly the location, service and food. Above all is food. Our service, we provide our employees with training course and we train them about beverage and food. Our location is good. The important things are service and food that make customers' loyalty.

Q6: Just now, you said you provide training. Who are the trainers?

A: There are several. That is, we train each other from the head that have experience. As regards the chefs, if have new things, new products we will train employees and tell them where this comes from, and what quality it is. Besides, there are trainers from outside such as wine. Some come from Bangkok or some from companies that come to train employees about wine.

Q7: Which part is involved with the universities?

A: Some students who are study tourism come from several institutes for an internship.

Q8: Are there a lot of students who come for internships?

A: Yes, every year, 2 students. It depends on whether they ask.

Q9: How about the employees who work here. Are they graduates in this area?

A: Some.

Q10: Do they work as the restaurant wishes?

A: We have some problems. That is their lack of experience. They know the theory, know the equipment, and how to serve, but they lack experience. This is also important. They need to continually practice. We give opportunities to new employees to let them practice, practice how to approach customers and how to talk to customers. They must be trained. Some don't want to be trained and cannot cope, especially with foreigners. It is mostly language that is the important problem.

They are afraid of speaking. They know what to say, and how to ask about tea, coffee etc. but they afraid of speaking. The students, who have just graduated, are afraid to speak, so have to be trained.

Q11: So are most of your customers French or which other nationality?

A: General. Only a few French. In general they are Europeans; there are a lot of Swiss, German, Austrian, and so on.

Q12: I saw the name of the restaurant and read some details it gives about French food.

A: That is widespread food that people know, called high-class food. Actually, the French don't eat this kind. They eat commonly like us. They will eat on special occasions.

Q13: Are most of your customers foreigners?

A: Both Thais and foreigners, actually, there are a lot of Thais; a lot of rich Thai people.

Q14: How about public relations?

A: PR from printing media, tour magazines both inside and outside country, and airlines. A lot of advertising, I think quite a lot.

Q15: How did the restaurant join the Hotel de Charm cluster?

A: It is the part called alliance. That is, knowing each other and then participating. If we know each other, it is easy. Suppose we have a club, we join the club so we know

many people. It is easy to talk. But if we don't know anybody, it is hard to talk. Also it is hard to cooperate. So joining the club makes it easier.

Q16: So are you the person who contacted Hotel de Charm?

A: My boss was the person who contacted them.

Q17: What do you expect from your participation with Hotel de Charm?

A: We expect cooperation more than to be business competitors. We are business cooperation such as set the price. If we set the price too high, it is not good. Too low, it is not good. Either Ok, we compete about this. Apart from this, it is up to how prominent you are. It depends on what customers choose. For the person who has sufficient capital when someone drops the price, they won't care. But for the person who has a small capital, when the price drops, they cannot survive. The price must stay in the middle. Then, it is up to customers to make decisions to use the service. But it still doesn't work because it is about business and it is difficult to set the same price. It is difficult. Everyone wants their own business to succeed.

Q18: Does the website help for advertising? Do you ask the customers how they know about your restaurant?

A: Mostly we ask. We observe whether they are local people or not. Mostly, we know them because at first we advertised a lot. For customers that we are not accustomed to, we will ask how they know us. People come from Bangkok, and other provinces, how they know us. There are several means such as customers from Bangkok who used to come and then tell others or they know from the hotel where they are staying. Medias that we advertised in also brought in customers. And the Medias that we selected have been reliable, such as City Life, Suwannapoomi, and Hello Chiang Mai. We advertise in all of these.

Q19: How about the current situation?

A: The current situation is rather better. If nothing happens, compared with 2-3 years ago, it is a lot better; at least there are no circumstances that interfere with investment.

Q20: How about the number of customers?

A: Customers have also increased in number.

Q21: How do you know that customers have increased?

A: We have records of revenue and the number of customers that come each day and each month. We will record them, and our revenue has also increased.

Q22: How many per cent have you increased, can you estimate?

A: It is not much because it is the period of getting better; it is about 20 per cent up compared with last year. We also have functions such as dinner or buffet. We are full of customers when compared with 2 years ago when seats were empty, rather empty, People were anxious the condition of the country was not good, so people stayed at home. But recently, it is quite good, now the situation is good people want to relax.

Q23: So what is the problem you experienced?

A: The major problem I experienced was the problem of the country's instability. This is very sensitive concerning our business of tourism. When we didn't have tourists, we lost half our revenue because half our tourists are foreigners, and half Thais. If foreigners won't come we lose half. Half means a lot. But if the stability of the country is good, it encourages tourism. The public sector should cooperate to improve tourism in our province. I think it can be better such as in the year of tourism. That was a boom year. It was a very good year for tourism business, and hotels. Since then it has continued for many years. When the circumstance happens, we must recover quickly because our revenue comes from tourism and is widespread.

Q24: So you think that if the government would support tourism more, the situation will be better?

A: Yes, both the situation and the well-being of the people. I think it will be much better and the image of the country will be much better in term of the global society. Our country should be the country that foreigners want to see. Actually, it is. Our country is the country that foreigners want to see but why have tourists decreased compared with previous years?

Q25: So you think the political factor affected a lot?

A: It affected a lot. If the country is not peaceful, they don't want to come. Even we don't want to go to Bangkok; otherwise we meet military checkpoints, and then meet police checkpoints. It is a mental disturbance. If the country is peaceful, anyone can travel anywhere and they are happy. People will come more, spend more. I think tourism, or the organisations involve with tourism were very bad at the time of the Rachaprasong closing. There were a lot of tourists in hotels in that area, but nobody

took care of them. They didn't take care of the tourists and the news of this that spread out damaged Thailand. No matter what circumstance happen, we must look after tourists first. But if we take good care of them, they will understand that it is a normal problem. But we did not take care of them at all. So Tourists had to drag their luggage out of Rachaprasong, It was bad. We must adjust here and manage. The private sector is ready to invest and have enough money to invest. If they receive good encouragement, I think it would be a good thing. The economy of the country will improve due to spas, hotels, and new resorts.

Q26: Beside the political problem, are there any other problems?

A: There are rarely other problems at the moment. Mostly, in the past we had the problem about food: beef was a problem but right now there is no problem. It depends on the quality control of each place. Each service place will control food and beverages - it should not be a problem. If tourists come, we have the chance to show the potential of the country as a whole. But if tourists won't come, they won't know what potential we have. If tourists come, I think Thailand, people always smile, and everyone that comes will receive good service. They will be impressed and come. I have meet customers who come every. They like travelling, and they like to travel in the south as well. They will come every year, they are European. They like to travel in the south more.

Q27: Did you ask them why they like the south more?

A: They want to relax, want sunshine, and want to relax in peaceful place. Mostly, the south has beaches, calm seas, more sunshine. They like to stay there often. They said they don't care about the situation of the country; they don't care because when they come they fly to Phuket or Krabi. They said with Thai culture, with being of Thai people that they are cheerful, others don't have; weather it is at Laos, Cambodia unlike Thailand.

Q28: This is the unique reason why they come?

A: This is the important factor that foreigners should know. I think it should be engrafted such as Thai tradition makes them want to come to visit Thailand. To engraft, not just we get money but when they come, they have a good impression as well. It is important, no matter they come as a backpackers or come as a group tour,

no matter how rich they are, they must be impressed. We must control the flea that overcharging too expensive. If we charge too much, they won't come again.

Q29: How can we solve? And what do think?

A: We must cooperate with entrepreneurs and must take care of tourist attractions too. We must have an organisation that takes care of things such as, suppose we go to a temple, tourists come, some people come to sell. We must have an organisation to supervise, so that you sell at this price and cannot sell at more than that price. We must have an organisation that controls more no matter what they are, hotel, but have the organisation that come to control; do not take advantage from customers too much. Don't make customers in bad mood. Ok, I think, to charge is a normal thing. We sell to foreigners at a special price but we should not make it too much.

Q30: So do you think network/this group (the cluster) can help?

A: Being in an alliance is good. We take care of each other not to exploit each other, and then if we have the same goal, help each other to develop, do not make thing overdo. When we do something we must think of the group first. It is the way to take care of each other, help each other take care. It also makes each organisation more advanced. We have a network with one center, not too much, not too low, we help each other take care.

Q31: How about in the past, was there any public sector support for the business?

A: A little because actually, the government office doesn't want to be involved. They left it. Mostly they more control things. According to the law such as, food and beverage, and checking for cleanness. They will give assistance in general ways such as Refund Tax, special discount, but only a little. In tourism they will organize events that will attract tourists to this area but still a little. Not much will attract Thai people more than foreigners. The promotion plan is still in its infancy actually. Chiang Mai is a big city; we should promote it a lot more, make people come to Chiang Mai which received the second most attractive place to live of the world, something like this. But when they come for a real visit, and then probably not because when they come, there is nothing to attract them. They go to see temples which nothing. The people who stay in the city as the government offices, at the high season, we should have events, we have the walking street which nothing,; we should have arts and culture shows whatever either every day or alternate days because some foreigners

come to Chiang Mai for 3 days and then go to Chiang Rai for 3 days and then go to other places. They don't stay for the whole week. We should organize events which customers can come to see. At the Night Bazaar, the walking street, if they don't come on Sunday, they won't see anything. Going to the Night Bazaar, they will be charged a lot, if they come to stay but nothing to see.

Q32: So you think that we should have the shows that represent Lanna which are unique and that will attract more tourists.

A: It is like when you go to England and would like to see what English people have that shows they are English. So tourists coming here want to see us but we have nothing to show.

Q33: When I stayed in Edinburgh, there was the Fringe Festival, and the military tattoo which I saw. I was really excited.

A: We should promote more culture. We must have culture enough to attract them.

Q34: What do you think about tourism in Chiang Mai in 5-10 years?

A: I think The Chiang Mai tourism can be sold for a long time because even Thai people want to come to Chiang Mai at least once and so do foreigners. But foreigners don't know what we have. Only think that the attractive country, people are cheerful, but there is a lot that we can promote in tourism. We must do more a lot and must serious. There are a lot of projects; green city, eco city, and then stopped not serious; there are streets for bicycles, but they are full of parked cars.

Q35: So you think the public sectors should be more serious.

A: Yes, much more serious. Bicycle lanes must be only for bicycles. Foreigners like to ride bicycles a lot. When the cars are parked, they cannot ride bicycles so they rode motorbikes. They don't taste the Lanna sightseeing style.

Q36: So you think that in future tourism will increase much more, but we must prepare for the green city which is already planned. We have a lot of plans but we haven't taken them seriously. So in your opinion, ought the universities to support the tourism industry?

A: They ought to support it a lot. All the universities those have teaching and learning about the tourism industry and that produce graduates. These students should receive the right education, they must learn about being service-minded starting from the first year. We must emphasise the service-minded. In the tourism

industry, the important thing is service-mindedness. If you are not service-minded, you can work but it is not good enough. If you are not service-minded, you can do everything; being ready to greet customers; being ready to serve customers. The students that are studying must train a lot and have loads of experience. Maybe take training courses or educational trips. The crucial thing is the language. I have seen that many know the theory but cannot speak. It is difficult because we must talk to tourists. We must communicate to make foreigners understand.

Q37: Beside English, what else should students learn?

A: One more; Japanese, Spanish, German, It is up to them to choose. Then communicating with customers will be easy. At least knowing a little is good. Like me, I use the experience, when I meet Japanese I speak a little and they like it. At least we know their language. Meeting with Spanish, know their language. At least they are satisfied more than we are interested in their countries. They are happy if we greet with their language. These languages are important to communicate with customers.

Q38: In the past, beside internship, did the universities support the business side such as research, IT, Consultancy?

A: No, only internship. Or sometimes are educational trip about the way to eat western style, but very little. We give students a special price to come to eat and the trainers will explain several things.

Q39: So you don't have links except for graduates who work here.

A: Some. If we have a lot of work, we contact lecturers to send students to work

Q40: What is the most important factor that you think will make your business successful?

A: In the food business both food and service. The location we cannot change but we can adjust and control by keeping up good standards of food and service. And we must always improve, must often train, learn to know whether we should talk or not with customers. There are other things if the whole picture of the city is good, every place should be competing against each other.

Q41: So joining the cluster can be of some help?

A: We promote Chiang Mai as whole. If the whole image is good, then customers will know everywhere will be good.

Q42: How many seats do you have?

A: Full capacity is about 120 seats.

Q43: How about in the future, will you expand?

A: probably not. We will emphasise more on quality. Quality is crucial. If there are too many people we cannot service our customers in time. Sometime customers arrive as a big group. We must inform the organizer that foods are different from the buffet we must arrange on a plate, control the temperature of the meat, it takes time. We must inform them first whether they want a buffet service or not. If we tell customers in advance, they will understand. We are rather careful.

Q44: How many departments are there?

A: In the office: secretary, public relations, marketing, and personnel. The main departments are service and kitchen. PR and marketing will find our customers

Q45: How about the vision and top management. Is it important to have a vision?

A: It is crucial because one's view of the world is always changing. Also culinary culture has changed a lot, so top management must keep up with what food is now popular; which beverage is popular. We must keep up with the trend which wine from where, and if we should have more. To consume a French meal took 3 hours from start to finish, but now they have adjusted from 5 courses to 4, or 3 courses; decreasing continuously to make it faster Thai people in particular don't like waiting for 3 hours so we must adjust for our customers. Westerners don't share, but Thai people like to share when eating, so we must adjust accordingly. For other vision is the promotion that makes customers to be more impressive, more variety. Sometimes when customers come, we don't talk to them, so they just eat. This means there is no relationship at all, but if we have a relationship such as when we talk to them; giving service is more impressive. This will make them more likely to come back.

Q46: Half are Thai, and half are foreigners.

A: For Thai most stay in Chiang Mai. In the high season, a lot come from other provinces such as Bangkok. In the winter time, they must be in Chiang Mai.

Q47: Thank you very much.

A: Sometime I maybe a little bit confused. On academic matters, I am not very skilled

Q48: You gave me a lot of information. In part of the universities, I think they have a variety of knowledge.

A: The universities have experts in tourism or whatever. If we promote cooperation with each other, maybe organize a special seminar, then might invite entrepreneurs to listen to the experts. I think this will make us widen our goals more. Having foreigners to give lectures… I think the universities can do a lot, and it also improves the education as well. I think we can develop a lot because sometimes entrepreneurs have money but they don't have much knowledge. Sometime they have knowledge but we have to use it in many different ways because some people don't have only one business but others as well. This point is important because entrepreneurs or representatives will listen to each place. However, in business it is hard to be completely open because we keep some secrets, we cannot reveal everything. But for the university, I think in several areas such as seminars we can all learn the same things and it is quite a good thing. It is good to have organisations to help. It is a good thing. Perhaps better wait from the government offices, rather slow, wait for budget. Increasing the organisations to help, it makes a good overview.

Appendix 5: List of Interviewees and places

1. National Level

Interviewees	Date	Time
National Economic and Social Development Board 1.Former Director of Strategy Formulation and coordination	11 March 2011	18.00-19.00
2.Plan and policy Analyst-	8 March 2011	19.00-21.00
Kenan Institue Asia 3.Senior Official	7 March 2011	14.00-15.00
Tourism Authority of Thailand (TAT) 4. Research and Market Director of TAT	15 March 2011	14.00-15.00
5.Permanent Secretary of Tourism and Sports ministry	7 April 2011	14.00-15.00
6.OSMEP	15 December 2011	13.00-15.00
7. President of Orchid Cluster	5 April 2011	17.00-18.00
Total = 7		

2. Local Level

2.1. NORTH- CHIANG MAI

Type	Interviewees	Date	Time
1. Policy Makers Local level	1.Director of Tourism Authority of Thailand: Chiang Mai Office-	13 Dec. 2010	13.30-15.00
2. Participants	1. Private Association 1.Vice President of Tourism Business Association	10 Dec 2010	10.00-13.00
	2. President of Hotel de Charm Cluster- Hotel de charm	8 Dec 2010	14.00-16.00
	2. Hotel- MD of Baan Num Ping-	26 Nov. 2010	15.00-17.00
	3. Spa-CEO of Chida Spa-	8 Dec. 2010	14.00-16.00
	4. Adventure- MD of Peak Adventure-	9 Dec. 2010	10.00-12.00
	5. Transportation/tour operator- Manger of Jatuporn Tour and Travel-	26 Nov. 2010	15.00-17.00
	6. Restaurant-Assist restaurant manager of Crystal Restaurant- Edutainment Cluster	3 Dec 2010	10.30-12.00
		14 Dec 2010	10.00-11.30
	7. President of South 13-	14 Dec 2010	11.00 -12.00
3. Education Institutes	Payap University 1. Assistant dean of Business Administration, Payap University- Chiang Mai University	25 Nov. 2010	16.30-18.30
	2. Chief of Tourism Department, Chiang Mai University	29 Nov.2010	14.00-16.00
	3. Assoc.Profesor-Tourism Department, Chiang Mai University	29 Nov. 2010	14.00-16.00
	4. Director of knowledge and Innovation Center Chiang Mai Rajabhat University	14 Dec. 2010	14.30-16.00
	5. Former Deputy Dean Rajamangala University of Technology Lanna	3 Dec 2010	13.30-15.00
	6. Senior Lecturer	13 Dec 2010	16.00-17.00
Tourists 8			
Total=14			

2.2. SOUTH - PHUKET

Phuket Tourism Cluster

Interviewees	Date	Time
University		
Prince Songkha University		
1.Dean of Hospitality and Tourism Faculty	11 Jan 2011	13.00-14.30
2.Deputy Dean-Academic	11 Jan 2011	15.30-16.30
3.Deputy Dean-Student Affairs- Tourism	11 Jan 2011	11.00-12.00
lecturer		10.30-12.00
4. Hotel lecturer	11 Jan 2011	09.00-10.00
5. Hotel lecturer	11 Jan 2011	10.00-11.00
Rajabhat Phuket University	18 Jan 2011	13.30-14.30
1. Dean of Management Faculty-Assist. Prof.	24 Jan 2011	11.00-12.00
2.Director of Research Center and hotel		
lecturer-Assist Pro	15 Jan 2011	11.00-12.00
3.Deputy of Research Center and tourism		
lecturer		
Private sector		
1. Chairman of Tourism Business	18 Jan 11	10.00-11.10
2. Association President of Thai Hotels	28 Jan 2011	13.00-14.00
Association Southern Chapter	18 Jan 2011	14.00-15.30
3. On behalf of President of Thai Chamber of	23 Jan 2011	16.00-17.30
Commerce-Tourism	31Jan 2011	15.00-16.00
4. Chairman of Phuket Taxi Cooperative	29 Jan 2011	11.00-13.00
5. Tour Operator-Exotic Sea Venture Tour	31 Jan 2011	13.00-14.00
6. President of Phuket Spa Association-		
7. The old town community leader-		
Public Sector		
1.Director of Tourism Authority of Thailand:	19 Jan 2011	10.30-11.30
2.Phuket office-Bangornrat Sinapryoon	25 Jan 2011	14.30-16.00
3.Director of Tourism and Sport-	28 Jan 2011	14.00-16.30
4.Senior Policy and Planning office/ Strategic		
Management for Southern Province Cluster		
(Andaman)		
5.Phuket Mayor	26 Jan 2011	19.30-21.30
Total = 20		

2.3 NORTHEASTERN-SAKON NAKHON

Sakon Nakhon Indigo Cluster

Interviewees	Date	Time
Public sector 1.Director of Tourism and Sport 2.Director, office of Commercial Affair-Sakon Nakhon 3.Chairman of Sakon Nakhon 4.Province Administration Office 5.Director of Tourism Authority of Thailand: Northeastern: Nakon Phanom 6.Director of Cooperative: Sakon Nakhon 7. Senior Community Development official 8. Head of Industry promotion-Northeast region	15 February 2011 16 February 2011 17 February 2011 23 February 2011 24 February 2011 1 March 2011 28 March 2011 21 February 2011	15.30-17.30 09.30-11.30 12.00-12.30 14.00-15.30 09.30-10.30 11.30-12.30 11.00-12.00 16.30-17.30
Private sector 1. Former director of Sakon Nakhon Chamber Commerce 2.President of Indigo Cooperative Cluster 3.Chairman of Panna Indigo group- 4.Chairman of Tumtao Indigo group	24 February 2011 16 February 2011 15 February 2011 23 February 2011	14.00-15.00/ 19.00-20.00 17.30-19.30 10.30-11.30
University Kasetsart University 1. KU-CSC Assistant President –Assist. Prof. 2.Director of Research Institue-Assoc. Prof. Deputy Director of Research Institute- 3.Chief of Marketing Department 4.Chef of Tourism Department 5.Dean of Liberal Arts and Management Science Sakon Nakhon Rajabhat University 1. Former VP-Assoc.Prof. 2.Assoc. Prof. Saithong 1.Former President Sakon Nakhon Rajamongkol University	29 March 2011 26 February 2011 1 March 2011 28 February 2011 25 February 2011 23 March 2011 23 February 2011 26 February 2011	10.00-11.00 10.00-11.00 16.00-17.30 14.00-15.00 14.00-15.00 17.30-18.30 17.00-18.30 08.00-09.00
Total=20		

Appendix 6: Interview Guide

At the interview stage, I used an interview guide by introducing the brief in which I defined University-Industry Linkages and the competitiveness of tourism clusters and explained the purpose of my study and posed direct questions to interviewees. The guide's topics are as follows: the interviews were conducted face-to-face. Interviews with participants tended to be semi-structured, guided by a prepared list of issues in three groups

A. Interview guide for private sector

    a) In your opinion, what is the tourism cluster? When and why does your firm participate in the cluster?

    b) Who made the decision to participate?

    c) What factors affected this decision?

    d) In your opinion, what factors affect the tourism industry and your firm?

    e) Do you have a firm's policy about clusters?

    f) What expectations do you have from the cluster?

    g) Which university does your firm collaborate with?

    h) How far does your firm collaborate with that university?

B. Interview guide for public sector

    a) Please explain the reasons why the government establishes a cluster?

    b) What is the expectation that the government has?

    c) Please explain the current situation of Thai tourism clusters?

    d) How does the government support Thai tourism cluster?

    e) What are the barriers that prevent a cluster being successful?

    f) How can the government overcome these problems?

C. Interview guide for Universities

    a) What is your policy about supporting the tourism industry?

b) What kind of programme does the university have to support the tourism cluster?

c) Does the university have any internship or cooperative programme to develop?

d) Does the university have a consultancy to a tourism cluster?

e) Does the university have an incubation project to support a tourism cluster?

f) How does the university cooperate with tourism clusters?

g) In your opinion, how can the university support the cluster and be successful?